MAJOR RESEARCH PROJECT

SALLY BLOY BA Hons MA

ACCEPTANCE AND COMMITMENT THERAPY GROUPS FOR INDIVIDUALS WITH PSYCHOSIS: A GROUNDED THEORY ANALYSIS

Section A: Acceptance and mindfulness approaches for individuals with psychosis: efficacy and potential mechanisms of change.

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Section B: Acceptance and commitment therapy groups for individuals with psychosis: A grounded theory analysis
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CANTERBURY CHRIST CHURCH UNIVERSITY

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Summary of Portfolio

Section A offers a review of the literature pertaining to acceptance and mindfulness approaches for individuals with psychosis. Research in the area has grown in recent years with studies showing favourable outcomes. Initial investigations have begun to explore hypothesised mechanisms of change. The review synthesizes and evaluates the emerging evidence base. A discussion of the hypothesised mechanisms of change is situated in a theoretical overview of the application of acceptance and mindfulness for psychosis. The empirical literature reviewed sheds light on these proposed processes of change. Findings are discussed with respect to recommendations for future research and implications for clinical psychology.

Section B provides an overview of the theoretical assumptions and emerging research on possible mechanisms of change in acceptance and commitment therapy (ACT) for psychosis. Findings from an exploratory grounded theory study about participants' experiences of an ACT for psychosis group are given. A proposed model outlined key mechanisms of awareness, relating differently and reconnecting with life, which led to reductions in distress and behavioural change. Leaning on others highlighted the importance of the group context in supporting change processes.

Section C offers a critical reflection on the research process by addressing four domains including skills developed, what might be done differently, clinical implications and future research directions.

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MAJOR RESEARCH PROJECT

Section A: Literature Review

ACCEPTANCE AND MINDFULNESS APPROACHES FOR INDIVIDUALS WITH PSYCHOSIS: EFFICACY AND POTENTIAL MECHANISMS OF CHANGE.

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Abstract

Aims. Applications of acceptance and mindfulness approaches for individuals with psychosis have gathered momentum in recent years. Research studies have started to investigate outcomes and hypothesised mechanisms of change. The current review synthesizes and evaluates the emerging evidence base. A discussion of the hypothesised mechanisms of change is situated in a theoretical overview of the application of acceptance and mindfulness for psychosis.

Method. Relevant databases were searched for peer-reviewed articles using terms related to acceptance and mindfulness approaches for individuals with psychosis. Outcome studies and studies exploring process of change were identified. References, citations and professionals networks were checked for further relevant studies.

Results. Findings endorsed treatment approaches that promoted psychologically flexible responses to distressing psychosis. Mindfulness, defusion and acceptance facilitated a non-judgemental relationship with distressing cognitions, emotions and perceptual anomalies. These processes appeared to reduce distress not through symptom elimination, but by responding to experiences with openness, awareness and engagement in valued-direction. Findings are discussed with respect to recommendations for future research and implications for clinical psychology.

Conclusion. The empirical literature reviewed highlighted favourable outcomes for the application of acceptance and mindfulness approaches for those with psychosis. Research also offered valuable insight into proposed processes of change.

Overview

In the last ten years, acceptance and mindfulness approaches have been adapted for use with individuals with psychosis. This selective literature review aims to appraise the efficacy of these approaches and explore potential mechanisms of therapeutic change. A brief overview of psychosis and the primary recommended treatment approaches is provided. Efficacy of cognitive behavioural treatments for psychosis is briefly discussed. Acceptance and mindfulness approaches for psychosis are introduced and followed by a review of efficacy. Potential processes of change are explored in the context of theory underpinning acceptance and mindfulness approaches and are substantiated with relevant research. Finally, a discussion of the findings and limitations are summarised and recommendations for future research and clinical implications are proposed.

Methodology

This review covers a range of literature but predominantly focuses on empirical research in acceptance and mindfulness approaches for individuals with psychosis. Multiple literature searches were conducted to obtain English language peer-reviewed articles published between January 2000 and January 2013. Searches were carried out across a number of databases using relevant terms (see Appendix A for a full search strategy). References were checked manually and professional networks were used to source forthcoming publications.

Psychosis

The term psychosis encompasses disorders characterised by perceptual disturbances. Symptoms are likely to affect a broad range of functioning, but particularly the domains of cognition, affect and behaviour. Typically, "positive" symptoms (experiences of perceptual anomalies, unusual beliefs and disordered thought or language) are considered the core of psychosis. However, negative symptoms such as amotivation, social withdrawal and self-neglect can be as problematic, impacting on social functioning and recovery. (Kuipers, Peters

& Bebington, 2006; Pinkham, Penn, Perkins, Graham, & Siegel, 2007). These difficulties typically follow an acute phase of psychosis (National Institute of Clinical Excellence [NICE] 2010), and can be enduring. In addition to the impact on individuals and families, social costs are significant (Knapp, Mangalore, & Simon, 2004).

Psychological difficulties are often associated with psychosis and complicate the presentation. Anxiety disorders, depression and substance misuse are common (Buckley, Miller, Lehrer, & Castle, 2009) and often associated with onset and maintenance of symptoms (Garety, Kuipers, Fowler, Freeman, & Bebbington, 2001). Presentations can thus be variable meaning that treatment approaches need to be flexible and guided by individual formulations (Morrison, 2004).

Research has endorsed a continuum model of psychosis (Johns and van Os, 2001; van Os Hanssen, Bijl, & Ravelli, 2000) which has helped shift perceptions of the disorder from something that is dichotomous (i.e. present or absent). Research has highlighted the presence of psychotic-like experiences in the "normal" population (Freeman et al., 2005). It should be noted that psychotic-like experiences can also feature in presentations such as borderline personality disorder, bipolar affective disorder and post-traumatic stress disorder (Morrison, 2004). The multifaceted nature of psychosis has meant that the disorder is understood within a broad multifactorial model (e.g. Garety et al., 2001).

Recommended Treatment Approaches

Antipsychotic medications and cognitive behavioural therapy for psychosis (CBTp) are the recommended interventions for individuals with psychosis in the UK, along with family intervention and arts therapies where appropriate (NICE, 2010). CBTp emerged from a growing acknowledgement of the psychosocial aspects of the disorder and increasing concerns about the limitations of pharmacotherapy (NICE, 2010). Although antipsychotic drugs are positioned as a primary intervention strategy, the guidelines also outline significant

concerns about effectiveness (Leucht, Arbter, Engel, Kissling, & Davis, 2008), adherence (Lacro, Dunn, Dolder, Leckband & Jeste, 2002), and physical side effects (Tandon et al., 2008). In light of these concerns, strong objectors, including service users (Morrison et al., 2012), have argued for psychotherapy instead of medication (Bentall & Morrison, 2002). Preliminary results have suggested that cognitive therapies may offer a number of symptomatic and social benefits in the absence of antipsychotic medication (Morrison et al., 2012). Despite this CBTp is predominantly delivered alongside pharmacotherapy.

Efficacy of CBTp. Eight meta-analyses have investigated the efficacy of CBTp (see Lynch, Laws & McKenna, 2010 for a review). Some have claimed that CBTp is effective at improving symptoms (e.g. Pilling et al., 2002). However, recent analyses urged caution, citing numerous methodological faults with previous meta-analyses (Lynch et al., 2010). In the latter review, CBTp was not shown to be effective, particularly where trials used blind allocation and control interventions, demonstrating the importance of rigour. However, in spite of this criticism and the relatively small effect sizes of previous reviews (Wykes, Steel, Everitt, & Tarrier, 2008), NICE (2010) still advocates CBTp. Developments in CBTp are seeing a shift in focus from symptom elimination (Wykes et al., 2008) towards addressing the emotional sequelae of psychosis (Birchwood & Trower, 2006; White et al., 2011) and the relationship to distressing perceptual disturbances (Pankey & Hayes, 2003) through acceptance and mindfulness approaches. What follows is a brief introduction to these approaches, their application to psychosis and how they diverge from CBTp.

Acceptance and Mindfulness-based Therapies

A number of therapies, termed contextual cognitive behavioural therapies, have developed in response to CBT (Oliver, Joseph, Byrne, Johns & Morris, in press). Acceptance and commitment therapy (ACT), mindfulness and person-based cognitive therapy (PBCT) are the main contextual approaches adapted for psychosis. Contextual approaches place an emphasis

on process over content. They propose that therapeutic change occurs where processes of problematic thinking, rather than content of thoughts, are targeted (Hayes, 2004). A de-emphasis on changing content and frequency of thoughts are the main differences from CBTp. Rather, acceptance and mindfulness is used to create flexible contexts in which these internal experiences occur (Oliver et al., in press).

Mindfulness has been described as "paying attention in a particular way: on purpose, in the present moment and non-judgementally" (Kabat-Zinn, 1994, p. 3). Mindfulness aims to offer a different way of relating to psychotic experiences (Chadwick, 2006). It has been offered as a standalone treatment for individuals with psychosis, predominantly in the group format. It has also been included as a component in other psychological treatments, such as PBCT (Chadwick, 2006). Mindfulness is also integral to ACT.

In ACT, greater psychological openness to internal experiences (such as thoughts, images, feelings, memories, sensations) is fostered in service of engagement in a valued life (Hayes, Strosahl and Wilson, 1999). ACT formulates that psychopathology emerges from a combination of rigid entanglement with cognitions, avoidance of unwanted internal experiences and behaviour that is inconsistent with core values (Hayes & Smith, 2005). It has been suggested that individuals with psychosis excessively engage in avoidance or control strategies to manage aversive positive symptoms (Gaudiano, 2005), impeding functional engagement with values (Hayes et al., 1999). Mechanisms through which flexible responding and an alternative relationship to distressing psychotic experiences are fostered are discussed later. Firstly, the efficacy of these approaches is outlined.

Efficacy of Acceptance and Mindfulness Therapies

Outcomes of ACT for psychosis (ACTp) studies are discussed with respect to the impact on rehospitalisation, the emotional dysfunction following psychosis and on command hallucinations. The efficacy of studies that offered mindfulness as a standalone treatment and

those that incorporated mindfulness into a component of the intervention is then discussed. The studies are tabulated in Appendix B and C.

Acceptance and commitment therapy. Outcome studies have shown promising results for ACTp, despite methodological limitations. The American Psychological Association has classified ACTp as demonstrating moderate research support (http://www.div12.org/ Psychological Treatments/treatments/schizophrenia_acceptance.html). This implies that, according to criteria by Chambless et al. (1998), treatment is probably efficacious. However this methodology has been heavily criticised (see Herbert, 2003).

Rehospitalisation. The first outcome study observed the effect of a four-session ACT intervention on rehospitalisation rates in a randomised control trial (RCT; Bach & Hayes, 2002). Initial results indicated that participants in the ACT condition remained out of hospital longer than their counterparts receiving treatment as usual (TAU). Claims that ACTp can reduce rehospitalisation by half have been heavily criticised for misrepresenting the data through biases in the methodology (Coyne, 2011).

Interestingly, findings indicated that those receiving ACT reported higher symptom frequency on a self-rating measure. This was believed to be linked to the therapeutic focus on awareness and acceptance of psychotic experiences. An analysis of covariance demonstrated significantly weaker convictions in hallucinations in the experimental group. Areas of concern in the methodology included shifting the primary outcome from symptom reduction to lower re-admission rates; interpreting dropouts as missing data rather than relapses and misrepresenting outcomes considering the low sample size of 40 in each group (Coyne 2011).

A follow-up study examined one year outcomes for participants from the 2002 study (Bach, Hayes & Gallop, 2012). Sixty-four participants were included in the primary analysis with data for 51 available at one year. Results indicated that the ACT group maintained progress over the TAU condition with respect to rehospitalisation rates, providing support for

long-term benefits of a brief ACT intervention. Again, small numbers affected power calculations and use of rehospitalisation as an outcome measure remained problematic. Nonetheless, the economic advantages of avoiding psychiatric admission were highlighted.

Gaudiano and Herbert (2006a) also investigated the impact of ACT on rehospitalisation rates. Three sessions of ACT failed to demonstrate statistically significant differences from TAU. In contrast to Bach and Hayes (2002), there were no significant changes in believability of symptoms. However, ACT reportedly reduced subjective hallucination-related distress but not frequency of hallucinations. Secondary outcomes showed significant improvements in social functioning in the ACT group. Significant discrepancies in overall clinical functioning were reported between groups with ACT showing medium effect size gains. Again, this study suffered from low sample size (29 completers across groups), although this did not affect data regarding rehospitalisation. This study benefitted from offering increased therapist contact to those in the TAU condition, aiming to control for potential bias.

Latterly, data from the 2002 and 2006a studies were re-examined (Bach, Gaudiano, Hayes & Herbert, 2012). Both datasets were subjected to an intent-to-treat (ITT) analysis. Improved analyses replicated previous outcomes, demonstrating reduced rates of rehospitalisation following a brief ACT intervention. A significant difference between groups was found in favour of ACT. Methodological quality improved this study. Dropouts linked to suicide or incarcerations were reassigned as re-admitted participants. The use of several analyses also improved reliability of the findings. The study also used mediational analyses to investigate whether believability affected hallucination distress and consequently rehospitalisation. These results are outlined in the upcoming discussion on change processes.

Emotional dysfunction. A blind RCT explored the feasibility of this methodology in ACTp (White et al., 2011). The study investigated the impact of ACTp on emotional dysfunction following acute psychosis. The research benefitted from using validated ACT and

mindfulness measures. A relatively small sample of 27 was achieved (14 ACT, 13 TAU). Findings revealed significant changes in negative symptoms and mindfulness skills. There was a significant correlation between changes in depression and changes in mindfulness. Significantly fewer individuals who were depressed at baseline were depressed at three month follow-up in the ACT group. Furthermore, fewer participants from the ACT group made crisis contacts over the three month follow-up period. Interpretations were limited by sample size and recommendations suggested the methodology was feasible for a larger sample.

Command hallucinations. In another RCT, Shawyer and colleagues (2011) investigated the impact of an acceptance-based CBT intervention on command hallucinations, Treatment of Resistant Command Hallucinations (TORCH). Participants were blindly randomised to TORCH, a waitlist control or befriending. Interestingly, no significant differences between TORCH and befriending were found. Both groups demonstrated favourable outcomes in terms of coping with voices compared with the waitlist control. Most notably, befriending showed significant improvement in acceptance of command hallucinations whilst TORCH failed to do so. A thorough discussion of these unexpected results highlighted variations in distress between groups at baseline; the challenge of an approach versus avoidant coping style; and possible diluting effects of an integrated treatment (CBT + ACT). Low sample size and weak methodological rigour should also be noted. Whilst this study may have failed to demonstrate the efficacy of the treatment over comparison group, it adds weight to the importance of non-specific therapy factors in accounting for change in outcomes (Lynch et al, 2010). Furthermore, interventions offering social support, normalising and an action-oriented agenda (such as befriending) may have important benefits and are worthy of further research.

Mindfulness interventions. Studies have investigated outcomes of standalone mindfulness interventions for those with psychosis and those where mindfulness was a

component of the intervention. Four studies in addition to the six relevant studies included in Davis and Kurzban's (2012) recent review are outlined.

Standalone mindfulness treatments. Following cautious adaptation for individuals with psychosis, Chadwick, Newman Taylor and Abba (2005) conducted an initial exploration of outcomes of a group programme targeting psychosis-related distress. A small sample of 10 participated in an uncontrolled study examining subjective well-being and general clinical functioning. Results tentatively suggested improvements in functioning following treatment. Conclusions were restricted by methodological limitations, but results offered encouragement for further application and research.

A later replication study addressed some of these methodological concerns (Chadwick, Hughes, Russell, Russell, & Dagnan, 2009). Twenty-two participants were randomly assigned to mindfulness or a wait-list condition. Again findings showed improvement in general functioning and gains in mindfulness of distressing thoughts and images, as measured on the validated Southampton Mindfulness Questionnaire (SMQ; Chadwick et al., 2008). There were no significant improvements for hallucinatory experiences. Furthermore, comparisons with the wait-list failed to demonstrate significant benefits, although results were in the expected direction. Although the study suffered from insufficient power, it demonstrated the feasibility of further RCT's.

A pilot study by Singh et al. (2007) explored the use of a mindfulness protocol for three individuals with psychosis presenting with anger management issues. A multiple baseline design indicated that a mindfulness intervention successfully reduced aggressive behaviour across a follow-up period of four years. These preliminary findings were based on a small sample size, but stability across a lengthy follow-up period was encouraging.

An uncontrolled feasibility study was conducted with an early intervention in psychosis (EIP) population, (Van der Valk, van de Waerdt, Meijer, van den Hout and de Haan, 2012).

With a sample of 16 individuals, improvement in psychological wellbeing (namely anxiety and agoraphobia) was demonstrated. Expected increases in mindful awareness and reductions in positive symptoms of psychosis were not forthcoming. The authors cautioned that inexperienced participants might struggle to tolerate heightened awareness of thoughts and that participants' understanding of instructions should be sought. The study was limited by the small pilot sample size.

Davis, Strasburger and Brown (2007) conducted in-depth interviews with five individuals following a mindfulness skills training programme for anxiety management in psychosis. Emerging themes demonstrated that participants responded positively to the intervention. However this pilot study suffered from insufficient methodological quality (Mays & Pope, 2000). Later, Brown , Davis, LaRocco and Straburger (2010) used thematic analysis to code data from 15 interviews following a mindfulness skills group for men with psychosis. Participants highlighted benefits including relaxation, symptom relief and developing a present moment focus. A number of methodological issues hindered the quality of this study, including potential biases in coding and non-adherence to formal qualitative frameworks.

Two studies explored the use of mindfulness groups in acute settings. In a qualitative thematic analysis York (2007) demonstrated that participants reported benefits in relating differently to distressing thoughts, relaxation, concentration and acceptance. It should be noted that the group had mixed diagnoses, but included individuals diagnosed with psychosis. Some attention was paid to researcher bias. Jacobsen, Morris, Johns and Hodkinson (2011) evaluated the implementation of a mindfulness group on a specialist inpatient psychosis unit. Eight participants completed pre- and post-treatment measures. A small sample size precluded formal statistical analysis. However, acceptability of the intervention and further research was reiterated.

Mindfulness as a component of treatment. Dannahy et al. (2011) described outcomes for nine groups using PBCT. PBCT combines CBT with mindfulness and emphasises acceptance, positive self-appraisal and relating to voices. Fifty participants with treatment-resistant voices were assessed pre- and post-treatment and at one month follow-up. Medium effect sizes were found for changes in general clinical functioning and for voice distress and control. There were no significant results with respect to changes in relating to voices. The authors queried a misfit between the theoretical underpinnings of the measure used and the therapy. Limitations concerned a lack of randomisation or control group, representativeness of a majority female sample and missing data.

An investigation of outcomes following mindfulness based cognitive therapy (MBCT; Segal, Williams & Teasdale, 2002) groups (Langer, Cangas, Salcedo & Fuentes, 2012) aimed to replicate the methodology of Chadwick and colleagues (2009). Results from 23 participants showed higher levels of mindful relating to internal events in the experimental condition. No other significant results were reported. Again, a lack of power hindered interpretations.

Summary

Results for ACT showed benefits with respect to hospital readmission rates and emotional dysfunction following psychosis. However, a number of methodological concerns limited interpretation of the findings. Although an acceptance-based CBT intervention for command hallucinations showed improvements for those with psychosis, it was no better than a comparison treatment (befriending). Results for mindfulness studies were mixed and were similarly constrained by methodological issues. Future research in both ACT and mindfulness for psychosis could benefit from improved methodological rigour.

Processes Underpinning Acceptance and Mindfulness Approaches

Despite growing evidence of efficacy, little is known about how the therapies affect change (Gaudiano, 2005). Research studies illuminating change processes are vital (Kazdin, 2007). Investigations could reveal that change occurs through generic therapeutic processes (Johansson & Høglend, 2007). Alternatively, mediation analyses could confirm existing theories and elaborate on the treatment components affecting change to maximise therapeutic benefits (Kazdin, 2007).

A small number of studies have begun to formally investigate potential mediators in acceptance and mindfulness approaches for psychosis. These are discussed below. To supplement this literature, studies investigating psychological processes in psychosis were drawn on to illuminate potential change mechanisms underlying acceptance and mindfulness models. A brief theoretical overview underscores the critical ingredients in these models.

Theoretical Conceptualisation

The therapeutic intervention in ACT involves targeting six core processes (figure 1) to promote three alternate response styles: open, aware and active (Hayes, Villatte, Levin & Hildebrandt, 2011; Oliver et al., in press). Acceptance and defusion are used to increase openness to aversive internal experiences. Through acceptance individuals are encouraged to create room for these experiences as an alternative to struggling with or avoiding them. Defusion aims to alter "the way one interacts with or relates to thoughts" (Hayes, Luoma, Bond, Masuda, & Lillis 2006, p. 8) thereby reducing unhelpful ways of responding to them. For example, this may mean encouraging an individual to step back from voices and view them as "the voices", undermining a literal response to the hallucination. An increased sense of awareness is promoted through viewing the self as an observer of internal experiences (self-as-context). Along with mindful awareness of the present moment, this perspective loosens literal attachment to distressing internal experiences. These processes are promoted in

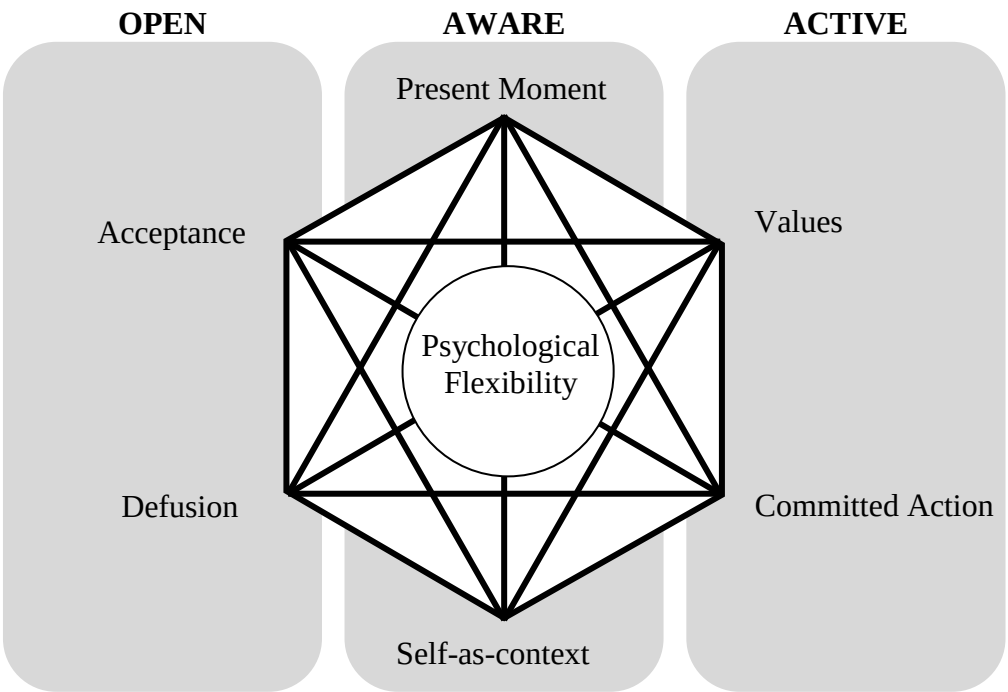
the context of an active engagement with life. Identifying values and developing goals support the commitment to values-based action.

It may be important to briefly consider different theoretical conceptualisations of mindfulness. The ACT model situates mindfulness within a psychological flexibility framework. Within PBCT and other mindfulness interventions, mindfulness is viewed as altering metacognitive awareness such that thoughts are viewed as events and facilitate a decentred perspective (Bishop et al., 2006).

These core processes are discussed below with reference to research where this exists.

Figure 1.

ACT model of psychological flexibility (Hayes et al., 1999; Hayes et al., 2011)



Open

In psychosis, experiential avoidance (EA) involves a paradox (Goldstone, Farhall, & Ong, 2011). Suppressing aversive psychotic experiences may offer short-term benefits but is likely to increase intensity, frequency and distress in the long term (Gross, 2003). Thus, EA has

harmful psychological consequences (Hayes, Wilson, Gifford, & Follette, 1996; Hayes, Strosahl, Bunting, Twohig , & Wilson, 2004). Thought-suppression or control strategies have been linked to increased delusional ideation and distress (Campbell and Morrison, 2007). Such response styles are common in psychosis (van den Bosch & Rombouts, 1997) and there is potential value in targeting these patterns.

Shawyer et al. (2007) demonstrated that those less accepting of hallucinations were less likely to act autonomously in relation to them. EA also facilitated paranoid cognitions in a student sample (Udachina et al., 2009). Along with deficits in perspective-taking and empathy skills, EA significantly predicted social anhedonia (Vilardaga, Estévez, Levin, and Hayes, 2012), which has been linked to psychosis-proneness (Kwapil, Miller, Zinser, Chapman, & Chapman, 1997; Gooding, Tallent, & Matts, 2005).

EA was found to significantly predict delusional ideation and associated distress for the general population and those with psychosis (Goldstone et al., 2011). The authors concluded that those who responded to life stressors in an experientially avoidant manner were vulnerable to more frequent and distressing delusional thoughts. EA not only made psychosis worse but contributed to the development of psychosis. Caution is advised when interpreting these results as EA could have been moderating the association between stress and delusions owing to the cross-sectional design of the study.

Another study investigated the moderating and mediating effects of negative self-appraisals, mood and psychological coping styles on delusions. Findings suggested that EA placed individuals in the general population at increased risk of delusional ideation when negative self-schemas and anxiety were present (Oliver, O'Connor, Jose, McLachlan, & Peters, 2012). More flexible response styles protected against delusional cognitions despite the presence of anxiety and negative self-appraisals. This study endorsed clinical applications that target EA.

Mediation analyses have explored the role of defusion in hallucination frequency and distress (Gaudiano & Herbert, 2006b; Gaudiano, Herbert & Hayes., 2010; Bach et al., 2012). Here, cognitive fusion is the degree of influence from voices, or believability of voices (Shawyer et al., 2007). Using data from their earlier study, Gaudiano and Herbert (2006b) tested the hypothesis that belief in hallucinations mediated frequency of hallucinations and associated distress. Findings indicated that believability mediated the effect of treatment on distress. They demonstrated an association between changes in distress and believability following ACTp. Believability did not mediate the effect of frequency on levels of distress. Therefore, results suggested a partial mediation between believability and frequency and distress of hallucinations. However, this was in the absence of formal mediational analyses. Interpretations were limited due to a number of methodological factors acknowledged by the authors. Most notable were temporal issues, low power and validity of the ad hoc self-report measure used to assess believability.

Gaudiano, Herbert and Hayes (2010) re-analysed Gaudiano and Herbert's (2006a) study using non-parametric bootstrapping, appropriate for small sample sizes (Preacher & Hayes, 2004, 2008). Hallucination frequency and distress were not significant mediators. However, ACT lowered distress through reducing believability, leading to the assertion that cognitive defusion is an important process of change. This study suffered from problems with clearly defined temporal variables and lack of a comparative treatment condition.

The mediational analysis combining the two original studies (Bach & Hayes, 2002; Gaudiano & Herbert, 2006a) demonstrated a link between reduced conviction in hallucinations and lower rates of admission (Bach et al., 2012). Results showed significant differences between ACT and TAU. These findings were replicated across both datasets and were confirmed through alternative analyses. With respect to mediation effects, degree of conviction in hallucinations mediated the effect of treatment on distress. Together with the

Gaudiano, Herbert and Hayes (2010) study, findings endorsed the role of cognitive defusion in reducing hallucination-related distress. Limitations included those from the initial research, namely an absence of assessment of treatment integrity, lack of power, unvalidated self-report measures and small, heterogenous samples.

Aware

A meta-cognitive view of the self facilitates an awareness of internal experiences without attachment to them. In ACT, this process is termed self-as-context. Mindfulness develops this skill through decentred awareness (Safran & Segal, 1990). Chadwick (2006) proposed that decentred awareness is the mechanism through which the relationship to distressing psychosis is altered. Hayes and Shenk (2004) have offered a broader definition of mindfulness within a contextual behavioural frame. This accounts for the value in non-meditational practices including perspective-taking, defusion and acceptance.

Oliver, McLachlan, Jose and Peters (2011) explored the role of mindfulness in changing delusional ideation in the context of negative self-appraisals in a non-clinical student sample. Cross-sectional analyses were conducted to ascertain which aspects of mindfulness predicted changes in delusional ideation. Accepting without judgement had a significant effect on delusions, as did negative schemas. A longitudinal analysis of the impact of mindfulness and negative self-appraisals on delusions was performed and allowed for comparison of direct and indirect effects. Longitudinally, mindfulness demonstrated a significant direct effect on distress associated with delusions. Over time, a significant indirect effect of negative schemas on changes in delusion-related distress was mediated by mindfulness. Findings supported hypotheses that negative schemas intensified delusion-related distress, preoccupation and believability. Negative schemas also impaired mindfulness skills. Recommendations endorsed interventions that develop mindfulness and address negative schemas. Noteworthy

limitations concerned psychometric properties of measures used and the predominantly female young student sample which impeded generalisability.

An analysis grounded in participant experiences offers as an alternative method for illuminating core change processes (Abba, Chadwick & Stevenson, 2008; Kazdin, 2007; Mason & Hargreaves, 2001). Two studies adopted a qualitative approach, using grounded theory methodology, to explore how mindfulness works with individuals with psychosis.

Abba et al., (2008) interviewed 16 people with distressing psychosis following participation in mindfulness groups. Data was analysed using open coding (Glaser & Strauss, 1967). The emerging theoretical framework, grounded in participants' experiences, indicated that mindfulness promoted an alternative relationship with symptoms. The process of responding differently to psychosis was reported to develop in three phases: through 1) openness and awareness, 2) willingness to allow the experience to be and 3) self-acceptance. Mindfulness altered the relationship to distressing psychosis through a process of decentring and acceptance of both symptoms and the self. Meta-cognitive insight (Teasdale et al., 2002), that is viewing thoughts as transient events, was highlighted as facilitating acceptance.

Aschcroft, Barrow, Lee and MacKinnon (2011) interviewed nine EIP participants following mindfulness groups using the Abba et al. (2008) protocol. While this study did not explicitly set out to explore mechanisms of change, the data provided some insight into processes. It is important to note that distressing psychosis was not the main presenting problem. Social inclusion, stigma and the emotional sequelae of a first episode of psychosis were key issues (Gumley & Schwannauer, 2006). Results from the grounded theory analysis indicated that mindfulness facilitated a different relationship with symptoms, the self and others through self-understanding, letting go and acceptance. For this cohort, group processes were reportedly significant in facilitating understanding, social relations and in reducing stigma through group normalising experiences.

Both of these qualitative studies presented a number of limitations. Firstly, group processes may have accounted for change. Secondly, social desirability may have resulted in respondent bias. Thirdly, although there were some attempts made to remediate professional and intellectual biases in data analysis (Mays & Pope, 2000) this remained a possibility. In terms of quality, both studies benefitted from respondent validation, relevance and a clear account of the methodology employed, as well as providing instances of coding (Mays & Pope, 2000).

Active

Openness and awareness to experiencing aversive internal events is encouraged in the context of engaging in a valued life. A variety of behaviour change approaches are used, including exposure, goal setting, motivational interviewing and skill development (Hayes & Smith, 2005). Efforts to achieve goals are commonly met by psychological barriers which are targeted by ACT processes.

No studies to date have explored the impact of behavioural change processes on psychosis in acceptance and mindfulness approaches. This is a broader empirical issue than just the psychosis literature (McCracken, 2013). Indeed there are no validated measures of committed action or attempts to measure it. Neither have there been any mediation studies investigating whether these components are key to affecting change. Anecdotal evidence from case studies have highlighted this as an important component for making recovery-oriented changes (Bloy, Oliver & Morris, 2011) and facilitating meaningful re-engagement in a purposeful valued life (Veiga-Martinez, Perez-Alvarez & Garcia-Montes, 2008). Mindfulness and defusion appeared to promote engagement in value-driven action despite positive symptoms for some (Baruch, Kanter, Busch, Juskiewicz, 2009).

Summary

A number of studies support the theory underpinning acceptance and mindfulness approaches adapted for psychosis. EA was found to increase paranoia, contributed to the development of psychosis and was implicated in delusions. Flexible responding was a protective factor against delusions and acceptance facilitated self-directed behavioural responses to hallucinatory experiences. Defusion from the literal content of hallucinations had an impact on levels of distress. Mindfulness had an effect on delusions. Qualitative studies suggested that mindfulness offered an alternative open relationship with psychotic experiences, self-acceptance and letting go of the experience. No studies have formally explored the impact of active engagement in valued life. However, case studies have revealed the importance of this component. Methodological concerns limited interpretation of findings.

Discussion

Emerging research has demonstrated promising results for applying acceptance and mindfulness approaches to psychosis. Outcomes showed reductions in rehospitalisation rates and disruption from voices. Distress associated with positive symptoms was reduced and individuals showed improvements in coping with intrusive voices. Studies also demonstrated amelioration of depression following psychosis and improvements in general wellbeing. The literature indicated that acceptance and mindfulness interventions successfully facilitated a different way of relating to positive symptoms and associated psychosocial difficulties. Mediation analyses have pointed to cognitive defusion as a critical component in reducing the distress associated with hallucinations. The effect of mindfulness on delusions has also been noted. Qualitative studies gave voice to participant perspectives, which highlighted that mindfulness promoted an alternative relationship to unwanted psychotic experiences. Decentering and acceptance were emphasised as mechanisms through which mindfulness reduced distress.

However, a number of studies suffered from significant methodological limitations and results should be interpreted with caution. Small sample sizes have resulted in studies with low statistical power. Too few studies used RCT methods and those that did failed to ensure rigour such as blind allocation. Many studies relied on waitlist conditions and TAU rather than comparisons with a control intervention. In mediation analyses decisions about statistical methods hampered interpretation of findings. A lack of attention to group processes and bias in qualitative studies may have affected the results presented.

Future Directions

This review has highlighted a number of gaps in the emerging evidence and points to possible future directions for research. Firstly, future studies should attend to the limitations outlined above. Specifically, larger scale studies are recommended, particularly those that use rigorous methodologies such as blind randomised allocation with a comparative treatment. Research investigating mindfulness-based approaches for psychosis would particularly benefit from this. The use of established validated measures specific to this population is encouraged (e.g. Shawyer et al., 2007), as is the development of further psychosis-specific measures. Longer follow-up periods would also offer evidence regarding the longitudinal benefits of these approaches for psychosis. Secondly, given the behavioural change element of the ACT model, studies exploring the behavioural outcomes of individuals with psychosis would add to the literature. Thirdly, more research into mechanisms of change is required in order to better understand which processes in acceptance and mindfulness are critical for this population. Clients in receipt of individual ACTp therapy have described mindfulness, defusion, values and acceptance work as contributing to change in a forthcoming qualitative study (Bacon, et al., in press). Further studies might also compare mechanisms of change across different therapies for psychosis in order to determine whether therapeutic change occurs through similar or different processes. And finally, future research should explore how

moderators such as non-specific therapy factors might affect outcomes. For example, in acceptance and mindfulness group programmes, group processes may play a significant role in therapeutic change. Client-related moderators may also point to whom (and with what sorts of difficulties) these interventions are best suited. Identifying moderators may help to elaborate on mechanisms of action.

With respect to clinical implications, this review has highlighted a number of salient processes. The research into EA has demonstrated that this is an important domain for those with psychosis. Interventions, such as acceptance and mindfulness, might promote alternative ways of relating to positive symptoms and psychological distress associated with psychosis. Cognitive defusion and mindfulness have proved especially valuable for responding differently to aversive internal experiences. The literature also suggested that these approaches are acceptable to people with psychosis. Given the focus on altering relationships to positive symptoms in the service of engaging in a meaningful life, these approaches are compatible with a recovery-oriented approach to psychosis (National Institute for Mental Health England, 2004).

Conclusion

Research into acceptance and mindfulness approaches for psychosis has grown in recent years. Evidence has highlighted treatment benefits for this population with respect to positive psychotic symptoms and associated psychosocial difficulties. Findings endorsed treatment approaches that fostered a more psychologically flexible response to aversive psychotic experiences. Mindfulness, defusion and acceptance promoted a non-judgemental relationship with distressing cognitions, emotions and perceptual anomalies. These processes appeared to reduce distress not through symptom elimination, but by responding to experiences with openness and awareness, allowing individuals to engage in a meaningful valued direction.

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MAJOR RESEARCH PROJECT

Section B: Empirical Paper

ACCEPTANCE AND COMMITMENT THERAPY GROUPS FOR INDIVIDUALS WITH PSYCHOSIS: A GROUNDED THEORY ANALYSIS

Word Count: 7998 (8027)

A thesis submitted in partial fulfilment of the requirements of
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Doctor of Clinical Psychology

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SALOMONS
CANTERBURY CHRIST CHURCH UNIVERSITY

Abstract

Aims. Theoretical assumptions and emerging research point to possible mechanisms of change in acceptance and commitment therapy (ACT) for psychosis. However, the specific processes by which change occurs remain unclear and under-researched. No current research has explored processes facilitating change in the group format of an ACT intervention for psychosis.

Methods. Participant perspectives were sought to help elucidate potential mechanisms of change. Nine participants of ACT groups for people with psychosis were interviewed about their experiences of the intervention. Interviews were analysed using methods and techniques informed by grounded theory.

Results. A proposed model outlined key mechanisms of awareness, relating differently and reconnecting with life, which led to reductions in distress and behavioural change. Leaning on others highlighted the importance of the group context in supporting change processes.

Conclusions. The processes identified, and the mechanisms through which these were achieved, as articulated by participants, were consistent with proposed change processes. Participants also offered additional insights based on experiential accounts. Contributions to theoretical understandings and clinical practice are discussed.

Introduction

Acceptance and Commitment Therapy: Theoretical Conceptualisation

Current guidelines for the treatment of psychosis advocate for cognitive behavioural therapy (CBT; National Institute for Clinical Excellence [NICE], 2010). Reviews on the efficacy of CBT for psychosis have been varied. Whilst some meta-analyses demonstrated it improved symptoms (e.g. Pilling et al., 2002), other reviews highlighted significant methodological limitations (Lynch, Laws, & McKenna, 2010) such as small effect sizes (e.g. Wykes, Steel, Everitt, & Tarrier, 2008).

Newer developments in CBT for psychosis have de-emphasised reducing symptoms (Wykes et al., 2008) focussing instead on relationship to distress from symptoms (Pankey & Hayes, 2003). Acceptance and commitment therapy (ACT), one of the more recently developed approaches, aims to do just this by inviting participants to approach aversive psychotic experiences with acceptance and mindfulness in the service of values-based action.

ACT falls within the cognitive behavioural tradition. However, it has a more broadly transdiagnostic approach which aims to promote psychological flexibility, the central concept guiding the model (Hayes, Villate, Levin, & Hildebrandt, 2011). It refers to the ability to be non-judgementally aware of internal events (e.g. thoughts, feelings, memories, urges, hallucinations, sensations) as they occur, without attempting to change those experiences and persisting in value-directed behaviour despite their presence (Hayes, Strosahl, & Wilson, 1999).

The scientific theory underpinning ACT is relational frame theory (RFT) which is a behaviour analytic account of language, cognition and behaviour. RFT offers an account of how language can impact significantly on the appraisal of cognitions (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). RFT also elaborates on the contexts when verbal rules might become problematic, for example when attempts to avoid unpleasant thoughts and feelings

are persistent and counterproductive (Hayes et al., 2011). Avoiding painful thoughts or feelings (experiential avoidance) and adhering rigidly to cognitive rules (cognitive fusion) might limit the ability to bring conscious awareness to the present moment and can thwart attempts to engage in behaviour driven by values (Hayes et al., 2011).

Open, aware and active are the three core processes which promote flexible psychological responding and target experiential avoidance and cognitive fusion (Hayes, et al. 2011; Oliver, Joseph, Byrne, Johns, & Morris, 2013). Psychological openness to internal experiences is encouraged through acceptance and defusion strategies. Defusion refers to the loosening of rigid verbal rules. Awareness provides the opportunity for perspective-taking and contacting the present moment. In the ACT framework, mindfulness supports flexible psychological responding (Hayes & Shenk, 2004) in tandem with perspective-taking, defusion and acceptance. Values provide a context for acceptance and defusion (Hayes, 2004). Identifying achievable values-related goals helps support the commitment to active engagement in meaningful behaviour.

ACT for Psychosis

The theory underpinning ACT for psychosis (ACTp) suggests that experiential avoidance, being overly literal about internal experiences, lacking clarity or despondency about life goals and difficulty committing to effective actions may diminish life circumstances for those with psychosis. Increased psychological openness to experiences promotes the willingness to allow symptoms to be without attempting to alter the form or frequency of them. Along with increased awareness of internal experiences, undermining literal engagement with symptoms supports a more flexible response to psychosis, thereby reducing distress. Finally, active engagement despite the presence of distressing psychosis is situated in the context of core values.

Efficacy of ACTp

Initial investigations have indicated that ACTp is an effective intervention (Bach & Hayes, 2002; Gaudiano & Herbert, 2006a; White et al., 2011). Randomised control trials demonstrated the utility of ACTp in reducing hospital readmission rates and psychotic symptoms (Bach & Hayes, 2002; Gaudiano & Herbert, 2006a). Further studies showed that ACT ameliorated emotional difficulties following psychosis (White et al., 2011). A CBT intervention augmented with acceptance and mindfulness strategies demonstrated improvements in quality of life, coping with command hallucinations and reduced disruption from voices. However, outcomes from a control condition (befriending) were comparable (Shawyer et al., 2012). ACTp been shown to reduce believability in voices, thereby reducing distress (Gaudiano, Herbert, & Hayes, 2010). ACT also has shown potential for impacting on negative symptoms and self-stigmatising beliefs that might impede recovery (Morris & Oliver, 2009). Although the ACTp research highlighted above has pointed towards promising results, the current body of evidence has numerous methodological limitations which impedes interpretation and should be reviewed with caution. The literature would benefit from improved methodological rigour.

Mechanisms of Change

Although research for ACTp is growing, the process through which ACTp effects change remains unclear (Gaudiano, 2005). Understanding change processes is important to the justification of treatment approaches (Kazdin, 2007). Such research might reiterate the importance of non-specific therapy factors in effecting change (Johansson & Høglend, 2007) or confirm theoretically proposed models of change (Kazdin, 2007). Highlighting crucial treatment components may help to maximise benefit.

Mechanisms of change research in ACTp. A few studies have investigated how ACT might ameliorate experiences of psychosis. Experiential avoidance has been shown to

contribute to psychosis (Goldstone, Farhall, & Ong, 2011). Flexible response styles were found to be protective against delusions and acceptance facilitated more autonomous responding to hallucinations (Oliver, O'Connor, Jose, McLachlan, & Peters, 2012.) Distress from hallucinations was reduced through defusion techniques (Gaudiano & Herbert, 2006b; Gaudiano et al., 2010; Bach, Gaudiano, Hayes, & Herbert, 2012). Longitudinally, mindfulness has been shown to reduce distress associated with delusion ideation (Oliver et al., 2012). Key processes promoting value-based action have not been studied as yet although case studies attest to its relevance (Baruch, Kanter, Busch, & Juskiewicz, 2009; Bloy, Oliver, & Morris, 2011;Veiga-Martinez, Perez-Alvarez, & Garcia-Montes, 2008).

Eliciting mechanisms of change through qualitative methodologies. Qualitative research methods are well placed to explore mechanisms of change (Carey, Carey, Mullan, Murray, & Spratt, 2006), particularly through participant perspectives. Such methodologies are especially valuable where research into novel approaches is limited and might be supported by exploratory in-depth analysis (Malterud, 2001). Participant perspectives support an experiential rather than theoretical account of change. Providing "bottom-up" rather than "top-down" explanations reduces reliance on theoretical assumptions and can provide a helpful bridge between research and clinical practice (Kazdin, 2008).

A recent study by Bacon, Farhall and Fossey (2013) used qualitative methods to examine processes of change in individual ACTp. Through a thematic analysis of participant accounts, mindfulness, defusion, values work and acceptance emerged as important components for change.

Research Aims

No research has investigated processes of change in group-based ACT interventions for psychosis. As highlighted, qualitative methods are particularly valuable in undertaking initial exploratory analyses. As such, this study used a qualitative methodology to offer a model of

change processes articulated by participants. Therefore, the primary aim for the research study was to establish the key mechanisms of change grounded in participants' perspectives. Subsidiary objectives were to identify how participants described their relationship to distress following the intervention and how they accounted for changes in distress.

Methodology

Intervention

Context. An ACT group intervention, "ACT for Life", was devised based on available research and implemented in an inner city NHS Trust. It formed the basis for a research trial investigating the effectiveness of ACTp in the group format. The trial comprised a total of 11 groups typically consisting of six participants. The groups were two-hourly sessions run at clinical team bases over four weeks, totalling eight hours. Outcome measures assessing mood, daily functioning and relationship to symptoms were administered across five time points (referral, pre-intervention, post-intervention, six-week follow-up and at 12 week follow-up).

Group participants. Individuals recruited for the trial were from an at risk mental state service (ARMS), an early intervention service (EIP) and a psychosocial service for severe and enduring mental illness. Clients attending these community services would have had varying experiences of psychosis and presented with difficulties managing internal experiences such as worries, delusional ideation, negative thoughts and voices. Eligible clients were those whose general wellbeing and life satisfaction were impaired as indicated by routine measures. Participants aged between 18 and 65 years and who spoke English were included. Clients were excluded if they had completed a course of CBT in the six months prior.

Group therapists. Therapists facilitating the groups were experienced ACT clinicians who met monthly for group supervision. With participant consent, sessions were audiotaped

and reviewed by an external monitor to rate therapy adherence. When consent was not given, therapists completed a checklist rating adherence to key elements of the ACT protocol.

Group protocol. The group protocol was based on a pilot group. The manual followed the core agenda of increasing psychological flexibility in the presence of distressing symptoms whilst encouraging the pursuit of meaningful life goals. Experiential exercises promoted psychological flexibility and were supported by key metaphors such as Passengers on the Bus (Morris, Johns, & Oliver, 2013; see Appendix D). Briefly, the metaphor likens dealing with internal obstacles to managing passengers on a bus. The relationship with the passengers affects the ability to drive the bus in a chosen direction. This metaphor is primarily a defusion intervention that targets the private events undermining successful engagement in value-based action (Hayes et al., 1999). Other well-established ACT defusion exercises were also included. Brief mindfulness and "noticing" exercises facilitated contact with the present moment, and promoted experiential acceptance, defusion and perspective-taking. Support was offered in identifying valued life-goals and pragmatic strategies were provided for developing plans for committed action.

Research Participants

For the current study, a total of nine participants were interviewed individually about their experiences of the "ACT for Life" groups. Inclusion and exclusion criteria followed that of the larger research trial. Additionally, individuals experiencing a relapse in symptoms of psychosis at the time of recruitment were not included in the study. Table 1 outlines the demographic details of participants.

Clients with varying attendance rates were recruited in order to ensure that multiple perspectives on the intervention were captured. The majority attended three or four sessions. One client attended only one session before dropping out. Time since completion of the group

intervention ranged from six months to two years. It was not possible to place restrictions on recruiting those who had recently completed a group owing to low sample numbers.

Table 1

Participant Demographic Data

	Age range	Gender	Self-defined ethnicity	Service	Months since group
P1	20-30	M	Black British	EIP	10
P2	20-30	F	White and Black	EIP	5
P3	20-30	M	European	EIP	5
P3	20-30	F	European	ARMS service	7
P5	40-50	M	White British	Psychosocial	20
P6	30-40	M	White British	Psychosocial	7
P7	40-50	M	Latin American	Psychosocial	12
P8	20-30	M	Black British	EIP	18
P9	40-50	M	European	Psychosocial	16

Research Design

Interview transcripts were analysed using an approach informed by grounded theory methodology (Charmaz, 2006). This method offers opportunities to generate inductively derived theory about a particular phenomenon (Willig, 2013). It allows for further conceptual development of the phenomenon under question. A grounded theory informed approach provided a framework to develop an explanatory model of change processes situated in participant accounts. Experiential accounts provided in-depth data of the therapeutic processes underpinning the intervention.

Time constraints limited the degree to which a comprehensive grounded theory methodology could be adequately carried out. Therefore, an abbreviated version suitable for a smaller scale study was employed (Willig, 2013). This had an impact on theoretical saturation which is concerned with the refinement of categories and aims to guide data collection until no new categories emerge. This task is not always possible where time is limited (Willig, 2013). Theoretical sufficiency is deemed appropriate in the absence of saturation and this was achieved towards the end of the current study (Dey, 1999). This strategy implies that

sufficient data is collected in order for categories to be developed to the extent that relationships can be further explored.

Ethical Considerations

The study was subject to an initial university-based peer-review process. Following this, ethical approval was sought through a local NHS research committee (Appendix E). Ethical practice was also guided by the British Psychological Society and the Health Professionals Council code of ethics and conduct (British Psychological Society, 2006; Health Professionals Council, 2009). The main ethical issues arising concerned ensuring capacity to consent, gaining informed consent, maintaining confidentiality, managing data protection, being transparent about risk management and ensuring patient safety.

Recruitment

A list of eligible participants was generated from those recruited to the larger trial. Participants who remained under the care of mental health services were identified, and their key workers were contacted to discuss suitability for the current study. Key workers sought consent from the service user to be contacted about the research study. Consent was given to contact 23 participants and 16 of those were contactable. Nine agreed to participate.

Data Collection

Potential participants were met at their local NHS mental health clinic. Informed consent was obtained and documented. Clear procedures for managing risk were discussed with the participant as per the patient information sheet and consent from (Appendices G and H). Participants were offered the opportunity for a post-interview debrief (although this was never required). Interviews lasted between 26 and 54 minutes resulting in over five hours of data. Interviews were audio recorded and later transcribed verbatim.

An interview schedule (Appendix J) was devised based on the research aims and a review of the literature. Service user consultants and experienced clinicians reviewed the

schedule, which was used flexibly to guide the interviews. Reflection on the interview process followed initial open coding of data and questions were adapted in line with the emerging theory.

Participants were given the opportunity to answer questions unaided. However, prompts about key exercises were necessary in instances where significant time had lapsed since attending the groups and participants appeared to be struggling to recall the material. Prompts included the worksheets handed out in the group and a brief description of the tasks as described in the group manual.

Data Analysis

It is important to clarify the particular approach taken, as various versions of grounded theory methodology exist (Willig, 2013). The study adopted Charmaz's (2006) social constructionist epistemological stance to grounded theory. This perspective sees grounded theory not as objective "truth" but as socially construed reality. The researcher thus has an active role in shaping the analysis of data such that meaning is co-constructed between researcher and researched (Charmaz, 2008). Analysis involves incorporating both the participants' understandings of change processes based on their experiences and the researcher's interpretations of these experiences (Clarke, Rees, & Hardy, 2004). In order to understand the ways in which researchers shape the construction of knowledge it is fundamental that the researcher "bracket" their prior experiences and assumptions about the data (Rolls & Relf, 2006). To support this process, a bracketing interview was carried out prior to recruiting participants. This allowed the researcher to acknowledge the potential influence of prior clinical experience of ACTp on data analysis (see Appendix K for further discussion).

Concurrent data analysis and collection allowed initial codes to be identified early and emerging analytical ideas to form. Initial line-by-line coding was used and followed

Charmaz's (2006) guidelines of defining actions represented in the data to begin to identify important processes. Significant initial codes were elevated to focused codes. Focused codes were more conceptual and provided analytical direction. The "constant comparative method" (Glaser & Strauss, 1967) was used to establish similarities within the data and supported the development of an analytic framework. The use of memos also supported the development of conceptual categories and thus the emerging theory. Memos explicating processes within individual interviews helped to compare and contrast conceptual categories. Memos also helped to clearly define the conceptual categories. Raw data was used in the memos so that participants' perspectives remained alive within the concepts. Conceptual categories were assimilated into overarching categories that formed the theoretical model. Supervision at the important coding stages helped to provide coding clarity and quality.

Principles of theoretical sampling were followed. This technique aims to direct the analytic process such that data is collected based on samples that aid in the development of theory rather than representativeness (Charmaz, 2006). The aforementioned strategy of "theoretical sufficiency" (Dey, 1999) guided data collection which ceased once this had been achieved. The processes of memo-writing, peer-group support and supervision provided opportunities to reflect on whether "theoretical sufficiency" was being attained. Given that categories and the relationships between categories were being suggested by the data and emergent coding, sufficiency was deemed to have been achieved.

Quality Assurance

A number of different guidelines for ensuring the quality of qualitative research exist (Mays & Pope, 2000; Meyrick, 2006 and Yardley, 2000). Steps were taken to ensure methodological rigour based on these good practice guidelines. Explicit communication of the epistemological stance of the lead researcher has been provided. A bracketing interview and a reflexive journal of the analytic progress of the study helped to keep in mind the role of

assumptions and prior experience held by the lead researcher (Appendix K). Supervision was also used to reflect on the researcher's responses to the data and the influence of their personal values and existing theoretical knowledge on interpreting the data. Research memos also provided evidence of the development of the analytic process for audit purposes. They offered insights into how interpretations of data were made. A methodology-focused peer-group offered further support for interrogating the credibility of the analysis. Finally, research supervisors provided useful guidance and commentary on the coding throughout the different stages of analysis.

Results

Three key processes emerged as important mechanisms of change and included awareness, relating differently and reconnecting with life and are presented in the visual model below (figure 2). They were not discrete mechanisms through which change occurred, but were closely inter-related. This is represented by arrows in the diagram. Either one of the three mechanisms may have felt more significant in facilitating change for a participant, but they were all commonly experienced by those interviewed. A further factor, leaning on others, was also implicated in change processes and was related to the group learning context. Different processes supported the key mechanisms of change. The model below was derived from the data analysis and is thus grounded in participant accounts of the intervention.

Prior to Therapy

It may be useful to initially outline the kinds of difficulties participants were facing and how they had been managing these prior to therapy. Participants had experienced a range of difficulties such as paranoid thoughts, negative self-critical thoughts, distressing voices, depression following an episode of psychosis, social isolation, low self-esteem, loneliness and self-stigmatising beliefs. Participants described how they had been relating to and attempting to manage their distressing experiences prior to therapy. Examples included:

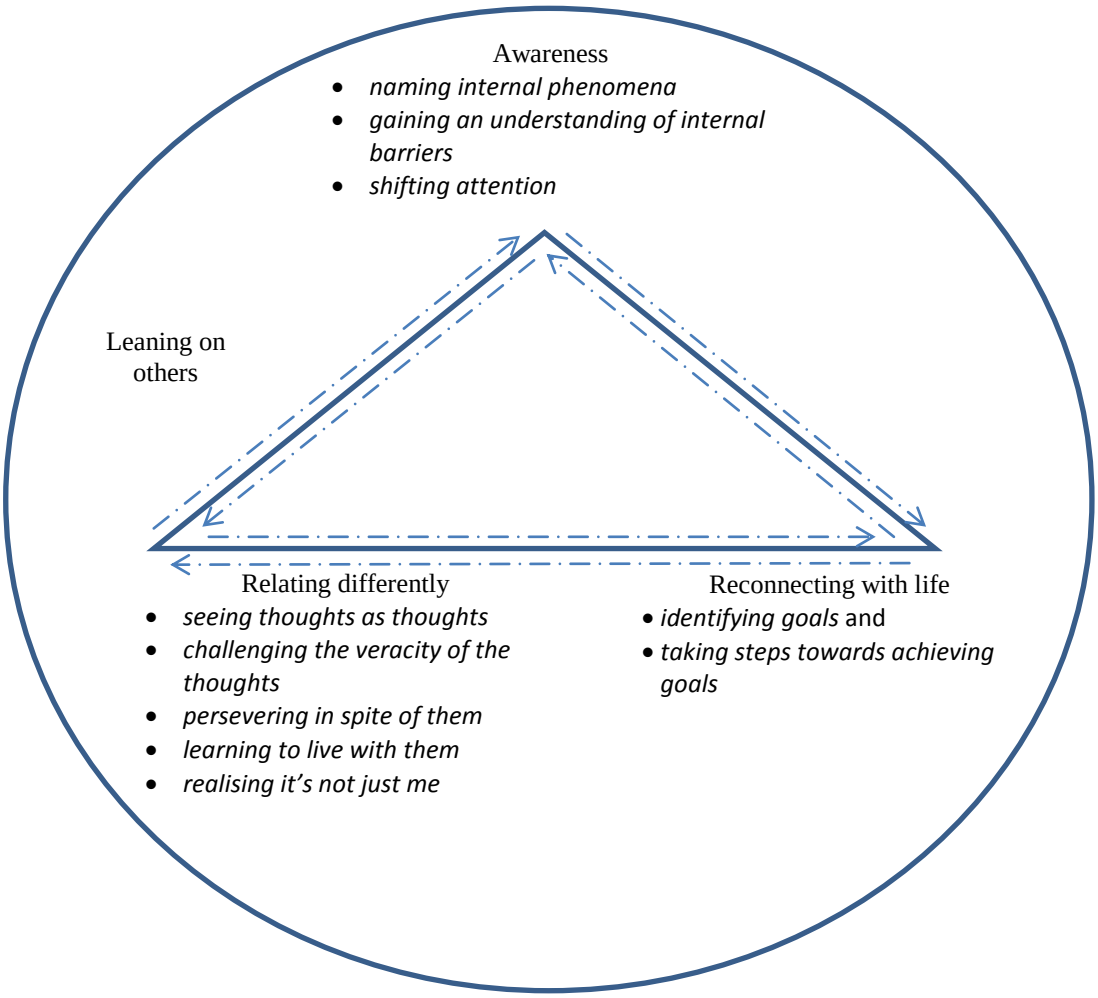

Figure 1. Possible mechanisms of change in group ACT for psychosis, as articulated by participants.

"Before I just listened to the thoughts and that I can't be bothered and there's no point." [P1]

*"Yeah, I got to the point on the hallucinations … an*d thinking about suicide and some things *like that."* [P3]

"[When] I was feeling down about something or I felt like my opinion wasn't being heard I just sulked and put myself in my room sort of thing." [P2]

Commonly, participants tended to isolate themselves and engage with the literal content of their internal experiences. Participants described becoming preoccupied by negative

thoughts, paranoid beliefs and being drawn into an "*imaginative world"* [p3]. This left them feeling as though they did not belong to society, that they were different and alone in their experiences:

"When I first got here ... I just felt like life was going on and I wasn't part of it." [P2]

What follows is an account of the possible processes through which change occurred as articulated by participants. The findings are presented here as a reality that was co-constructed between participants and researcher and are not intended to imply an objective truth.

Awareness

This category captured the processes through which participants began to observe often unpleasant and distressing internal experiences. The "passengers on the bus" metaphor was identified as the primary mechanism that facilitated awareness. Three important processes supported a change in the lived experience for participants: naming internal phenomena, gaining an understanding of internal barriers and shifting attention. These are explored further below. A brief outline of participants' accounts of the benefits of awareness is also given.

Naming internal phenomena. Awareness included initial steps of identifying, naming and verbalising internal phenomena, such as thoughts, voices, memories, feelings, urges and so forth. Through observing and naming their internal experiences, participants were able to gain perspective and an understanding of their predicament. This process seemed to afford participants the opportunity to look at their problem from a more objective stance. One participant summed this up by saying:

"I mean there are the monsters and, and all the rest of the jitter to deal with and … all the things that you carry with you, things that you want to get rid of." [P5]

The ability to bring attention to thoughts and voices and observe them with curiosity seemed to lessen the degree to which they took the content of their thoughts or voices

literally. For example, simply observing voices without aiming to alter them reduced the degree to which participants felt dictated to by them. In the quote below, a participant describes how naming the distressing voices and viewing them as events reduced the omnipotence of the voices.

"Talking about those passengers in the bus … I never thought in that way, but once I was reassured that they are just part of me, they are not owning me, that really helped me to focus that, you know, *okay let them be there. I know I can't get rid of those thoughts but I know they're there. As long as I know they're there they can't take control over me. That's fine for me."* [P6]

This participant articulated how identifying and naming difficult internal experiences was "*like you're putting out those stones which make you heavy"* [P6]. This remark also captured her ability to step back from the distress associated with painful emotions.

Gaining an understanding of internal barriers. Participants described being invited to bring awareness to their internal experiences whilst engaging in activities in the group and between sessions. This helped them gain perspective of internal phenomena operating as barriers to meaningful engagement. Initially, bringing conscious awareness to thought processes helped participants to begin to discriminate whether the thought was helpful or unhelpful:

"it just helped me know when a certain thought was coming out, whether it was good or bad." [P1]

This led to developing an appreciation that thoughts, emotions, memories and symptoms of psychosis could be unhelpful barriers to engaging in a meaningful life. This was explained as:

"negative thoughts that you might have about yourself, you know, not thinking that you can, when you*'re trying something, not thinking that you're going to be able to do it"* [P2].

Participants began to notice that engaging with particularly unhelpful thoughts might work against them and contribute to feeling stuck:

"if you're just stuck with your bad thoughts, with your depression and everything what's happened bad in your life, you can just concentrate about this thing. You can't move forward. You will just damage yourself." [P6]

Participants realised the consequences of focussing too heavily on internal experiences may mean that *"you lose direction"* [P8] because *"you're not living aint it, you're not experiencing life, you're just, like, you're too inward sort of thing."* [P8]

Internal experiences were identified as interfering with goals. For example, in engaging in one of his goals, one participant reported that "the passengers that showed up were anxiety *and um, er, jellyness in the legs and panic attacks"* [P5]. For another participant, memories were identified as impeding his ability to engage with goals. For a different participant it was *"voices that come to your mind telling you you cannot do it, the goal"* [P7]. As highlighted earlier, some participants realised the predicament of being dictated to by voices brought a sense of powerlessness and frustration.

Shifting attention. Once participants were able to observe their internal experiences and begin to gain the perspective that private events could be functioning to impede their engagement with life, they began to develop the ability to shift awareness. This helped participants to perceive a degree of choice over engaging with internal experiences. This allowed participants to *"take time out; to just not get bogged down in negative thoughts and what other people think."* [P2]

Paying deliberate attention to the external world helped to foster the ability to move their attention from an internal to an external focus. One participant described how he used nature as a focus in managing distressing voices:

"There were lots of people in my head and all of them were talking and then I kind of switched my mind on something else, like nice weather and looking at the nature. It kind of *helped."* [P3]

This helped him to appreciate his predicament "*from a different perspective"* [P3]. The body was also used to develop the ability to shift focus from internal experiences:

"if I've got some bad thoughts I know that I don't need to concentrate on them. Sometimes when the baby sleeps I will, you know, relax. I would clear everything, you know, *try to feel my body."* [P6]

Deliberately choosing to bring attention to the external world was also seen as novel. It brought with it pleasure and a sense of re-connecting with life. Using objects that invited an engagement with the senses helped to foster this. Referencing a mindfulness exercise using an orange, one participant highlighted the joy that a deliberate engagement with an object could bring:

"And you peel, and smell ...that was also nice because sometimes you do things and they are, they ...you never focus on enjoying food. Sometimes you will just do this mechanically but if you stop for a second and, you know, focus on things which make, which *can make you happy, that means a lot."* [P6]

Benefits of awareness. Participants described a number of benefits. Being more mindful of their experiences helped them to be more aware of changes that had occurred, including noticing that they felt less isolated. Being able to name and verbalise internal experiences had also helped to improve communication about these experiences with relatives, which was seen as supporting the process of feeling less alone. Awareness had helped to promote opportunities for reflecting on the impact of being entangled with private events and crucially *"noticing it before it got too magnified"* [P2]. This awareness helped to create the possibility for a different way of responding than previously:

"Before the group I sort of got bogged down in them [thoughts] and then by the time I *did notice them, I was already too bogged down to even care."* [P2]

Relating Differently

The second category referred to a process that supported a different way of responding to internal experiences. This process appeared to ease the distress that arose from negative self-critical thoughts, self-stigmatising beliefs, critical voices and paranoid beliefs. There were five mechanisms which facilitated a different way of relating to internal experiences: seeing thoughts as thoughts, challenging the veracity of the thoughts, persevering in spite of them, learning to live with them and *realising it's not just me.* Importantly, the process of becoming aware of the internal experience was not entirely distinct from an alternative way of responding to these experiences. For many interviewed, this act of becoming consciously aware was in itself a novel way of relating to internal events. The five supporting mechanisms are expanded on below and are followed by descriptions of the benefits of relating differently to internal experiences.

Seeing thoughts as thoughts. One of the ways in which participants began to respond differently to thoughts was to view them simply as experiences. One participant described the impact of this alternative relationship with thoughts:

"I got that it really doesn't matter anymore because at the end of the day it's just a *word, it's just a thought."* [P2]

For another participant seeing thoughts as thoughts offered alternative possible behavioural responses:

"I don't need to listen to, to my thoughts you know, those upsetting thoughts, I can make my better decision*."* [P6]

Importantly, this participant emphasised that the word *"doesn't really need to have any meaning for you."* [P6] Participants described a variety of techniques that promoted this way

of responding to thoughts. Repeating aversive thoughts aloud quickly *"until it sounded silly"* [P2] had the effect of reducing the power of the thought. Another participant described using the Passengers on the bus metaphor to imagine the voices as passengers inside her mind that she need not take notice of. This offered a humorous way of relating to previously distressing experiences such that she was no longer "*so scared of them"* [P6].

Challenging the veracity of thoughts. Another way in which participants related differently to thoughts was through challenging the veracity of the content of the thoughts. As one participant explained:

"I tend to just try and see if like the thoughts are true or not." [P1]

This participant described using a goal-related activity to disprove distressing paranoid beliefs. He came to the conclusion that:

"most of things that I thought was gonna happen didn't. Got on alright. And I started going every week." [P1]

Another participant described using explicit thought-challenging techniques. Writing down the self-limiting thoughts allowed her to set goals to challenge those beliefs. Powerfully, she describes here how this technique changed her relationship with beliefs about being disabled:

"Well, I've improved my walking by using it. Because when I first arrived here I was in a wheelchair and I got myself out of the wheelchair. But, you know, there comes a point *where it feels like you're doing the same thing over and over. So then I'd take the negative* words and set myself goals relating to the words in relation to how I feel about my disability an*d stuff. So then I'd sort of go for a walk and then look at my journal and see if the negative words, see if I can change the word, depending on how well the walk went." [P2]*

She also described using the technique of repeating words until they lose their meaning whilst engaging in an activity in order to challenge a thought such as *"can't be bothered today"*:

"I'll write that down, look at it, sort of force myself to get me jogging bottoms on, me watch and me water and go out the door and do a 10 maybe 15 minute walk and just have *that 'can't be bothered' going around in my head for 10* – 12 minutes. By the time I get to the *end of my walk 'can't be bothered' won't be there anymore."* [P2]

Persevering in spite of distressing thoughts or psychotic experiences. Creating an alternative way of responding to internal experiences sparked determination to engage in preferred activities despite the presence of the experiences:

"I started to start doing things even if I had a bad thought about it. Like I think at that time I wanted to go play football and I kept on worrying about different thoughts and *chatting."* [P1]

Another participant described being more willing to try and fail than not to try at all. This perseverance appeared to be a function of a different way of relating to negative self-critical thoughts. Viewing thoughts as events reduced her entanglement with the literal meaning of the thoughts allowing her to make choices based on her goals rather than listening to the negative thoughts. Similarly, another participant was able to view insecurities as negative thought processes distracting him from seeking employment. Changing the manner in which he related to these insecurities allowed him to persist in his effort to secure a job. Clarifying a goal to focus on, such as finding a job, was also identified as an important factor in being willing to engage in goal-related behaviour in spite of the presence of distressing thoughts or voices.

Learning to live with them. Participants described coming to a realisation that their internal experiences (especially thoughts and voices) would not necessarily disappear, despite

challenging them, seeing them as events or engaging in goals in spite of their presence. This realisation meant coming to the understanding that

*"they'*re always gonna be there regardless, so I guess you have to, like, learn to live *with them."* [P1]

Becoming aware of the futility of trying to control their experiences was key:

"I don't see how you can control them really. I think just by letting them be and not *listening to them too much is the main thing you can do because they're always going to be there aint it, always going to be in the back of your mind."* [P8]

Those interviewed described conscious awareness of the presence of these experiences, but finding a way to put them to one side. This was made possible because an alternative way of responding to aversive experiences reduced the degree of omnipotence and distress they previously incited.

Realising it's not just me. A major part of relating differently to internal experiences involved realising others experienced similar things. Learning *"that it's not just me"* [P1] was an important factor in changing the way they related to themselves. Having previously been isolated for feeling different and being strongly aware that *"*a lot of negative *connotations are to do with psychosis"* [P8], there was a general consensus that meeting people with similar problems had a significant impact. Indeed, for some, this was "more *useful than some of the exercises."* [P5]

Participants described how normalising, sharing, self-compassion and self-acceptance facilitated an alternative response to self-stigmatising thoughts. A video vignette played during the sessions about a young man experiencing a number of difficulties following bereavement helped to normalise the participants' responses to stressful events. It also appeared to encourage self-reflection and facilitate open sharing about their personal difficulties. The video and sharing within the group appeared to foster a more compassionate

stance to their dilemmas. A degree of self-disclosure from the therapists about the difficulties inherent in not getting drawn into negative thinking and in achieving goals also helped to promote self-compassion. The group experience helped one participant to realise that:

"my problem is not the end of the world, because you know everyone is human, all of us can make some mistakes." [P6]

Thus, participants began to experience a different way of relating to the parts of themselves that had previously felt shaming. Self-acceptance appeared to be facilitated by the realisation that they could simply allow their experiences to be and that they did not need to eliminate parts of themselves.

Benefits of relating differently to internal experiences. Primarily, participants reported feeling less distressed by their internal events. For one participant feeling less distressed had helped to *"feel like I can breathe a bit more"* [P2]. Importantly, participants acknowledged that the experiences (or symptoms) had not been eradicated but that they had *"learnt to live with it"* [P1]. By learning to respond differently to their experiences, participants could simply allow their experiences to exist without having to struggle against them, control them or change them:

"even if I feel like tingling in the body I kind of don't react like before." [P3]

Responding differently had benefits with respect to feeling less disconnected and isolated. By not struggling so intensely with internal experiences, participants were able to focus more on the external world and on re-connecting with the social world.

Reconnecting with Life

This third category brought about tangible changes in participants behaviour that relatives often noticed. Reconnecting with life referred to the process of beginning to actively engage in meaningful behaviour. Reconnecting with life was closely linked to awareness and relating

differently. In talking about self-critical thoughts, this participant demonstrated how the three processes are intrinsic to each other:

"just letting them be and like not focusing on them too much yeah. And having a clear idea of what your goal is … as well as identifying your demons … then you can try and put the demons aside and concentrate on the actual aim yo*u have" [P8]*

For most, this process involved re-entering into the social realm. Participants described emerging from an isolated cut-off existence to one in which they had begun to initiate and maintain connections with others, which they saw as a positive development.

Key elements of the intervention that seemed to support the process included identifying goals and taking steps towards achieving those goals. Key skills described earlier were integral to this particularly awareness of thoughts as obstacles and learning to live with thoughts, hallucinations, paranoid beliefs, memories and emotions.

Details of participants' accounts of the two processes supporting their attempts to reconnect with life are given below. The benefits of getting back into life, as articulated by participants, are also given.

Identifying goals. Taking the time to clarify goals was considered valuable:

"Doing what's important to you, yeah, but even establishing those things; the goals that are important to you." [P5]

Both identifying the goals and committing to them in the public domain helped to motivate participants to achieve their goals. Participants described the sense of focus this offered them and the way in which goal-orientated activities provided an opportunity to relate differently to their experience of psychosis:

"the very specific goal of taking more exercise is not actually a horrendously important goal, it's a good goal, but it's also a way of getting you to do something different, to act in a different way." [P5]

They also offered caution that goals set should be achievable to avoid becoming *"bogged down"* [P2] by them.

Taking steps towards achieving goals. The majority of participants identified goals for reconnecting with others, socialising more and getting out more. Successes with these goals and recognition of success by their networks proved to be important motivators to maintain the behaviours. Setting daily goals helped to sustain change:

*"if you at least think for five minutes what could I do ... and then sl*owly, slowly, you *know, just make a different goal, different goal every day. So that's helped a lot."* [P6]

This participant demonstrated that an awareness of thoughts as obstacles was an important element in relating differently to the thoughts and that goals formed a valuable conduit through which behavioural change could occur. Others also referenced this skill of noticing thoughts that arose in the context of taking steps towards achieving goals:

*"To see what passengers came up, like see what thoughts c*ame up when you tried to do *umm, do something that you wanted to do, or you were trying to do something."* [P1]

Participants reported becoming aware of how thoughts impacted on behaviours and noticing behaviour as being inconsistent with values. For one participant, noticing how her previous way of relating to her experiences was detracting from her values to be a good mother was particularly enlightening:

"it's helped a lot because, you know, when you're a new mum ... 100% of your time you need to focus on *your child. So if you're cut up with, you know, the depression, then you can't do those things."* [P6]

Participants opted for an alternative way of relating to those thoughts by viewing them as events. Choosing instead to remain committed to engaging with goals rather than becoming entangled with the content of thoughts was seen as beneficial "because it would *allow me to concentrate more on the actual journey rather than the faults in my head."* [P8]

Benefits of getting back into life. Increasing meaningful engagement in life had important benefits for participants, as highlighted by this comment:

"I think it was positive for me in both my mental wellbeing and my physical wellbeing because I'm doing a lot more than I was before the group." [P2]

Predominantly participants reported feeling more connected with a meaningful life across a number of domains, including through employment, hobbies, education, exercise and social engagement. One participant captures the impact of being immersed in life rather than experiencing it passively:

"I got a job, was in a band, was super busy. And I guess maybe I was living life rather than letting it pass me by soon after I did this." [P8]

Leaning on Others

The final category provided an important context for supporting change. As discussed earlier, the group experience was critical in supporting a different way of relating to self-stigma. However, it also offered a context for learning to lean on others for support during the process of therapeutic change: "you could lean on other people for their opinions*"* [P2]. Having others in the group helped to diffuse the intensity of the therapeutic encounter, possibly particularly important for some: *"*if it was 1:*1 then it would be a bit more intense"* [P2]. It also provided a forum for multiple perspectives and allowed participants to receive emotional support from one another: *"you've got people who can help you, so it's extra"* [P4].

Discussion

This study has offered a framework for understanding processes of change in an ACTp group-based interventions. This study also makes a novel contribution to the literature more broadly by using a methodology that has not been utilised to understand processes of change in ACT. Through participants' accounts, three overarching processes of change were related to the

intervention, namely awareness, relating differently (to self and to internal experiences) and reconnecting with life. A further process, leaning on others, created an important context for change and referred to the group experience. What follows is a discussion of these processes with respect to theoretical assumptions, clinical applications and implications for future research. The study limitations are also outlined.

Theoretical Implications

Participants' perspectives of key components of change in ACTp groups can be usefully compared with existing research and theoretical assumptions. In the discussion below, themes arising from participants' accounts are grouped into those that are directly theoretically-consistent, those that are not explicitly referenced in the framework but are arguably ACT-consistent and those that initially appear contrary to the proposed model. Finally, contributions to conceptualisations of mindfulness are discussed.

Firstly, theoretically consistent processes included shifting attention, seeing thoughts as thoughts, persevering in spite of them, learning to live with them, identifying goals and taking steps towards achieving goals. The ACT-consistent processes were akin to cognitive defusion and acceptance. The latter incorporated the ACT-consistent notion of willingness to persist in the face of adverse internal experiences. Defusion techniques working to undermine the omnipotence of hallucinations or paranoid ideation were identified as helping to reduce distress, as with Gaudiano, Herbert and Hayes (2010). Responding differently to aversive internal events or distressing psychosis is consistent with the central aim of increasing psychological flexibility in ACT for psychosis. In the study, relating differently to difficult experiences helped to reduce the level of distress despite their continued presence. Results also highlighted that goal-directed behaviour contributed to change processes, echoing the findings of Bacon and colleagues (2013).

Secondly, processes not explicitly emphasised by the ACT framework included naming internal phenomena, gaining an understanding of internal barriers and *realising it's not just* me. However, these could be construed as being ACT consistent. The first two are inherent to defusion, mindfulness and perspective-taking. Results are thus consistent with assertions that mindfulness is an important mechanism of change in ACTp (Bacon et al., 2013; Oliver et al., 2012; White et al., 2011). Participants described relating differently to self-stigma through exposure to others with similar difficulties. Arguably, these processes are aligned with ACT components promoting acceptance, perspective-taking and committed action. However, the group context appeared to offer a unique format for promoting self-acceptance.

Thirdly, the remaining theme, challenging the veracity of thoughts, appeared to be more consistent with traditional CBT methods (Hackmann, 1997). On further examination, challenging thoughts was contextualised in relation to pursuing value-directed behaviours. It may well be that participants reappraised their internal experiences as part of a process that facilitated broader values-based action.

Finally, this study has also contributed to debates about the construct of mindfulness. Bishop et al. (2004) proposed two components to mindfulness: increased conscious attention to internal events and an open stance towards these phenomena. Mindfulness meditation practices are integral to these components. Hayes and Shenk (2004) caution against rigidly aligning with the underlying philosophy of meditational practice. Non-meditative methods may also promote mindful attention and acceptance. ACT techniques have the same effect, but follow a broader contextual behavioural paradigm.

In this study, participants did emphasise the value in initially bringing their experiences into full conscious awareness. However, awareness appeared to incorporate facets of present-moment contact, cognitive defusion, attentional control and perspective-taking. The category of relating differently also contained elements akin to metacognitive awareness (seeing

thoughts as thoughts) and acceptance (learning to live with them). However, participants associated these processes with contextually defined behaviours of perseverance in pursuit of value-based actions. Thus, in the current study participants' descriptions appeared to suggest a broader definition of mindfulness than that of Bishop et al. (2004).

Clinical Implications

Given the paucity of research on the therapeutic benefits of commitment to behavioural change (McCracken, 2013), this study has provided a valuable contribution. The finding that individuals with psychosis were able to persevere with behavioural goals in spite of persisting symptoms or aversive internal experiences is clinically relevant. Moving towards goals whilst concurrently working to ameliorate distress was valued by participants and helped to create a context for change.

Although caution has been offered with respect to how mindfulness is used with individuals with psychosis (Yorston, 2001), the current findings suggest that mindfulness techniques may be both acceptable and useful for people with psychosis. The findings have also pointed towards a more flexible application of mindfulness beyond meditational practice.

Participants clearly felt that the group format was particularly beneficial. Primarily, it appeared to support an alternative relationship to internalised self-stigma. Therefore, this finding endorses this treatment modality in delivering ACTp.

Directions for Future Research

This study has contributed to a growing body of research investigating how ACT can usefully be adapted for those with psychosis. Further research on processes of change using mediational analyses may help to further clarify mechanisms of change and how they can be optimised in the clinical context. Additionally, further research on key mechanisms related to mindfulness may help to clarify whether meditational practice is integral to its definition. Future research might also investigate more closely how committed action contributes to

improved psychological flexibility. As highlighted by McCracken (2013), this is important to ACT generally, but is particularly relevant to those with psychosis where social engagement is often impaired (Pinkham, Penn, Perkins, Graham, & Siegel, 2007). Finally, research could be directed at improving outcome measures that are more sensitive to the changes outlined in these findings, such as those capturing variations in value-consistent behaviours.

Study Limitations

This research into mechanisms of change in an ACT group for individuals with psychosis is limited by its scale. The constrained timescale and resources may have limited methodological quality. Larger scale grounded theory research would have the benefit of increased sample size and allows the possibility of using theoretical sampling to broaden out concepts and make comparisons with other data.

In seeking a heterogenous sample for this study, access to the research was made available to all participants who had attended the group intervention over a two year period. One of the major limitations of this study was the variability with regard to the time that had elapsed since participants had taken part in the intervention. Some participants had further psychological treatments in the intervening months. This means it may have been difficult for them to discriminate whether ACT was responsible for change. Furthermore, there are also the potential effects of history and maturation such as the passage of time, the effects of social, relationship and treatment contexts which may have influenced outcomes for participants. However, full efforts were made to re-acquaint participants with the central exercises. Importantly, the extended duration since the intervention for some participants offered encouragement that ACT continued to be of benefit.

Conclusion

This study proposed a model of change processes in ACTp groups. The model was grounded in participants' accounts of therapy obtained from interviews with nine individuals

with psychosis. As such, the findings have offered valuable insight into how ACTp in a group setting was perceived to effect change. Three inter-linked processes with discrete functions were key in creating change and a further fourth factor provided an important context for change. Contributions to theory, clinical practice and future research have been outlined.

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MAJOR RESEARCH PROJECT

Section C: Critical Appraisal

Word Count: 1919

A thesis submitted in partial fulfilment of the requirements of
Canterbury Christ Church University for the degree of
Doctor of Clinical Psychology

JULY 2013

SALOMONS
CANTERBURY CHRIST CHURCH UNIVERSITY

Question 1: What research skills have you learned and what research abilities have you developed from undertaking this project and what do you think you need to learn further?

Prior to commencing this training programme, I had had some experience of working within the research context. As a clinical research officer, I had become familiar with a number of dimensions of research such as interviewing skills, managing research data and the administrative tasks associated with research. However, during the process of undertaking this research project, I acquired a number of new research skills predominantly in the areas of ethics, methodology and interviews.

Applying for ethical approval of a research project was an unfamiliar experience, but one which I have valued highly. I found the IRAS form helpful in developing my ideas and gaining clarity on the research process, particularly in the aims and design of the project. In my previous research role, I had developed an appreciation of the importance of the core ethical requirements, especially patient safety. Completing the required paperwork is an important reminder of these core values. Although attending the ethics panel was daunting, it went without any major problems most likely due to the in-depth ethical considerations that had been prompted by and articulated in the paperwork.

The research project I had been involved used quantitative methodologies. Therefore, the prospect of designing and implementing a qualitative project was a novel one. I became familiar with the numerous qualitative research approaches and developed skills in how to choose an appropriate methodology.

Whilst the grounded theory approach made theoretical sense to me, it was another matter entirely learning to put this method into practice. It certainly took a while to get used to the iterative nature of analysing data. At times, I also felt uncertain about assigning codes to data. It helped to continually return to the notion that meaning is co-constructed between researcher

and participants (Charmaz, 2006). This reassured me that my voice was as much a part of the process as the contributions articulated by participants.

A bracketing interview and supervision also helped considerably with the data analysis. I was able to consider my preconceived assumptions about the research process and the research questions in an interview before undertaking the research. By "bracketing" these ideas, I was able to reflect on when they were encroaching on the analysis. In these instances, I found that memo-writing, the reflective diary and supervision were helpful to clarify my ideas. Individual supervision and a grounded theory peer group offered further support and helped me to develop my confidence in data analysis. I also found comfort in the notion that we are never free of pre-conceived ideas in our data analysis (Thomas & James, 2006).

Through the literature review and assessing the quality of my own research, I have also acquired skills in evaluating qualitative research. A number of frameworks were particularly helpful in this endeavour, including Mays and Pope (2000) and Yardley (2000). In evaluating the quality of this research project, I was able to appreciate how different elements might impact on the quality of the research. In my case, the time-limited restrictions adversely impacted the degree to which a pure grounded theory approach could be conducted. Limited time resources also meant that I was unsuccessful at learning to use the Nvivo software, despite my best attempts. This was a frustrating experience and I would value the opportunity to learn this programme properly before undertaking further qualitative research as I had a small glimpse of how it could help efficiency.

Despite being familiar with interviewing participants in my previous research capacity, I had only used standardised questionnaires. Creating an interview schedule was a novel skill and one which I enjoyed consulting with service users on. I have a long-standing interest in bringing service users more into the research process and therefore enjoyed this collaboration.

I was also able to reflect throughout the project how I might like to involved service users more broadly in applied research.

In conducting interviews, I was aware of a pull towards the format of the clinical interview and had to consciously remind myself of the different context of research. I had a sense of the different role of the psychologist in research and how important it is to respond appropriately to contributions in the research setting. This is particularly important where the interview structure is more open-ended. Whilst I have certainly made progress in developing this skill, I believe that further experience will certainly help to improve my qualitative research interviewing skills.

Question 2: If you were able to do this project again, what would you do differently and why?

If I repeated this project, I would make a number of changes based predominantly on the methodological quality of the study and the research design limitations. Theoretical saturation has been regarded as potentially unachievable especially in time-limited applied research (Corbin & Strauss, 2008, Willig, 2013). Dey (1999) argued that theoretical sufficiency may be adequate for exploring relationships between categories. However, an increased sample size may offer further data to expand upon these relationships. Increasing the time period may allow the opportunity to increase the sample size. In this project, the pool of potential participants was limited and only a few more may have been possible if the time period increased.

Pursuing other options to deepen the data, such as through triangulation, may have been possible with the benefit of more time. I would have then been able to consider including interviews of clinicians to explore their ideas of change mechanisms in the intervention and potentially what they made of the participants' accounts. Another technique which may have

improved the quality of the research is validation (Williams & Morrow, 2009). Reviewing the categories and the emerging theory with participants may have been possible with increased time resources and would be a dimension of grounded theory that I would aim to include in future research.

Three areas in the research design might have improved the study. Firstly is the issue of time elapsed since participation in the treatment intervention. This study was related to a larger outcome-based trial following group interventions over a period of two years. It would be important to reconsider the design of the current retrospective study, possibly excluding participants based on time lapsed or those who had either gone on to receive further treatments. In this study, the consequence would have been a reduced sample size. In future research, I would aim to consider both quantitative and qualitative methodologies at the outset of the research trial. It may have been more efficient for the qualitative study to have commenced shortly after the outcomes study, aiming to recruit participants at a particular time point following the intervention.

Secondly, the research study may have been supported by broadening the research aims to include a comparison with data from individual therapy. This would allow for accounts of change in group therapy and individual therapy as articulated by participants. This approach might usefully offer important insights into how change is accounted for in the two different modalities and whether there is significant convergence.

Thirdly, on reflection, the interview schedule may have been somewhat limited. The schedule was flexibly adapted throughout the process to reflect the emerging categories. However, it may have been more helpful to be guided more explicitly by the theory in some questions. Although data about change processes emerged through broad questioning about the intervention, specific open questions about perceptions of how change occurred may have

offered additional insights. Elliott, Slatick and Urman's (2001) Change Interview questionnaire may have offered a useful outline.

A final point of learning for the future would be with respect to the organisational management of the project. In the future I would endeavour to space out the interviews and analysis of data more evenly in order that each transcript can be adequately coded before moving on to the next analysis. This would help to provide more space around the data analysis for reflection on emerging categories and how this might best inform the next steps.

Question 3: <u>Clinically</u>, as a consequence of doing this study, would you do anything differently and why?

The findings of this study have reinforced for me the importance of group work in the clinical context. My experience has sometimes been that psychological groups have been positioned as an efficient method of reducing waiting times and saving valuable resources. This research aligns itself with the theory that emphasises the social learning inherent within the group context (Yalom, 1995). Beyond that, it has also highlighted to me the value of group work in promoting an alternative relationship to internalised self-stigma. Although the value of meeting individuals who share commonalities is recognised with respect to universality and social isolation, the participants of this research were able to articulate how the group changed their relationship with their experience of psychosis. I have been involved in numerous groups for those with psychosis over the years and am even more convinced now of the importance of offering psychological intervention groups for individuals with psychosis.

Finally, although for several years I have enjoyed working within an acceptance and mindfulness framework, I have only been able to use case studies and anecdotal evidence to confirm the importance of engaging in valued life direction. This research has highlighted the

value of supporting individuals with psychosis in engaging in goal-directed behaviours. Participants spoke of significant behavioural changes in their lives and the cumulative knock-on effect of engaging in meaningful activities despite the presence of distressing thoughts or symptoms of psychosis. This emphasises for me the value in a recovery-focussed model and encouraging active engagement in the community and society. It has been noted that there is a lack of research in the domain of commitment to behavioural change in ACT (McCracken, 2013). This research emphasises that this aspect of the intervention is integral to adapting an acceptance and mindfulness stance towards distressing internal experiences. As a result, I will endeavour to promote active meaningful engagement despite the presence of psychological difficulties in service of living a valued life.

Question 4: If you were to undertake further research in this area what would that research project seek to answer and how would you go about doing it?

There are three further research questions that I would explore further if I continued to research this area. The first area has already been mentioned in question 2 and concerns whether mechanisms of change grounded in participant accounts would be the same for both group interventions and individual therapy. The thematic analysis of data on individual therapy by Bacon, Farhall and Fossey (2013) can be viewed alongside these findings and highlights areas of convergence.

Secondly, it may be possible to use quantitative methodologies to answer a similar research question concerning mechanisms of change in ACT groups for those with psychosis following on from this exploratory study. Kazdin (2007) has described how best to explore change processes through mediational analyses. In a chapter on researching change processes in psychological treatments, Kazdin has presented the essential requirements for investigating mediators and offered recommendations for undertaking mechanisms of change research.

Importantly, appropriate measures of potential mediators for this population would be essential. This may necessitate further work on outcome measures in ACT for psychosis.

Finally, it might be valuable to explore more closely which key processes are integral to change for those with psychosis and what kinds of changes are accounted for. Mediational analyses may be best suited to examining this research question (Kazdin, 2007).

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Appendix A

Literature Search Strategy

Searches were not time limited and were conducted up until January 2013.

Databases searched:

- Ovid Medline
- PsycINFO
- Cochrane Database
- CINAHL
- Social Policy and Practice
- Zetoc
- Google scholar

In addition to this, the Association for Contextual Behavioural Science web resource was cross-checked (www.contextualpsychology.org)

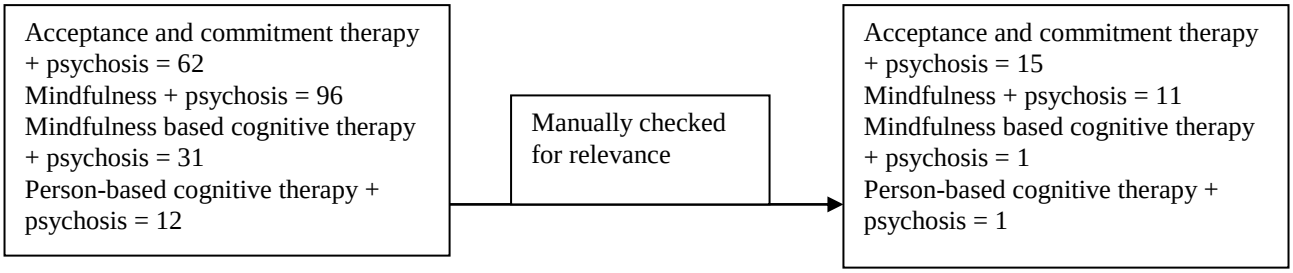
The following search terms were combined with the term psychosis:

Acceptance and commitment therapy OR
ACT OR
Acceptance OR
Mindfulness OR
Mindfulness based cognitive therapy OR
MBCT OR
Person-based cognitive therapy OR
PBCT OR

Exclusion criteria:

- Articles not in the English language
- Articles not peer-reviewed
- Dissertations

Visual representation of literature search:



Appendix B

Summary of ACT Outcome Studies

Study	Treatment protocol	Sample	Study design	Outcomes
Bach & Hayes, 2002	4 session ACT intervention vs TAU	N = 80	Blind randomised allocation Comparison group = TAU	reduced rehospitalisation by half
Bach, Hayes & Gallop, 2012	As per Bach & Hayes, 2002	N = 64 (51 at follow up)	As above	ACT maintained progress over TAU for rehospitalisation rates
Gaudiano & Herbert, 2006a	3 session ACT intervention vs TAU	N = (29 completers)	Non-blind pilot RCT	ACT showed no significant differences from TAU in rehospitalisation Reduced hallucination-related distress in ACT group
Bach et al., 2012 (Re-analysis of Bach & Hayes, 2002 and Gaudiano & Herbert, 2006a)	As above	As above	Intent to treat analysis	reduced rates of rehospitalisation following brief ACTp
White et al., 2011	10 sessions of ACT	27	12-month Prospective Randomised Open Blind Evaluation (PROBE) clinical trial (ACT vs TAU)	significant changes in negative symptoms and mindfulness skills significant correlation between changes in depression and changes in mindfulness fewer individuals depressed at baseline where depressed at 3 month follow up in the ACT treatment group
Shawyer et al., 2011	15 sessions of the intervention acceptance-based CBT intervention, Treatment of Resistant Command Hallucinations (TORCH)	43	blind randomisation to TORCH treatment, a waitlist control or befriending 6 month follow up	no significant differences between TORCH and befriending Befriending & TORCH improved coping with voices befriending showed significant improvement in acceptance of command hallucinations; TORCH did not

Appendix C

Summary of Mindfulness Outcome Studies

Study	Treatment protocol	Sample	Study design	Outcomes
Chadwick, et al., 2005	10 sessions of mindfulness for distressing psychosis	10	uncontrolled study	improvements in functioning following treatment.
Chadwick et al., 2009	twice-weekly group sessions lasting 5 weeks, plus home practice, followed by 5 weeks of home practice	22	randomly assigned to mindfulness or a wait-list condition.	improvement in general functioning and gains in mindfulness of distressing thoughts and images comparisons with the wait-list failed to demonstrate significant benefits no significant improvements for hallucinatory experiences
Singh et al., 2007	Manualised treatment: Meditation on the Soles of the Feet (Singh, Wahler, Adkins, Myers, & the Mindfulness Research Group, 2003),	3	experimental multiple baseline design 4 year follow up	reduced aggressive behaviour
Van der Valk et al., 2012	eight 1-hour sessions over 4 weeks	16	nonrandomized, non-controlled prospective follow-up study	improvement in anxiety and agoraphobia
Davis et al., 2007	mindfulness skills training programme for anxiety	5	Qualitative analysis	participants responded positively to the intervention
Brown et al., 2010	mindfulness skills group for men	15	Qualitative thematic analysis	Participants highlighted benefits including relaxation, symptom relief and developing a present moment focus
York, 2007	Inpatient weekly mindfulness group	8	Qualitative thematic analysis	participants reported benefits such as relating differently to distressing thoughts, relaxation, concentration and acceptance
Jacobsen et al., 2011	inpatient mindfulness group	8	Pre and post assessment	No formal statistical analyses
Dannahy et al. 2011	PBCT groups 8 – 12 sessions	50	nonrandomized, un-controlled study, pre and post assessment	Medium effect sizes were found for changes in general clinical functioning and for voice distress and control
Langer et al., 2012	MBCT group	23	randomly assigned to mindfulness or a wait-list condition.	higher levels of mindful relating to internal events in the experimental condition. no other significant results

Appendix D

"Passengers on a Bus" Metaphor

(Taken from "ACT for Life" manual)

"Is dealing with barriers and obstacles a bit like being a driver of a bus and managing the passengers on the bus?"

"Suppose there is a bus and you're the driver. On this bus we've got a bunch of passengers. The passengers are thoughts, feelings, bodily states, memories, and other aspects of experience. Some of them are scary. What happens is that you're driving along and the passengers start threatening you, telling you what you have to do, where you have to go. "You've got to turn left," "You've got to go right," and so on. The threat they have over you is that if you don't do what they say, they're going to come up front from the back of the bus.

It's as if you've made deals with these passengers, and the deal is, "You sit in the back of the bus and scrunch down so that I can't see you very often, and I'll do what you say pretty much." Now, what if one day you get tired of that and say, "I don't like this! I'm going to throw those people off the bus!" You stop the bus, and you go back to deal with the mean-looking passengers. But you notice that the very first thing you had to do was stop. Notice now, you're not driving anywhere, you're just dealing with these passengers. And they're very strong. They don't intend to leave, and you wrestle with them, but it just doesn't turn out very successfully.

Eventually, you go back to trying to calm the passengers down, trying to get them to sit way in the back again where you can't see them. The problem with this deal is that you do what they ask in exchange for getting them out of your life. Pretty soon they don't even have to tell you, "Turn left"—you know as

soon as you get near a left turn that the passengers are going to crawl all over you. In time you may get good enough that you can almost pretend that they're not on the bus at all. You just tell yourself that left is the only direction you want to turn. However, when they eventually do show up, it's with the added power of the deals that you've made with them in the past.

Now the trick about the whole thing is that the power the passengers have over you is 100% based on this: "If you don't do what we say, we're coming up and we're making you look at us." That's it. It's true that when they come up front they look as if they could do a whole lot more. They do look pretty scary. The deal you make is to do what they say so they won't come up and stand next to you and make you look at them. But what if it was a little different to this? Imagine that the driver (you) has control of the bus, but you trade off the control in these secret deals with the passengers. What if, in other words, by trying to get control, you've actually given up control! What if it were the case that these passengers can't make you do something against your will."

These are the key elements of the metaphor:

- You're the driver of the bus. You want to go places and do what's important for you.
- The passengers are your thoughts and all kinds of inner states. Some are nice, some ugly, scary, nasty.
- The scary ones threat you and want to come up front where you'll see them.
- You take this very seriously and stop the bus (you don't go anywhere anymore) and try to make a deal with them: they'll keep quiet in the back of the bus, only when you do exactly what they tell you.

- This means your route plan is greatly impaired and you're always on the watch when driving the bus.

- What happens is that you let these passengers control the whereabouts of the bus. You, the driver, are not in control at all.

- What if it’s like this: Even though these passengers look scary, nasty, threatening etc. they can't take control (unless you let them). They can't actually make you do something against your will.

Appendix E

Letter of ethical approval

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Appendix F

Letter of R&D Approval

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Appendix G

Participant Information Sheet

Participant Information Sheet

Acceptance and commitment therapy groups for individuals in community settings: A grounded theory analysis.

PART 1

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish. Part 1 tells you the purpose of this study and what will happen to you if you take part. Part 2 gives more detailed information about the conduct of the study. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you want to take part.

What is the purpose of the study?

The aim of the study is to evaluate whether a new talking therapy (Acceptance and Commitment Therapy) delivered in a workshop format can help people in routine mental health services in the UK. The aim is to see if the therapy is feasible and acceptable to service users, and whether it can improve aspects of peoples' mental health.

Why have I been chosen?

Some people have unusual, worrying or distressing experiences or beliefs, which bring them into contact with mental health services. We think such experiences may be helped by talking them through with a therapist who is able to discuss them in detail, and with others who also have similar experiences.

One of these talking therapy approaches is called Acceptance and Commitment Therapy (ACT). ACT is a relatively new treatment, developed in the recent years. We still do not know how exactly it helps people to improve or to continue to manage their problems. This study therefore aims to see whether ACT does help people and to improve our understanding of the treatment so that we can develop it further to be more helpful.

You are being invited to take part in this study because you were referred to the ACT for Life groups and this research is interested in finding out more

about your experience of the groups. The researcher is a Trainee Clinical Psychologist and this research will form part of the training course (Doctorate in Clinical Psychology).

Do I have to take part?

No. It is up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and be asked to sign a consent form. You are still free to withdraw at any time, without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

What will happen to me if I take part?

Your care-coordinator or primary clinician will tell you about the study and if you are interested in taking part, the researcher will contact you to discuss what is involved in more depth and to answer your questions. The researcher can contact you by whatever method you prefer e.g. letter, telephone, or email. Please indicate to your care-coordinator or primary clinician, how you would like to be contacted. If you are still interested and you are suitable for the study, you will be invited to come for a meeting with the researcher. During this meeting the researcher will go through this information sheet with you, answering any questions you have, and you will be asked for consent to participate in the study by filling in a consent form. You will be given a copy of the information sheet and a signed consent form to keep if you decide to participate.

If you choose to participate, you will be invited to an interview about your experiences. You have the choice as to whether you prefer to have a one-to-one interview or in a group of up to 4 other people who attended the groups. The interviews will not last longer than 60 minutes. The interviews will take place at your team base [redacted]. The interview will comprise a number of questions about your experience of the groups. There will be a chance for you to discuss what you remember about the groups, what you enjoyed and what you didn't, what seemed useful and what didn't and to talk more about how, if at all, the groups have had an impact on your life.

We hope that this new treatment will be helpful. However, this cannot be guaranteed. The information we get from this study may help us to improve treatments.

When the study is finished the results will be published. This is likely to be in 2013. We will not identify you individually in any report or publication of the research. You are welcome to have a summary of the results if you are interested.

If you take part in the study, your travel expenses will be reimbursed up to the value of £10.

Please also note that if you do have private medical insurance you should inform the insurer, before deciding to take part in the study.

What are the risks of taking part?

Interviews about our experiences can involve conversations that may bring up unpleasant thoughts or memories. It is up to you how much you would like to talk about in the interview. However, you will not be expected to talk about anything that makes you feel uncomfortable. The researcher will be sensitive in responding to your feelings, and will conduct the interviews in a caring and compassionate manner. You will be welcome to taking breaks during the interview. The researcher will find someone to support you further if the interview has been upsetting for you.

If at any time you wish to stop the interview or withdraw from the study for any reason, just let us know and we will stop.

What are the benefits of taking part?

The information we obtain may help improve future psychological treatments. Some people might also find it useful to talk about their experiences of the groups.

Contact Details

Please ask if there is anything you do not understand or if you would like more information. If you are interested in taking part in the study, you can contact Sally Bloy by email (sb660@canterbury.ac.uk) or write to her at Clinical Psychology Department, Salomons Campus, Canterbury Christ Church University, Kent, TN3 0TG. You can also let your care coordinator know and they will contact Sally for you.

This completes Part 1 of the Information Sheet. If the information in Part 1 has interested you and you are considering participation, please continue to read the additional information in Part 2 before making any decision.

PART 2

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak with the researcher who will do their best to answer your questions (see contact details section above).

If you become distressed during the course of the study there will be support available to you from the researcher, as well as your care coordinator and treating team.

If you remain unhappy and wish to complain formally, you can do this by contacting the researcher's supervisor [redacted].

If you remain unhappy and wish to make a formal complaint to the Trust you can write to the [redacted]

Will my taking part in the study be kept confidential?

All the information recorded will be strictly confidential and kept in accordance with the Data Protection Act 1998, and used only by members of the research team. All information will remain confidential unless there is a concern raised in the interviews around harm to you or to another person. If this is the case, the researcher will have to inform a clinician involved in your care.

Your Consultant Psychiatrist will be informed of your participation in the study.

In order to ensure confidentiality, you will be assigned a study number, and all research information about you will be held under this number, thereby making it anonymous. Your name will only be on the consent form and a database where random study numbers will be assigned. This information will be stored on a password protected CD and kept in a locked cabinet in the Clinical Psychology Department at Salomons Campus, Canterbury Christ Church University for ten years.

If you consent, we will inform your consultant psychiatrist and the team responsible for your care about your involvement in the study.

In order to analyse the data, the interviews will be audio taped. These tapes will be kept confidential. The researcher will only use your first name in the interviews in order to maintain confidentiality. The audio files will be deleted

once they have been transcribed by the researcher. No identifiable information will be used in the transcribed documents. As part of the presentation of results, your own words may be used in text form. However, this will be anonymised, so that you cannot be identified from what you said. Pseudonyms will be used to protect your anonymity. All of the anonymised transcribed data will be stored on a password protected CD and kept in a locked cabinet in the Clinical Psychology Department at Salomons Campus, Canterbury Christ Church University for ten years. They will be kept separate from the identifiable information.

What will happen to the results of the study?

When the study is completed, we intend to publish the results but you will not be identified in any publication. The results will also be written up as part of the thesis for the researcher's training course (Doctorate in Clinical Psychology). If you would like, we will write to you and inform you of the results of the study. The description of the results of the study will be written in a way that is understandable to the lay person.

Who has reviewed the study?

This study was given a favourable opinion for conduct in the NHS by a Research Ethics Committee. You will be given a copy of the information sheet and a signed consent form to keep if you decide to participate.

Thank you for considering taking part in the study.

Appendix H

Participant Consent Form

Consent Form for Participants

Acceptance and commitment therapy groups for individuals in community settings

Researcher: Sally Bloy, Trainee Clinical Psychologist
Supervisor: Dr [redacted], Clinical Psychologist

Address: [redacted]
Telephone:

To be completed by the participant: Initials:

I have a copy of and have read the "Participant Information Sheet".	
I have had the opportunity to ask any questions.	
I understand that participation in the study is voluntary and I am free to withdraw at any time without giving a reason for withdrawing and without affecting my future care.	
I understand that the information obtained from this study will be kept strictly confidential. However, if at any time during the study information is obtained which would suggest that I or any other person is in danger, the researcher would have a responsibility to inform a member of my clinical team.	
I give my permission for my Consultant to be informed that I will be taking part in the study.	
I agree to the interviews being audio recorded for the purpose of analysing the data.	
I agree to anonymised quotes being used in publication	
I agree to take part in the study.	

…… …… ……
(Signature) (Print name here) (Date)

I have explained the study to the participant and have answered all questions about the study.

…… …… ……
(Signature) (Print name here) (Date)

Appendix I

Letter to Consultant Psychiatrist

Consultant Psychiatrist
Address

Date

Dear Dr X,

Re: X

I am writing to inform you that your client X has agreed to take part in the research study entitled 'Acceptance and Commitment Therapy for Psychosis'.

Acceptance and Commitment Therapy (ACT) is a cognitive-behavioural intervention that helps individuals live a life they value. We will evaluate ACT in a group format for clients with psychosis and those at risk for psychosis, using a qualitative research methodology. By interviewing clients that have taken part in ACT for Life groups, we hope to be able to explore of how and why therapy in this format works for individuals with psychosis. The key feature of this study, which explores mechanisms of change underpinning this treatment, is that such an analysis will be grounded in participants' experiences of the treatment. It is hoped that this analysis can be usefully compared and contrasted with emerging quantitative research in ACT for psychosis and the current psychological theories. Research grounded in participants' experiences will also offer valuable insight into treatment acceptability.

Ethical permission has been granted for the study. Informed signed consent has been taken for participation in the study. X has been informed that should she/he decide withdraw at anytime, his/her care will not be affected in anyway.

Dr [redacted] is supervising this research project which forms part of my thesis for the Doctorate in Clinical Psychology programme. Please do not hesitate to email me on sb660@canterbury.ac.uk, should you require further information.

Yours sincerely,

Sally Bloy
Trainee Clinical Psychologist
Study Principal Investigator.

Cc: Client, Care-coordinator

Appendix J

Interview schedule

Introduction
I am doing a study on people's experiences of the ACT groups. I am interested in talking with you about your experience of the ACT groups, what you remember about them and how they might have impacted on your life. I will ask a number of questions to guide our conversation. Please feel free to talk openly and honestly about your experiences. It is important that you discuss information that you are willing to share with me so don't feel like you have to say anything you are not comfortable with. The interview will last approximately 50 minutes. Before we start I would like to go through the consent form with you so you are clear about what you are agreeing to take part in (show consent form).
Do you have any questions before we start?

Background information:
Service:
Date of groups attended:

Interview

1) What was it that made you decide to go along to the groups?

Prompts: What were you hoping to get out of the groups?

2) Can you tell me what the groups were like for you?

Prompts: Do you remember any of the exercises? What was it like to do them?

3) How did you find being in a group?

Prompts: Would you say it was enjoyable or difficult to be in a group? How was it being with the other people in the group? How did being in a group impact on your experience?

5) What do you think stood out for you the most?

Prompts: What was it about that? Any particular exercises? Did you prefer any of the activities? And why?

6) Can you tell me what you've taken forward with you into your life now that you have completed the groups?

Prompts: What impact do you think it has had? In what areas of your life? Extract thoughts and feelings.

7) Can you tell me about a recent time when you have used some of the things you learnt at the groups?

Prompts: what happened? What were the thoughts and feelings? What impact did it have?

Prompt: seek both effective and ineffective examples. What's the difference in these situations?

8) Have you noticed any changes in yourself or in your life since you did the groups?

Prompts: within yourself and with relation to others (family, friends, partners, work colleagues). What others may have noticed.

9) What was it like being exercises to do outside of the groups?

Prompts: what were your thoughts? Did you do them? What was the impact? If you didn't do them, what stopped you?

10) Is there anything else you would like to add?

Probing questions:
Why?
How?
Can you tell me more about that?
Tell me what you were thinking?
How did you feel at that point?
What impact did that have?

Appendix K

Abridged Research Diary

The following notes were typed up from a reflective journal about the research process

2011	
January	Ideas about MRP's were presented at the research fair. Nothing presented about ACT. Discussed with staff whether it would be possible to pursue this independently and who might support this in the department. Project about ACT for psychosis became available – possibly using qualitative methods to explore how ACT works with those with psychosis.
April	Supervisor selection due this month. Found it difficult to secure an internal supervisor with an interest in acceptance and mindfulness approaches. Broadened out to include those with an interest in psychosis and finally found an internal supervisor with space. Looking forward to developing ideas.
June	Beginning to develop ideas about conducting qualitative research with people with psychosis who went to an ACT group intervention. Really interesting to discuss ideas with service user consultants with an interest in research. They seemed to think the idea had value and service users would like to talk about their experiences of therapy.
July	Met with external supervisors to discuss ideas and logistics. Project is an off-shoot of a larger trial, so need to think about whether a full new ethics application is necessary. A number of organisational issues to be actioned. Starting to feel like ideas are getting there and a viable project is being hatched.
September	Drafts of project proposal being worked on. Useful initial literature review. Finding out more about different qualitative methodologies. Somewhat confusing! Considering IPA as an appropriate method. Also familiarising myself with the large trial's ethics application. Many areas to consider!
October	MRP proposal submitted!
November	Useful MRP review meeting with departmental research team. In preparing for review, looked at other qualitative research about processes of change in therapy. Grounded theory may be more appropriate if thinking about developing a model to understand change processes. Review panel were agreeable after persuasion. Positive feedback about my grasp of the project. Minor changes to attend to. A methodology-specific peer group has been set up. Will be really useful to engage with colleagues about the approach and how to implement it. Especially given I have never done qualitative research before.
December	Amendments to project proposal approved! Good to go. Now to consider next steps. Meeting with external supervisors. Extensive discussion about different qualitative methods as supervisors are less familiar with these ideas. Interesting talking about the different underlying philosophical assumptions of the approaches. Began thinking about research aims and potential

	hypotheses. Was important thinking about this in relation to the methodology. Useful discussion about kinds of questions to ask participants. Ethics procedure discussed. Awaiting guidance on whether full approval required.

2012	
January	Started to tackle ethics paperwork online. So many areas to consider! Forms are useful in prompting what needs to be considered. Ethical considerations relevant to this group are particularly important because of issues of capacity. Important to reiterate informed consent and stable mental state. Also issues of patient safety, how to manage risk transparently and providing support post-interview. Questions unlike to be of a sensitive nature so may be easier for participants. Useful to have the larger trial's ethics application to work from. Met with supervisor for bracketing interview. Really interesting to think about prior assumptions, what drew me to the area of research, my previous experience in the area and how these experiences/thoughts might influence the process and analysis. Given that I have experience of delivering acceptance and mindfulness interventions with clients, it is really important to be aware of these assumptions. My experience has pointed me towards a sense that this way of working can be really useful for some, especially those whose lives seem to have become stuck following psychosis. Re-engaging with activities seems to have been helpful for some. My experience has also opened me up to the possibility that some people with psychosis may find parts of ACT more difficult to grasp or less relevant to them (especially perhaps some of the metaphors, some mindfulness exercises and some of the defusion techniques). Also, my familiarity with the model may get in the way of seeing what is in the data, so I need to be careful of that. My internal supervisor who has little ACT experience will be very helpful here and remaining true to the data will help too. I have a good understanding about what the model says about how change is brought about, but I'll be really interested to see what those who have experiences the therapy groups have to say. It may well be that some areas of the ACT model are not as important. Also, I don't really have any sense of whether ACT will be experienced differently according to the varied difficulties that people with psychosis have. It may well work differently for different kinds of problems. I will also be very curious about hearing from people who have not found it helpful.
February	Finalised ethics paperwork. Really tricky getting everything to get and in order! Ethics panel booked for March.
March	Attended ethics panel and despite there being a very large panel (intimidating!), it went off very well. No major issues highlighted. They just were curious about why I had offered participants the option of meeting in a group or individually but were satisfied with my response that some might like to meet with the people they were in group with. This might help them to talk and remember together. Others might prefer to speak privately. No changes to address fortunately.

April	Favourable opinion received from ethics. Started process on R&D application.
May	R&D taking long. Many internal hoops to jump through. Approval to conduct project needs to come from heads of service areas. May prove difficult as significant research is undertaken across the services. Frustrating process as panel did not meet as scheduled so pushed back.
June	Still awaiting internal approval to conduct research. Making a start on literature review despite controversy surrounding when to do this in grounded theory. Despite needing to be pragmatic in applied research and also with the tight timeline, it is impossible to attend to the data with a blank slate. Most important will be to reflect on the process of influence.
July	R&D approval finally received. Starting to set up meetings with services now about the project. Finally starting to feel like it is happening. Met with research assistant for larger trial to discuss potential participants.
August	Met with clinical teams to discuss research project. Really useful to meet with people face to face and to answer questions. Feedback was that the project seems viable. Started to gather potential clients to approach via care co-ordinators.
September	Meeting with internal supervisor and a trainee from another course who is also doing an ACT for psychosis research project (outcomes-based). Useful to think about how to work together to fulfil recruitment criteria. Discussed with supervisor how to bring in prompts from the group manual without unduly influencing participants. Important to give them a chance to reflect initially. Worksheets may be useful prompts. Also discussed the importance of reflecting on the group processes with them. Important to seek examples of how the intervention or the group format may have been unhelpful too. Practical issues to sort out too regarding access to clients.
October	Recruited first 3 participants and interviews conducted. Interviews were really varied. Talking freely appeared difficult for some. Hard to know whether they were struggling to recall the groups or whether they generally find it hard to talk at length. Some of the interviews were really short. Really interesting information emerging about the impact of the groups. So far seems like they were powerful for some. Little time between interviewing, getting transcribed and jotting down initial ideas from the data. Already starting to adapt the interview schedule from what participants are bringing. Useful to ask for feedback to get ideas of convergence or difference. Memos from each interview have helped to get a handle on what they seem to be saying about how ACT helped and the role that the exercises played in helping them.
November	Fourth, fifth and sixth participants recruited and interviewed. Going well. Emerging themes are being identified. Seems to be that people are suggesting that the groups helped them to see things differently and to respond to their circumstances in a different way. The problem of remembering the groups remains. Also some of the clients have had further therapy since the groups and there may be some conflation. Initial line by

	line coding seems to be going ok and memo-writing is helping to develop some ideas. Not sure about how to move to high level coding. GT peer group meeting useful to talk through issues in coding and share extracts from transcripts. Useful to remain faithful to the data. Importantly reminded to stick to the methodology – easy to get drawn into a thematic analysis! Started to explore the option of using Nvivo. Seems complex, but not sure how else to move on from initial coding and how to bring codes together. Also discussed how people are adapting their interview schedules and the dangers of leading questions! Meeting with internal and external supervisors. Shared coding from entire transcript. Positive feedback although cautioned regarding closed questions and leading the interviewee. Useful to be conscious of this. Also discussed a plan for Section A and timelines for writing up findings. Useful discussion on emerging findings and how to view these.
December	Making progress on Section A. Found a useful way to structure the paper. Hope supervisors agree!

2013	
January	Seventh and eighth participants recruited. Starting to get more difficult to recruit people. A lot are not suitable because of relapse or have been discharged from services. Some are unable to remember the group and have therefore decided not to go ahead with the research. Discussed with supervisors. Agreed that may have to settle at 9 or 10 participants. Interesting interview with a participant who dropped out. Seems as though he had other priorities and is regretting not continuing but appeared to gain some benefit anyway. Feedback from Section A was positive. Few changes to make.
February	Another peer group meeting. Continued to look at transcripts where available. Problems with Nvivo mean that others have abandoned this. I may too. Trying to figure out how best to manage the data and coding. Excel may be the most efficient given the time pressure.
March	Discussed coding with supervisor. Really useful to think this through with someone. Memos have helped in this process and starting to draw out potential models. Codes appear to converge around four themes. Drawing together codes under each theme and seeing if that makes sense. Starting to come together. Starting to write introduction to Section B. Annual update of project submitted to ethics committee.
April	Ninth participant recruited. Unable to get any further participants from those that attended the group intervention. Exhausted all options and am restricted to recruiting from participants of the larger trial. Hoping that 9 is sufficient. The data analysis supports this, nothing new emerging and there is sufficient data to offer a potential model about relationships within the data. Analysis from final participant revealed that the emerging themes are

	appropriate and nothing new highlighted. Importance of group process emphasised by this participant. Fits with the idea of the group providing participants with a different way of relating to themselves. Starting process of writing Section B results section.
May/June	Refining results and themes. Drafts completed and feedback given. Finalising project for submission. Compiling end of study reports and tying up loose ends.

Appendix L

Coded Transcript

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Appendix M

Coding Development – Work in Progress

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Appendix N

Example of Memo

This is an example of a memo following analysis of a participant interview transcript.

The participant described hoping to learn from others and find out that she was not that different, that others had similar problems.

She remembered the PoB metaphor first and described this as the most meaningful exercise. She related this metaphor to thoughts (particularly negative thoughts) or negative mood states. The main thing she took from this exercise was a technique to manage negative thoughts. This involved her writing down her negative thoughts and counselling herself through those thoughts to a more positive perspective. This metaphor has been carried with her following the groups. She uses it as a structure to review her week and to write down a negative thought and then challenge herself that the thought is an obstacle. Usually she finds that it is not and she can stick to her self-directed goal in spite of the thought.

She also remembered imagery exercises which I took to be the mindfulness exercises. The participant got from these a sense of escape and relaxation, taking your mind away for a bit. This appeared to help her not get caught up in negative thinking and to allow her time to focus on herself.

She remembered an exercise where words were repeated. She understood this to be a way of reducing the power behind the words so that they sounded silly. In that way she came to see that it didn't really matter, that they were just thoughts or just words.

She described the groups as initially difficult to speak in, but that this became easier when people became more familiar with each other. Getting over awkwardness was an important step in this process. She appreciated the group as they were able to lean on each other. She also fund a group less intense and described a process of bouncing ideas around.

She found the groups had helped her to vocalise her feelings, to name them. She also described a process of connecting with goals and with people. This was positioned as a different response to one she had previously used which involved shutting herself away.

Mindfulness with a satsuma did not resonate and neither did a ball throwing exercise (ice breaker??)

Overall this participant described significant changes in her life. She described less negativity and a general feeling of liberation. She described giving things a go more. She has made conscious efforts to challenge negative self-limiting thoughts and changing her relationship to the thought through engaging in an important task. Writing down her goals has been an important part of the process. She also described the importance of noticing when negative thoughts are obstructing her and then she can make a conscious decision to act in accordance with her objectives.

Appendix O

Coding Relationships

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Appendix P

End of Study Notification

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Appendix Q

Summary of Final Ethics Report

Department of Applied Psychology
Canterbury Christ Church University
Runcie Court, Salomons Campus
Broomhill Road
Tunbridge Wells, Kent TN3 0TG

Dear Research Ethics Committee

Study Title: Acceptance and Commitment Therapy groups for individuals with psychosis: A grounded theory analysis.
REC reference: **12/LO/0480**

I am writing to inform you that the above study has now been completed. Please find attached a brief summary of the findings of this research. Please do not hesitate to contact me if you require any further information.

Yours sincerely

Sally Bloy
Trainee clinical psychologist

CC to R&D

Summary of Research

Study Title

Acceptance and Commitment Therapy groups for individuals with psychosis: A grounded theory analysis.

Research Context

Applications of acceptance and mindfulness approaches for individuals with psychosis have gathered momentum in recent years. Research studies have started to investigate outcomes and hypothesised mechanisms of change. However, the specific processes by which change occurs remain unclear and under-researched. No current research has explored processes facilitating change in the group format of an acceptance and commitment therapy intervention for psychosis.

Research Aims

This study used a qualitative methodology to offer a model of change processes articulated by participants. Therefore, the primary aim for the research study was to establish the key mechanisms of change grounded in participants' perspectives. Subsidiary objectives were to identify how participants described their relationship to distress following the intervention and how they accounted for changes in distress.

Method

Nine participants of acceptance and commitment therapy groups for people with psychosis were interviewed about their experiences of the intervention. Interviews were analysed using methods and techniques informed by grounded theory methodology.

Results

A proposed model outlined key mechanisms of awareness, relating differently and reconnecting with life, which led to reductions in distress and behavioural change. Leaning on others highlighted the importance of the group context in supporting change processes.

Implications

Participant perspectives were sought to help elucidate potential mechanisms of change. The processes identified and the mechanisms through which these were achieved, as articulated by participants, were consistent with theoretically proposed change processes. Participants also offered additional insights based on experiential accounts. These endorsed a broader definition of mindfulness to include applications beyond meditational practice. These findings contribute to theoretical understandings of change processes in acceptance and mindfulness approaches. Implications for clinical practice included an emphasis on engagement in meaningful value-driven goals despite the presence of distressing psychosis; the benefits of mindfulness and the potential for flexible application with those with psychosis and the endorsement of the group format. Future research might use mediational analyses may help to further clarify mechanisms of change and how they can be optimised in the clinical context. Additionally, further research on key mechanisms related to mindfulness may help to clarify whether meditational practice is integral to its definition. Future research might also investigate more closely how committed action contributes to improved psychological flexibility. Finally, research could be directed at improving outcome measures that are more sensitive to the changes outlined in these findings, such as those capturing variations in value-consistent behaviours.

CC to R&D

Appendix R

Journal Submission Requirements

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