The Acceptability and Feasibility of Acceptance and Commitment Therapy training to support work-related wellbeing for managers of homelessness services.

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Portfolio Abstract

Introduction: Managers of homelessness services have an important role in implementing psychologically informed environments (PIEs), managing staffing levels, dealing with emergencies such as deaths in service and supporting their teams. Given these challenges, it is not surprising that they can be at risk of vicarious traumatisation, burnout, and poor wellbeing. Acceptance and Commitment Therapy (ACT) has been shown to be an effective workplace wellbeing intervention and could be offered to managers of homelessness services. Given the pressure that managers are under working with service pressures, high staff turnover and clients with complex needs it is appropriate they are provided with further support for their wellbeing. However, it is important to assess the feasibility prior to offering it more widely. At present there are no studies which have investigated ACT-based training for managers in homelessness services. Therefore, the aims of this current study were to assess the acceptability and feasibility of an ACT-based training for managers of homelessness services. The training was intended for participants to learn to use ACT to support their work-related and personal wellbeing. Secondary objectives were to assess participant recruitment, retention rates, measure completion and signal efficacy.

Method: a mixed methods pre/post design was employed. Participants were managers within homelessness services from across England who were recruited to either face-to-face or online training. Both the face-to-face and online sessions followed the same format, following the training for staff wellbeing detailed in Flaxman et al (2013). This training offers 3 sessions of ACT based exercises aimed at increasing psychological flexibility and wellbeing. Validated Outcome measures were given at baseline and following each session and an adapted Change interview (Elliot & Rodgers, 2008) was completed post-training. Measures of wellbeing, workplace quality of life, psychological flexibility, feasibility and acceptability indices and group alliance were used. Quantitative analysis included reliable change analysis and a linear mixed model analysis. Qualitative data was analysed using content analysis. Measures of group alliance and feasibility were descriptively analysed.

Results: A significant increase was found on the CompACT Valued action subscale and on the SWEMWBS measure of general wellbeing. A marginally significant decrease was found on the Proqol-5 Secondary traumatic Stress Scale (STS). There was no significant difference across the other measures. Effect sizes ranged from small to large across measures. Themes developed from qualitative analysis include engagement with training, beyond training, implementing skills and behavioural change or intention to change. Participants shared that they found the training useful, engaging and made changes because of the training. However, attrition was high and measure completion was poor.

Discussion: Overall, the current study demonstrated some promising initial findings for work-related wellbeing for managers of homelessness services. Participants shared via change interviews that they found the training useful, interesting, and accessible. However, attrition was high and so there needs to be adaptations to the training to increase feasibility. With regards to signal efficacy Valued action, and general wellbeing increased post-training which is consistent with prior research in this area. However, the lack of a significant change in overall psychological flexibility contrasts with prior literature, which has generally found increases in psychological flexibility post-intervention and that this change mediates changes in various measures of wellbeing. Future research reassessing the training, would be beneficial and it may be helpful to gain buy-in from services so that the managers are supported to be able to fully engage with the training. Furthermore, incorporating suggested adaptions in a trial would evidence whether these increase engagement and benefit.

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Finally, I would like to thank my cohort – they have been a source of support and truly understood every step of the way.

Statement of Contribution

Project design	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle
Literature review	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle
Ethical approval	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle
Participant recruitment	Katie Hall (Practice Development Unit) sent out the initial advert for the face-to-face participants and Olivia Young then made contact to those who registered interest with her and shared relevant consent forms and information sheets. Joanna Turner created the Eventbrite, sent out the advert and organised the Eventbrite signups for the online condition. Joanna Turner also supported technically with the online sessions.
Data collection	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle. Rachel Nolan completed the change interviews for the face-to-face participants.
Data Analysis	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle

	Dr Nima Golijani-Moghaddam completed the fidelity check of the session recordings
Write up	Olivia Young supervised by Dr Nima Golijani-Moghaddam and Dr Anna Tickle Dr Anna Tickle, Dr Nima Golijani-Moghaddam and Joanna Turner read drafts of the Journal paper and provided feedback. Dr Anna Tickle also read the draft extended paper and provided feedback.

Contents

List of tables.

List of figures.

List of Journal Appendices

Appendix A - Permission to use SWEMWB measure.

Appendix B- Adapted Change interviews based on Elliot & Rodgers (2008) Client Change Interviews

Appendix C - Content analysis - Latent pattern analysis Kleinheksel et al (2020)

Appendix D - Theoretical Framework of Acceptability and Feasibility Sekhon et al (2017)

Appendix E - ACTFM (O'Neill et al 2019)

List of Extended paper Appendices

Appendix A - Ethics approval letter and amendment

Appendix B – Participant information sheet

Appendix C – Consent form

Appendix D - Face-to-face participant change ratings**.**

List of SSRP Appendices

Appendix A – adapted Change Interview (Elliot & Rodgers, 2008) Change interview schedule.

Appendix B – Post-training feedback sheet

Appendix C– Framework analysis full data set

Systematic Review

The Effectiveness of psychological interventions for clinical psychology trainees: A mixed methods systematic review.

Psychological interventions for trainees: a review

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Conflict of Interest

None to declare.

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Data availability statement

Data is available upon request.

Abstract:

Objectives: The purpose of this review was to systematically identify existing research on the use of psychological interventions with clinical psychology trainees. **Method**: Meta-analysis and Meta-synthesis were used to analyse the relevant data extracted from the identified studies. Meta-ethnography (Noblit & Hare, 1988) was followed for the Meta-Synthesis. Data was analysed for the Meta-Analysis using Meta Essentials 1.4 (Suurmond, et al., 2017). **Results**: Meta-Analysis identified a post-intervention significant increase in acceptance, mindfulness, self-compassion, valued-living and self-efficacy. No significant effect was found for stress. The Meta-synthesis established the following third order constructs of 1) The personal impact on the trainee 2) Developing skills as a clinician 3) Gaining theoretical insights 4) Challenges or barriers to utilising skills. **Conclusions**: Overall, the results reflect personal and professional benefits of the intervention for trainees. Nonetheless, this was not the experience of all trainees, with results also suggesting that some trainees experienced difficult thoughts and feelings associated with the intervention and that there were challenges to engaging with and utilising the strategies from the intervention. Methodological quality was variable and further research is needed to distinguish which model if most efficacious and determine causality by using a control group.

Key practitioner message

- Clinical psychology training is demanding and stressful and so the review aims to Identify current interventions which can support Clinical psychology trainees' wellbeing.
- The review also considers what further impacts do these interventions have on trainees skills.
- Useful interventions could be offered as standard within Clinical Psychology training.

Keywords

Clinical psychology trainees, Mindfulness, Meta-analysis, Meta-ethnography, systematic review.

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Introduction

The prevalence of mental health difficulties in the UK has been shown to be around one in six (McManus, et al., 2016). Research consistently demonstrates an increased risk for healthcare professionals, given burnout, poor wellbeing, and risk of secondary traumatic stress (Royal College of Physicians 2015; Johnson et al., 2018; British Medical Association, 2020). The most reported cause of sickness absence within the National Health Service (NHS) is “anxiety, depression or other mental health difficulties” (NHS Digital, June 2021).

Clinical psychologists face occupational stressors such as repeated exposure to highly distressing material, high caseloads, professional isolation, concerns about client safety and poor work-life balance # (Norcross, & Vanden Bos, 2018). The proportion of practitioner psychologists in the UK experiencing moderate to severe stress has been found to range from 29-40% (Hannigan, et al., 2004), although these results must be interpreted with caution given recent contextual factors, such as austerity (Cummins, 2018) and the COVID-19 pandemic (Pappa et al., 2020) More recent research indicates that 62.7% of clinical psychologists have experienced mental health difficulties (Tay, et al., 2018). There is a higher risk of psychologists and mental health staff experiencing psychological distress, burnout, or secondary traumatic stress if they are younger (Way, et al., 2004; Rupert & Kent, 2007; Craig & Sprang, 2010) or have less work-related experience (Kadambi & Truscott, 2004; Sprang et al, 2007). This is likely to be particularly relevant to clinical psychology trainees, with the majority (62%) of successful applicants to programmes ages ranging 25-29 (Clearing House, 2021).

Clinical psychology training is highly demanding, requiring trainees to switch between their roles of a clinician, researcher and academic (Cahir & Morris, 1991; Schwarz-Mette, 2009). Academic demands include a range of work including reports, essays, and attendance at teaching days (Cahir & Morris, 1991; Schwarz-Mette, 2009), as well as clinical placements and the stressor of having their therapeutic work regularly evaluated (Cahir & Morris, 1991) They often experience stress and worry stemming from self-doubt related to their clinical abilities and the expectations placed on them regarding clinical outcomes (Pakenham & Stafford-Brown, 2012). Whilst the trainee’s cohort can be a source of support, they also describe a detrimental sense of competition and comparison (Galvin & Smith,2017). Furthermore, in the UK, trainees hold a dual status of NHS employee and student, which brings the potential fragility of being an employee who is consistently clinically evaluated alongside the demands of being a student who needs to 'pass' many academic components of a programme to maintain their job.

The demands of UK clinical psychology training have a significant impact on trainees’ health and wellbeing. In their longitudinal study, Kuyken et al., (2000) found that some experienced difficulties in work adjustment, depression, and interpersonal conflict which increased significantly between the first and second year of training. In a further sample of first-, second- and third-year trainees, 41% experienced difficulties in the same areas and one in three had a probable substance misuse problem (Brooks, et al., 2002). One of the largest surveys of UK trainees (Cushway,

1992) found that 75% of trainees were experiencing moderate stress due to their training, with 59% meeting “caseness” on the General Health Questionnaire ([GHQ] Goldberg & Hillier, 1979), a probabilistic term meaning people presenting in general practice would be likely to receive further attention if scoring the same (Jackson, 2007). However, it is important to note the many changes within clinical training and the NHS since these studies which will undoubtedly impact trainees’ experience, such as the introduction of the Agenda for Change system, alterations to course structures and assessments, and the Covid-19 pandemic. There are many factors that trainees have identified as stressors that impact on their wellbeing such as high workload, lack of social support, relationships with their colleagues, client challenges and their distress, course structure, struggles with their work-life balance, traumatic experiences, and poor supervision (Cushway, 1992; Galvin & Smith, 2017; Jones & Thompson, 2017; Willets, 2018).

The impact of clinical psychology training is not just relevant for the UK; consistent findings have been observed within psychology training internationally. For example, a national survey of doctoral level psychology students in the USA found one of the most reported difficulties was depression (Huprich, & Rudd, 2004), which has been found to impact trainees’ ability to develop their professional competencies (Humphreys, et al., 2017). Furthermore, it has been found that many trainees in the US experience burnout at some point during their training (Swords & Ellis, 2017).

Despite high levels of distress and their professional knowledge, there are barriers to trainees and psychologists disclosing mental health difficulties. Trainees can feel stigma associated with disclosing due to implicit suggestions that trainees cannot also be service users and a lack of “trustworthy receivers” to whom they could safely disclose (Willets, 2018 p.86). Other barriers include worry about the impact on training, a fear of “voicing the unspoken” internalised stigma and no space for distress within the course culture (Turner et al., 2022; Zamir et al., 2022). These reflect similar concerns that have been reported by qualified clinical psychologists (Tay, et al., 2018). Considering these barriers, it may be valuable for courses to introduce proactive support that is not contingent on disclosure. This is important considering that NHS have a responsibility as an employer to provide mental health support for staff to thrive and more targeted support for those who need it (Farmer & Stevenson, 2017). However, unfortunately universities do not have the level of duty of care that would be expected (Abrahart, 2022). Nonetheless, it is reasonable to expect that clinical psychology training programmes, largely being run by psychologists would utilise professional knowledge and skills to support trainee wellbeing. With limited resources in terms of both funding and trainee time, it is important that any interventions offered are empirically supported.

One-way trainees could be supported with the demands of training and impact on wellbeing is through interventions or skills training utilising psychological theory. Approaches such as Mindfulness, Acceptance based approaches, and other third wave models have been shown to have both personal and professional benefits when offered to trainees and mental health professionals. For example, they have been shown to increase self-care behaviours in counselling trainees and mental

health professionals (Shapiro, Brown & Biegel, 2007), decrease stress (Newscome, et al, 2006; Aggs & Bambling, 2010; Rudaz et al, 2017) and increase professional skills such as empathy (Shapiro et al., 1998; Beddoe & Murphy, 2004; Cohen-Katz et al., 2005; Newsome et al, 2006). Furthermore, in a recent review, Acceptance and Commitment Therapy (ACT) has been shown to reduce general and work-related distress in healthcare workers (Prudenzi et al, 2021). These approaches have potential to promote personal and professional wellbeing in clinical psychology trainees.

Where trainee clinical psychologists have been considered in empirical reviews of issues such as self-care, burnout and wellbeing, they have been grouped with other mental health professionals (Rudaz et al, 2017; McCormack, et al, 2018; Posluns, & Gall, 2020). However, given the unique multifaceted role of a trainee clinical psychologist and the challenges training, they should arguably be considered as a distinct group. Clinical psychology trainees not only complete research and academic work at a doctoral level, but also work and hold the responsibilities of a Band 6 NHS employee. It is important to determine if there are interventions that can mitigate the impact of training on wellbeing. The purpose of this review is to systematically identify existing research on the use of psychological interventions with clinical psychology trainees. The review follows Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidance (Yepes-Nuñez, et al, 2021) and aims to answer the following questions:

- Which psychological interventions have been used with clinical psychology trainees?
- What was the target of these interventions? (e.g., self-care)
- Were these interventions effective?
- What are the trainees' experiences of these interventions?
- What is the methodological quality of the included studies, as rated against established appraisal criteria?

Methodology

Epistemological position

Pragmatism was adopted for this review because of the inclusion of qualitative, quantitative, and mixed methods studies. Pragmatism proposes that researchers should utilise the methodological or philosophical approach that best suits the research question (Tashakkori & Teddlie, 1998) and is most frequently associated with mixed-methods research (Crewell & Clark, 2011).

Searching

A literature search of the following databases was completed between July 2022 and January 2023, with a final search completed January 2023: Psycharticles, Medline, Cumulative Index of Nursing and Allied Health Literature (CINAHL) and PsycINFO. Grey literature was also searched using ProQuest and was included to account for publication bias and broaden the search scope. (See Table 1 for search terms).

Table 1.

Search terms
Clinical psychology train* OR clinical psychology graduate train* OR trainee clinical psychologist OR psychology doctora* student OR dclinpsy train* OR dclin psy train* OR clinical psychologist in training AND Cognitive behave* OR cbt OR Acceptance and commitment therapy OR mindfulness* OR Compassion focused therapy OR narrative exposure therapy OR psychotherapy OR psychological intervention OR Therap* AND Subjective wellbeing OR wellbeing OR well being OR "mental health" OR self-compassion OR self-care OR psychological stress OR distress OR stress OR impact OR burnout OR effect.

Search terms for systematic search.

Studies were included if they were:

- Original research offering an intervention for clinical psychologists in training.
- Written in English
- Quantitative, qualitative, or mixed method studies
- reporting an intervention including at least one component relevant to psychological theory, for example, coping strategies, emotional regulation etc. This excludes physical (including relaxation), art, occupational, medical interventions, reflective practice groups or tutorials. This also excludes private personal therapy that trainees may have sought.
- From any country internationally

Studies were excluded if they:

- Involved trainees from other psychological professions e.g., Cognitive behaviour therapy trainees, counselling psychology trainees, where the data could not be extracted for clinical psychology trainees only.

Identified studies were screened by the first author by title and abstract and included if they clearly met the criteria. If it was unclear if studies met the inclusion or exclusion criteria, then the full text was screened and assessed.

Data abstraction and analysis

Quantitative data were extracted using a template in Microsoft Word. This included: participant demographics, intervention, measures, and key findings (including Means, Standard deviations, and effect sizes).

For the qualitative data Noblit and Hare's (1988) procedure was followed. This involved reading and re-reading the articles to systematically extract the relevant data. This was recorded using a template in Microsoft Word. Data extracted included participants, key findings, the study authors' interpretation of the findings, and limitations. Data were considered in terms of first- and second-order constructs. First order constructs refer to the data gained from study participants (i.e. direct quotes) and second-order constructs are the interpretations and meaning applied to the first order constructs by the researchers (Schütz, 1962).

Meta-Analysis

Meta-analysis “is a statistical tool for estimating the mean and variance of underlying population effects from a collection of empirical studies addressing ostensibly the same research question” (Field & Gillet, 2010, p.665). Meta-analysis was used to investigate the effectiveness of the interventions presented. The planned analysis was of the pooled pre/post effect size for each common measure identified. Information where possible reported in the studies was used to compute effect sizes by entering the data into Meta-Essentials 1.4 (Suurmond, et al., 2017). Where studies had not reported effect sizes the first author derived these from the available data reported (pre/post Means, Standard Deviations, and sample size). Where authors had not reported the overall score for a measure, the first author summed the subscales and divided by the number of subscales to create a Mean. Additionally, where participants’ scores were reported individually, these were summed and divided by sample size to calculate a Mean.

Qualitative analysis: Meta-ethnography

Meta-synthesis refers to methods which aim to develop new knowledge from the critical analysis and integrative synthesis of qualitative research (Bondas & Hall, 2007). Meta-ethnography (Noblit & Hare, 1988) is an interpretive approach to synthesis which aims to develop new understandings that go beyond the original individual studies’ findings (Frances et al, 2015). It is the most utilised approach to meta-synthesis in healthcare research (Hannes & Macaitis, 2012) and, if well-completed and reported, can develop new insights into even highly researched areas (Campbell et al, 2011).

Noblit and Hare’s (1988) procedure was followed. After data extraction, the synthesis is completed through the processes of:

1) Reciprocal translation: Identifying first and second order constructs that are comparable and developing a third order construct which captures this.
2) Refutational translation: Identifying first and second order constructs which are contrasting and developing a third order construct with captures this difference.
3) Developing a line of synthesis: this involves drawing together the similarities and difference
4) s into a new interpretive construct (Noblit & Hare, 1988).

Quality appraisal

Quality appraisal is a crucial aspect of systematic reviews (Higgins et al, 2019) yet there are no agreed appraisal criteria (National Institute for Health and Care Excellence [NICE], 2012) and there is debate regarding which methods provide the most consistent appraisals (Dixon-Woods et al, 2007). Some researchers argue that using a structured tool for quality assessment provides an objective evaluation of the rigor of studies included (Whiting, et al., 2017). For this review the quality appraisal was completed using the Mixed Methods Appraisal Tool ([MMAT] Hong et al, 2018). The first and third authors independently rated each study against the relevant

MMAT criteria and allocated a score of 0 (not met), 1(partially met) or 2 (fully met). The few minor discrepancies were resolved through discussion. Studies were not excluded based on their quality given that even low-quality studies can provide valuable information.

Reflexivity

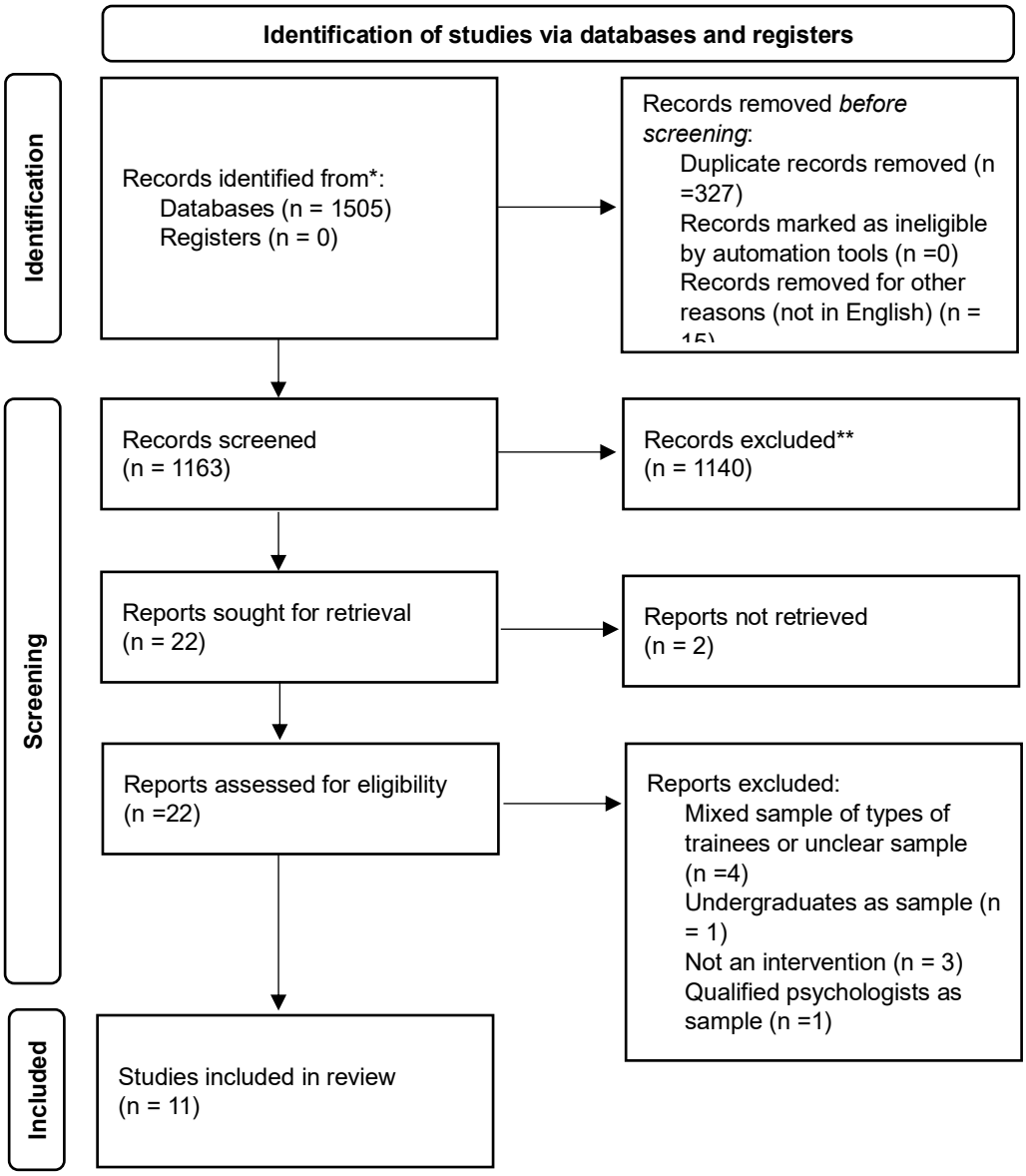
Throughout the process of conducting the synthesis, the first author kept a reflective journal and used research supervision to monitor and manage their judgments and potential biases.

Results

Searching

The PRISMA flow diagram (Page et al., 2021) outlines report selection (See figure 1). Table 2 illustrates each of the included reports' key characteristics. Each report has been numbered and will be referred to by number hereafter for conciseness. The review included 11 reports. It is important to note that reports 2 and 8 are based on the same sample, and 9 and 11 used the same sample (different to that for 2 and 8) which was confirmed by one of the authors. The samples from reports 4 and 5 may also have used some of the same participants, as participants were sampled from a larger study. This supervisor involved with all 3 studies was contacted but a response was not received. Therefore, the total number of independent participants across the reports is believed to be approximately 162. The study designs, measures and analysis vary across the studies.

Figure 1.



PRISMA flow diagram of search strategy

Table 2.

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
1	Harris, C. K. (2010) America	Quantitative	Group based Values enhanced Mindfulness-Based Stress Reduction (8x 1 and ½ hour sessions) Visual analysis of data	9 Clinical psychology Psy.D and PhD students completed baseline. 1 dropped out prior to intervention. Final data on 8 participants.	***Five Facet Mindfulness Questionnaire (FFMQ).*** (Baer, et al., 2006) ***Positive and Negative Affect Schedule*** *(PANAS)* (Watson, Clark, & Tellegen, 1988) ***Perceived Stress Scale (PSS).*** (Cohen & Williamson, 1988) ***Acceptance and Action Questionnaire (AAQ)*** (Hayes et al., 2004) ***Self-Compassion Scale (SCS).*** The SCS (Neff, 2003) ***Valued Living Questionnaire (VLQ).*** The **VLQ** (Wilson & Groom, 2002) Daily mindfulness logs Daily self-care behaviour logs	Pre/post analysis for each participant both Visual and statistical analysis.	The most strongly supported hypothesis was the prediction that there would be significant increases in trainees' "openness" to experience. Hypotheses were partially supported for the Observing and Describing factors of the Five Facet Mindfulness Questionnaire, the Perceived Stress Scale, and Self-Care Behaviour Logs. Overall, there was not support for hypotheses that predicted significant changes on the Acting with Awareness, Nonjudging of Internal Experience, and Nonreactivity to Internal Experience factors of the Five Facet Mindfulness Questionnaire, the Positive and Negative Affect Schedule, the Self-Compassion Scale, and the Valued Living Questionnaire.
2	Pakenham, K. I. (2015).	Quantitative	Group based Acceptance and Commitment Therapy (12 x 2-hour long workshops)	51 participants 32 Clinical psychology trainees completed measures at both time points. Demographics	**42-item Mental Health Professional Stress Scale** (Cushway, Tyler, & Nolan, 1996) **The General Health Questionnaire-*28*** (Goldberg, 1978)	Pre/post Pairwise t-tests and Pearson's correlations	Authors found significant changes in trainees scores from baseline to follow-up on measures of counselling self-efficacy, client–therapist

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
				Mean age was 27.66 years (standard deviation (SD) 6.62, Age was range= 21–50 years), Gender n=28 were women	***Self-Compassion Scale (SCS)*** (Neff, 2003) **Counselor Activity Self-Efficacy Scales** (Lent, Hill, & Hoffman, 2003) **Working Alliance Inventory-Short Form** (Tracey & Kokotovic, 1989) **Acceptance and Action The 16-item Acceptance and Action Questionnaire** (Bond & Bunce, 2003) ***Five Facet Mindfulness Questionnaire (FFMQ).*** The FFMQ (Baer, et al., 2006) **The White Bear Suppression Inventory** (WBSI, Wegner & Zanakos, 1994) ***Valued Living Questionnaire (VLQ).*** The **VLQ** (Wilson & Groom, 2002)		alliance, self-kindness, acceptance, defusion, mindfulness and values, and a marginally significant improvement on somatic symptoms. These changes were found despite trainees reporting increased work-related stress from baseline to follow-up. The findings are consistent with previous studies.
3	Hemanth, P., & Fisher, P. (2015).	Qualitative	Mindfulness group run by 2nd author (10x 1-hour long sessions)	6 Clinical psychology trainees **Demographics** Participants were all female and had a mean age of 31	Semi-structured interview	Interpretative Phenomenological Analysis (IPA)	Despite some initial discomfort with the group the trainees reported feeling more comfortable as the sessions went on. They also reported using mindfulness for self-care, supporting them to be more present in sessions with clients and felt that their confidence in using mindfulness skills increased.
4	Killebrew, J. L. E. (2012). San Diego (Alliant International University)	Qualitative	Group based Mindfulness and psychotherapy course (10 x 4-hour long sessions)	21 Clinical psychology graduate students **Demographics** Ages ranged from 22-41.	One page journal papers submitted by participants	Grounded theory	The authors found that the mindfulness course supported the development of a range of mindfulness skills. The

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
				Gender n= 2 male participants and n=19 women. Ethnicity of participants was as follows; Caucasian n=14, Latino n=2, African America n=1, Asian n=2, or mixed ethnicity n=2. Students' religious affiliations were Christian n=7, Buddhist n=2, Jewish n=1 and other or none specified n=11.		The Constant Comparative Method of analysis (Glasser, 1965) was used in conjunction with the Dedoose software program to examine the content.	themes reported largely reflect the nature of practicing the skills, being able to relate differently to their emotions and situations, being able to manage difficult emotions and developing their present moment awareness.
5	Lau, M. (2012). San Diego (Alliant International University)	Qualitative	Group based Mindfulness and psychotherapy course (10 x 4-hour long sessions)	5 clinical psychology graduate students **Demographics** Ages ranged from 30-45. Gender n=2 males' participants and n=3 women. The participant's ethnicity was as follows Asian n=2, mixed Asian/Caucasian descent n=1, and Caucasian n=2	Interviews	IPA	Themes reflected a positive impact of practicing mindfulness skills on the trainees' personal life including personal relationships and emotional regulation and on their clinical practice and work with clients.
6	Hopkins, A., & Proeve, M. (2013).	Mixed methods	Group based Mindfulness-based cognitive therapy (8 sessions manualised programme)	11 Clinical psychology trainees **Demographics** Participants mean age was 33.6 years (range 24–55 years).	***Perceived Stress Scale (PSS).*** (Cohen & Williamson, 1988) ***Five Facet Mindfulness Questionnaire (FFMQ).*** (Baer, et al., 2006)	Pre/post analysis using Friedmans analysis of variance by ranks for repeated measures. Thematic analysis for qualitative data	Pre-training themes reflected the trainees desire to develop their skills in other models and develop their clinical practice. Post training themes covered the challenge of the skills practice, responding to stress differently and responding to clients and within sessions differently. For the quantitative data, there was no significant different on the PSS although the trainees had

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
							reported qualitatively that their response to stress had changed. There was a significant difference on the observe, non-judge and non-react facets of the FFMQ but not the describe or act with awareness facets. Although authors noted that these aspects were seen within themes emerging from the qualitative data.
7	Moore, P. (2008). Bristol UK	Mixed methods	Group based Mindfulness (4 x 10-minute sessions)	10 clinical psychology trainees **Demographics** Gender n=9 participants were female and n=1 male.	**Perceived Stress Scale** (PSS14; Cohen, Kamarck, & Mermelstein, 1983), **Kentucky Inventory of Mindfulness Skills** (KIMS; Baer, Smith, & Allen, 2004) **Neff Compassion Scale** (NCS; Neff, 2003) Semi-structured interviews	Pre/post using Wilcoxon signed ranks. Qualitative data was analysed using Thematic analysis (Braun & Clark, 2006)	There was no significant difference between pre and post scores on the PSS. There was also no significant difference between pre and post scores on the NCS, except the self-kindness subscale. There was a significant difference between pre and post scores on the KIMS with trainees reporting increased mindfulness skills. Themes that emerged from the qualitative data reflected positive views of the course as accessible and a good introduction to mindfulness, the impact of practice on their personal and professional lives (recognising being unmindful, using mindfulness to cope with stress and to support work with clients) and some recommendations for the future of the

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
							course (discussion after practices)
8	Pakenham, K. I. (2017). Australia	Mixed methods	Group based Acceptance and Commitment Therapy (12 x 2-hour long workshops)	57 completed the end of course evaluation form 22 Clinical psychology trainees completed both questionnaires **Demographics** The mean age was 28.82 years (*SD*) = 7.57, range = 22–50 years. Gender *n* = 20 were females	Purpose built self-care and self-efficacy questionnaire Satisfaction questionnaire. Each questionnaire consists of eight items including a single item that provides a global satisfaction rating for course and teaching (*Overall, how would you rate this course* (*teacher*)). Items are rated on a 5-point scale (1—*strongly disagree* to 5—*strongly agree*	Pre/post Pairwise t-tests for self/report measures Mean and Standard deviation (SD) of those identifying with self-care component Percentage of participants reporting a theme for open ended questions	Most of the trainees reported finding the course helpful for fostering self-care practices, almost ¾ of the same reported one or more specific self-care behavioural change (present moment awareness practice, use of mindful meditation and regular use of defusion were the most commonly reported). Overall, self-care in the trainees significantly increased from the beginning to the end of the course.
9	Pakenham, K. I., & Stafford-Brown, J. (2013). Australia	Mixed methods	Group based Acceptance and Commitment Therapy (4 x 3-hour long sessions)	28 in treatment condition and 28 in control. The control group was offered the intervention after the treatment group so that 56 participants provided pre-treatment data and 44 post-treatment data **Demographics** Participants mean age was 28.45 years, *SD* = 8.26, range = 21–52 years), *Gender n* = 49 were females	Purpose built social validation questionnaire Course satisfaction questionnaire The 56 participants rated their satisfaction with their post-graduate clinical training on a 5-point response scale (1 *totally dissatisfied* to 5 *totally satisfied*	Mean and SD for domains of trainee perceptions Qualitative data was analysed using Thematic analysis (Braun & Clark, 2006)	91% of trainees reported they would continue to use ACT strategies persoanlly following the end of the course. 25% reported they would use the strategies specifically for stress management. 84% of trainees reported they intending to use the ACT strategies professionally. 98% reported that the course increased their interest in ACT. Though 77% did report difficulties with understanding ACT at the beginning of the course and 2 participants reported negative consequences from the intervention (reporting it made them less open to ACT).

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
10	Rimes, K. A., & Wingrove, J. (2011). Bath, UK	Mixed methods	Group based Mindfulness-Based Cognitive Therapy (8 sessions)	20 Clinical psychology trainees **Demographics** Age not reported Gender all participants were female 9 were in the 1st year, 6 were in the 2nd year and 5 were in the 3rd year of training.	**Perceived Stress Scale** (Cohen, Kamarck and Mermelstein, 1983), **Hospital Anxiety and Depression** Scale (HADS; Zigmond and Snaith, 1983) **Interpersonal Reactivity Index** (IRI; Davis, 1983). **Five Facet Mindfulness Questionnaire** (Baer, Smith, Hopkins, Krietemeyer and Toney, 2006), **Self-Compassion Scale** (Neff, 2003), **Rumination-Reflection Questionnaire** (Trapnell and Campbell, 1999). A Mechanisms of Mindfulness Questionnaire was devised to investigate other possible processes. Participants were asked multiple choice and open-ended questions to further assess the impact of the course and their home practice.	Pre/post Paired t-tests for participants on self-report measures Pearson's correlations for comparison between year groups Content analysis of qualitative data	The authors found that following the MBCT course, rumination significantly decreased in trainees and self-compassion and mindfulness increased. 1st year trainees were the only group to show a significant reduction in stress, the authors explained that this may have been due to adjustment with their workload rather than the MBCT course. There was no significant change in anxiety or depression, but this was not expected due to levels being low prior to intervention. Qualitative themes reflected increased acceptance, compassion, and awareness. Trainees also noted developing new ways to respond to stress and their thoughts. There were also themes relating to how the trainees would use the skills they learned in clinical practice and the difficulties they found during the intervention (resistance)

Study No.	Authors, (year) and location	Design	Intervention and target outcome/s	Participants and demographics	Data	Analysis	Key findings
11	Stafford-Brown, J., & Pakenham, K. I. (2012). Australia	Mixed methods	Group based Acceptance and Commitment Therapy (4 x 3-hour long sessions)	28 in treatment condition and 28 in control condition. 2 in treatment condition withdrew. **Demographics** The participants mean age in the treatment group was 28.79 (SD= 8.99). In the control group mean age was 28.11 (SD= 7.59). Gender, In the treatment group n=3 were male and n=25 were female, in the control group n=4 were male and n=24 female.	**The 42-item Mental Health Professional Stress Scale** (Cushway, Tyler, & Nolan, 1996) **The General Health Questionnaire-*28*** (Goldberg, 1978) **The Satisfaction With Life Scale** (Diener, Emmons, Larsen, & Griffin, 1985) **Self-Compassion Scale** (Neff, 2003) **The 15-item Counselor Activity Self-Efficacy Scales-Helping Skills Scale** (Lent, Hill, & Hoffman, 2003) **Working Alliance Inventory-Short Form** (Tracey & Kokotovic, 1989). **The Acceptance and Action Questionnaire** (Bond & Bunce, 2003) **Five Facet Mindfulness Questionnaire** (Baer, Smith, Hopkins, Krietmeyer, & Toney, 2006), **The White Bear Suppression Inventory** (WBSI;Wegner&Zanakos, 1994) **The Valued Living Questionnaire** (Wilson, Sandoz, Kitchens, & Roberts, 2010) Social validation questionnaire. A 20-item questionnaire was developed to gather social validation data on the intervention.	Chi-square and Fisher exact test for categorical data and Anova for continuous. Pairwise t-tests used for pre/post treatment data Mediational hypotheses were analysed by nonparametric bootstrapping procedure for estimating direct and indirect effects with multiple mediators (Preacher & Hayes, 2008). Qualitative data was analysed using Thematic analysis (Braun & Clark, 2006)	Professional self-doubt and psychological distress decreased for the intervention group and increased within the treatment group. Self-efficacy significantly increased more so for the treatment group relative to the control group. Qualitative data indicated that 96% of participants felt the intervention had increased their interest in ACT, though 41% of trainees had found understanding the content challenging. 78% of trainees said the program should be offered to new students, 18.5% were unsure and 1 person said it should not. There was no further data indicating why.

Key characteristics of the included studies

Types of interventions

Four reports were of studies using Acceptance and Commitment Therapy ([ACT] 2,8,9,11), two Mindfulness Cognitive Therapy ([MBCT] 6,10), one Values-Enhanced Mindfulness Based Stress Reduction ([MBSR], 1), two a Mindfulness group intervention (3,7) and two a Mindfulness and Psychotherapy course (4,5). These were all group-based. The target outcomes were Mindfulness (1,2,6,7,10,11), Acceptance (1,2,11), Values based Living (1,11), reducing stress/psychological distress (1,2,6,7,10,11), increasing self-compassion (1,2,7,8,10,11) and self-efficacy (2,8,11).

The explicit focus of reports 1 and 8 was to foster self-care behaviours in trainees, though the authors did also consider and measure work-related outcomes such as acceptance and mindfulness-based skills and therapist self-efficacy. The remaining reports were focused more broadly on both the personal and professional impacts of their interventions on the trainees. They considered aspects related to personal wellbeing such as self-care and self-compassion (1,2,7,8,10,11) and stress levels (1,2,6,7,10,11), but also skills such as acceptance (1,2,11) and mindfulness (1,2,6,7,10,11), which can inform both the trainees' personal lives and their professional skills.

Meta-analysis

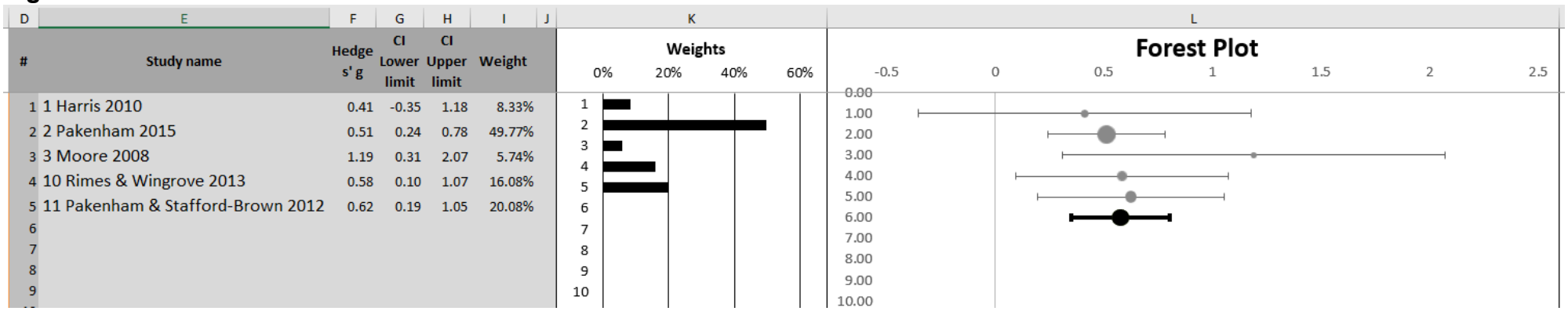
Eight reports included quantitative data, five of which reported data that could be included in the Meta-analysis (1,7,9,10,11). There were common measures across the included studies. All had a mindfulness component and a corresponding measure and so this was included for analysis. Measures of values and acceptance were also included, these were analysed separately as they are considered distinct processes (Hayes et al., 2011). Further common measures included were of self-efficacy, stress, and self-compassion. Work and personal stress were analysed together because there was insufficient data to separate these related constructs.

Meta-Analysis of Mindfulness

Heges g was used to calculate overall effect size. The results demonstrated a medium significant effect size (g = 0.58, 95% CI [0.35–0.80], z = 7.09, p < 0.001). Statistical heterogeneity was significantly low (*I²=0.00 p < 0.001*) indicating that effect estimates were similar.

A forest plot (Figure. 2) was produced that demonstrated significant pre/post increase in Mindfulness in 5 reports (1,2,7,10,11).

Figure 2.



#	Study name	Hedges' g	CI Lower limit	CI Upper limit	Weight
1	1 Harris 2010	0.41	-0.35	1.18	8.33%
2	2 Pakenham 2015	0.51	0.24	0.78	49.77%
3	3 Moore 2008	1.19	0.31	2.07	5.74%
4	10 Rimes & Wingrove 2013	0.58	0.10	1.07	16.08%
5	11 Pakenham & Stafford-Brown 2012	0.62	0.19	1.05	20.08%

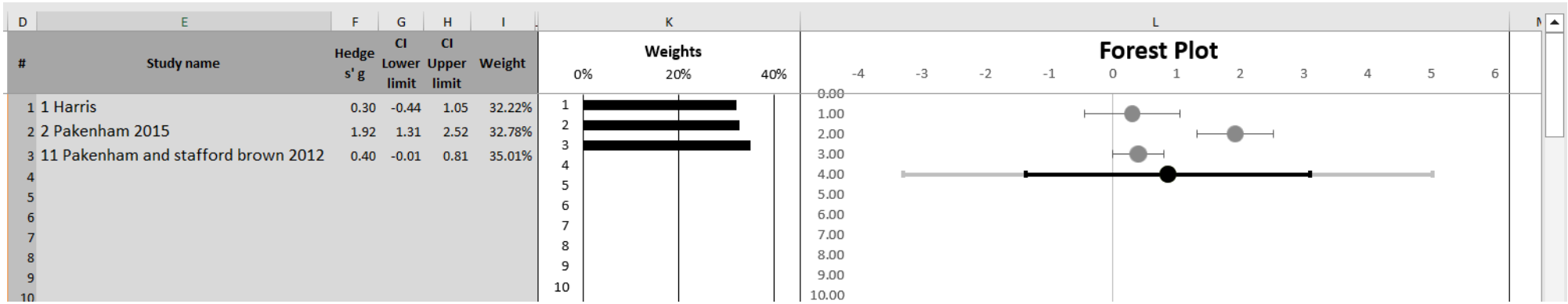
Forest plot Mindfulness

Meta-Analysis of Acceptance

Heges' g was used to calculate overall effect size. The results demonstrated a large significant effect size (g = 0.86, 95% CI [-1.37–3.10], z = 1.67, p = 0.048). Statistical heterogeneity was significantly high (*I²=90.37, p = <0.001*) indicating that effect estimates were variable and potentially influenced by clinical and methodological differences between studies.

A forest plot (Figure. 3) was produced that demonstrated significant pre/post increase in Acceptance in one study (2).

Figure 3.



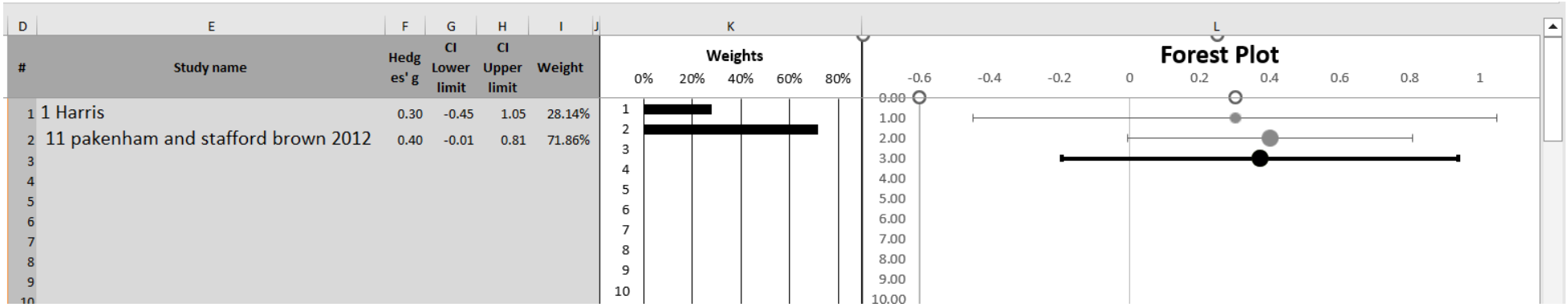
Forest plot Acceptance

Meta-Analysis of Valued living

Heges' g was used to calculate overall effect size. The results demonstrated a small significant effect size (g = 0.37, 95% CI [-0.19–0.94], z = 8.37, p < 0.001). Statistical heterogeneity was low and not significant (I^2= *0.00, p = 0.791*) indicating that effect estimates were similar.

A forest plot (Figure. 4) was produced that demonstrated non-significant pre/post increase in Valued living in both studies (1,11).

Figure 4.



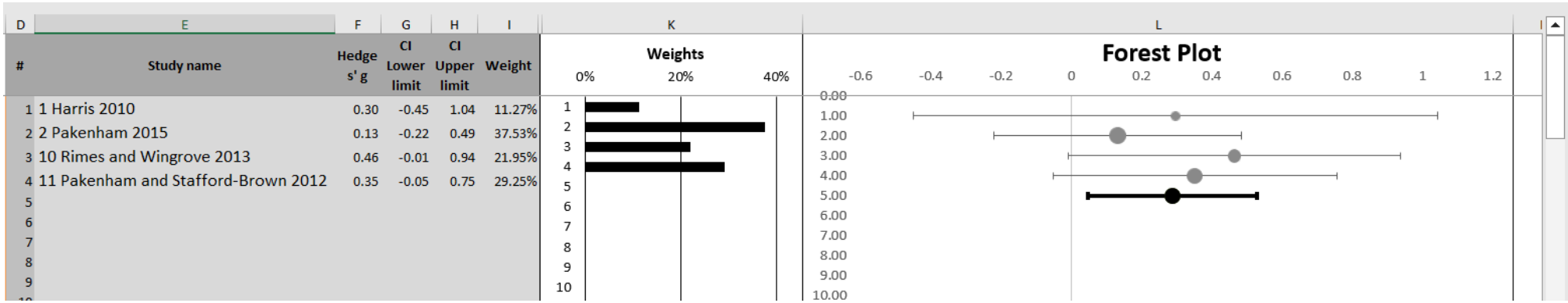
Forest Plot Valued living.

Meta-Analysis of Self-compassion

Heges' g was used to calculate overall effect size. The results demonstrated a small Significant effect size (g = 0.29, 95% CI [0.05–0.53], z = 3.81, p <0.001). Statistical heterogeneity was low and not significant (I^2= *0.00, p* = 0.678) indicating that effect estimates were similar.

A forest plot (Figure. 5) was produced that demonstrated non-significant pre/post increase in Self compassion in all four studies (1,2,10,11).

Figure 5.



#	Study name	Hedge s' g	CI Lower limit	CI Upper limit	Weight
1	1 Harris 2010	0.30	-0.45	1.04	11.27%
2	2 Pakenham 2015	0.13	-0.22	0.49	37.53%
3	10 Rimes and Wingrove 2013	0.46	-0.01	0.94	21.95%
4	11 Pakenham and Stafford-Brown 2012	0.35	-0.05	0.75	29.25%

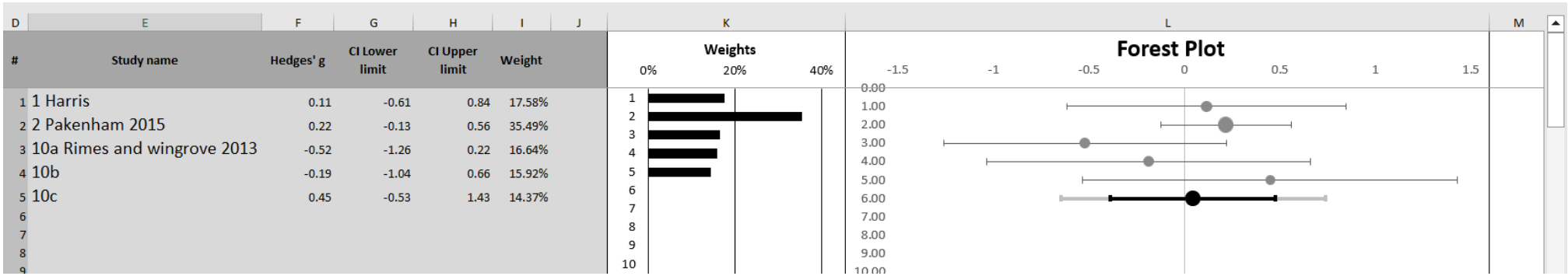
Forest plot Self-compassion

Meta-Analysis of Stress

Heges' g was used to calculate overall effect size. One study (10) had split their analysis of stress and considered each year of trainees as a separate sample and so we also considered each year group separately. The sample was split into the first year trainees (10a), second year trainees (10b) and third-year trainees (10c). The results demonstrated no effect size which was not significant (g = 0.04, 95% CI [-0.39–0.48], z = 0.29, p = 0.387). Statistical heterogeneity was moderate and not significant (I^2= *32.56, p* = 0.204) indicating that there was a degree of variability between the studies.

A forest plot (Figure 6) was produced that demonstrated non-significant pre/post changes in stress in all five studies. Three (1,2,10c) indicated a non-significant increase in stress and two samples (10a,10b) a non-significant decrease in stress.

Figure 6.



#	Study name	Hedges' g	CI Lower limit	CI Upper limit	Weight
1	1 Harris	0.11	-0.61	0.84	17.58%
2	2 Pakenham 2015	0.22	-0.13	0.56	35.49%
3	10a Rimes and wingrove 2013	-0.52	-1.26	0.22	16.64%
4	10b	-0.19	-1.04	0.66	15.92%
5	10c	0.45	-0.53	1.43	14.37%

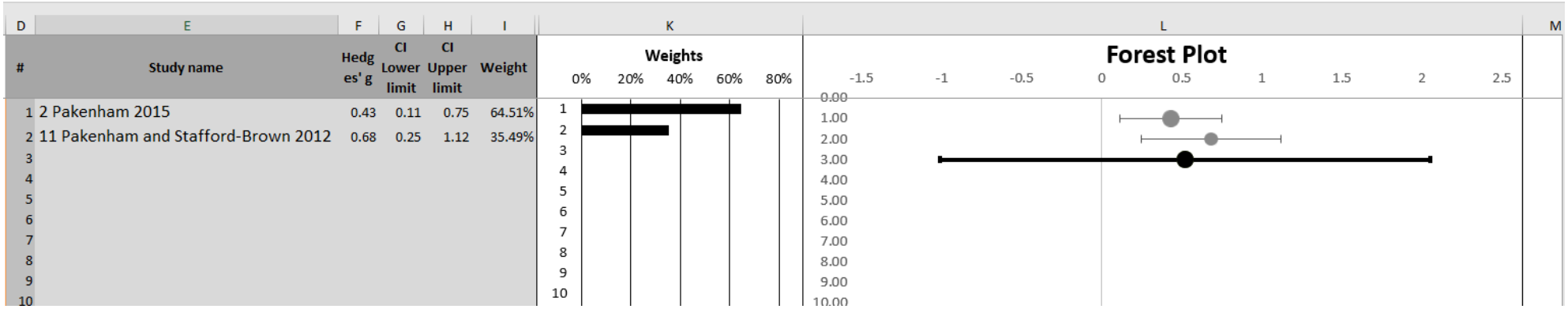
Forest Plot Stress

Meta-Analysis of Counsellor Self-efficacy

Heges' g was used to calculate overall effect size. The results demonstrated a medium significant effect size (g = 0.52, 95% CI [-1.01–2.05], z = 4.32, p < 0.001). Statistical heterogeneity was low and non-significant (*I^2=0.00, p = 0.341*) indicating that effect estimates were similar.

A forest plot (Figure 7) was produced that demonstrated significant pre/post increase in counsellor self-efficacy in both studies (2,11).

Figure 7.



Forest plot Counsellor Self-efficacy

Meta-Synthesis

Four third-order constructs were developed: 1) The personal impact on the trainee; 2) Developing skills as a clinician; 3) Gaining theoretical insights; and 4) Challenges or barriers to utilising skills. All but the third had subthemes. Table 3 outlines which papers contributed to the themes and subthemes.

Table 3.

	Contributing paper								
Third order constructs *Subthemes*	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
The personal impact on the trainee	*	*	*	*	*	*	*	*	*
Self-care and compassion	*	*	*			*			
Responding and relating differently to internal experiences		*	*	*	*	*	*	*	*
Developing their skills as a clinician	*	*	*	*	*		*	*	*
Presence and patience in session	*		*	*		*		*	
Utilising strategies with clients	*	*	*		*		*	*	*
Gaining a new theoretical insight		*	*	*			*		*
Challenges and barriers associated with utilising skills	*	*	*	*			*	*	*
Barriers to utilising skills	*	*	*	*			*	*	
Difficulty understanding model		*							*

Third order constructs and the studies they were derived from.

The personal impact on the trainee

Reciprocal and refutational translation established the third-order construct of 'the personal impact on the trainee', with every report contributing to at least one of the subthemes: 'self-care and self-compassion' and 'responding and relating differently to internal experiences'.

Self-care and compassion. Four studies (3,4,5,8) established the ways that trainees utilised the skills they had learned from the intervention for their own self-care and self-compassion. Two (3,8) captured trainees' intention to use the strategies, such as cognitive defusion and mindfulness exercises, as methods of self-care. All four (3,4,5,8) established how the strategies allowed trainee to treat themselves in a more kind and compassionate way, e.g., "Wendy: I am trying to be patient and noncritical of myself." (Kilibrew, 2012, p. 56). Trainees noted how their increased compassion also impacted their response and compassion for others, e.g., "Jack: I feel I am more understanding and compassionate with others and that translates to myself. When I'm more understanding and compassionate within myself, it

reciprocates to others and it has this ever-evolving impact on everything" (Lau, 2012, p. 101).

Responding and relating to internal experiences. Eight reports (4,5,6,7,8,9,10,11) established the ways that trainees used their learned skills to cope with their stress and respond and relate differently to internal experiences. For example, trainees noted how they could prevent themselves from being caught up in their stressful experience "And once you start noticing yourself getting caught up in that cycle, you just sort of step back and say, "right! Just take a moment". (P19)" (Hopkins & Proeve, 2013, p. 122). They also reported planning to continue using the strategies to reduce stress:

> Mindfulness helps me manage my feeling, my stress, and my anxiety. If I'm more aware, like if I'm fidgeting, I become more aware of that, or if I'm feeling really stressed, I can say, "Hey, I'm stressed!" and just kind of learn to manage it better (Lau, 2012, p.111).

Four studies (4,5,7,10) identified how trainees could step back and observe their thoughts and experiences "A new way of looking at situations—feel more able to cope and less likely to react—observing a situation/ feeling without becoming involved in it/them'' (Participant E)" (Moore, 2008, p.335). All four studies also noted how trainees felt more present and aware of times when they were not, e.g., "Dee shared "I keep it more in the present, so I'm not worrying about it more in the future or ruminating on how I handled it in the past."" (Lau, 2012, p. 74). These subthemes fit with the findings from the meta-analysis that mindfulness significantly increased post intervention. Whilst the meta-analysis indicates that stress increased in three studies, the subthemes suggest that the way that the trainees responded and coped with stress had changed, which is consistent with third-wave interventions.

Refutational translation established that not all the trainees' experiences were positive. For example, they reported the intervention leading to negative or unhelpful feelings (10) or would not recommend the intervention to others (11).

<u>Developing skills as a clinician</u>

Reciprocal translation established the third-order construct of "Developing skills as a clinician", with eight reports (3,4,5,6,7,9,10,11) contributing to one of the subthemes: 'presence and patience in session' and 'utilising strategies with clients. Trainees reported that the interventions changed the way they would respond to clients and the way their practice has developed because of learning new skills.

Presence and patience in session. Six reports contributed to this subtheme (3, 5,6,7,9,10,). Trainees explained they could use their skills to be more present in sessions (3, 5, 6, 10), e.g., "" Don't worry so much about what they think of you as a therapist … allowed me to take on board what the client was saying more" (P19)" (Hopkins & Proeve, 2013, p. 122). They could also respond to clients in sessions with more patience and understanding (5, 7, 10), e.g., "Jon noted that, when working

with his clients, “They notice that I’m not rushing or that I don’t hurry them. If the session is going over a little bit, it’s OK.”” (Lau, 2012, p. 101).

Utilising strategies with clients. Trainees utilised the skills they learned to inform their clinical practice (4,5,7,9,10,11). Some (5) reflected how their personal use of the skills encouraged them to use the same skills within their clinical work:

> It was a little difficult for me to say that I’m going to help others manage their emotions or manage themselves and self-reflect when I really, authentically wasn’t able to do the same for myself . . . Now that I can self-regulate (I can with meditation), . . . I think I have more confidence going in and sitting down with somebody and being able to help somebody because I have skills that I can implement on myself.” (Lau, 2012, p. 105).

Others (3,5) noted their intention to use the skills with clients: “Yes. I can see many possible benefits and applications for client use . . . especially in helping clients deal with situations that they cannot change.” (Pakenham & Stafford-Brown, 2013, p. 61).

> Jon shared the following comment: If I have a client, for example, that has a repetitive pattern that she engages in with her partner and it’s been, what’s the word, *maladaptive* for her, then yeah, I would bring mindfulness up and introduce it as a tool for her to use so she can be aware of the things that she is doing . . . You know, so she doesn’t go about in those patterns in a very robotic, automatic kind of way (Lau, 2012, p. 95).

This theme reflects similar findings to the meta-analysis with an increase in self-reported counsellor self-efficacy.

<u>Gaining a new theoretical insight</u>

Reciprocal and refutational translation established the third-order construct of “Gaining a new theoretical insight”, with five reports (4,5,6,9,11), all focused-on mindfulness-based interventions, contributing to the theme. The intervention gave trainees insight into the underlying theory and how it can be integrated with other theories. They reflected how mindfulness fit with their current skills, e.g., “JAKE: I continue to be fascinated by how mindfulness can possibly be integrated into other theories of therapy. The positives of mindfulness are very positive and have something to offer almost all theories” (Killebrew, 2012, p. 49)

> I see commonality with all techniques. If psychodynamically we are gaining greater awareness of our defenses, our automated responses, our conditioned responses, all this mindfulness again provides the means for that awareness. And awareness is the first step. So, whether it’s a formal MBSR-based course or one to- one therapy, enhancing awareness and practical coping skills, teaching the practical, just learning to sit with it, remembering to breath, remembering that it’s OK and that you are creating more than half your problems in your head (Lau, 2012, p. 97).

They also note how their understanding of the model developed because of the intervention ““…the words are now coming from my experience.” (P4)” (Hopkins & Proeve, 2013, p. 123). One report (5) noted how the intervention had encouraged trainees to seek further knowledge about the model “Actually, I have done a lot of reading on how mindfulness can really help with depression. That’s a population that I am really interested in working with.” (Lau, 2012, p. 85).

Three reports (4,9,11) identified divergent data. Trainees reported difficulty with understanding the theory underlying the model and the strategies:

> AMY: Furthermore, what I did not understand about this chapter was how acknowledging the interdependence of all phenomena leads to liberation “from every sort of fear, pain, and anxiety”. Just because one acknowledges that they are not independent of the world or cut off, doesn’t make what happens to them any less real. (Killebrew, 2012, p. 49).

Some trainees felt that the intervention had deterred them from using the model again “I think it has made me less open to ACT.” (Pakenham & Stafford-Brown, 2013, p. 61).

Challenges and Barriers associated with utilising skills.

Reciprocal and refutational translation highlighted “Challenges and barriers associated with utilising skills”, with across seven papers (3,4,5,6,9,10,11) with subthemes: barriers to practising skills and difficulty understanding the model.

Barriers to utilising skills. Six papers (3,4,5,6,10,9) contributed to this subtheme Trainees noted time constraints; “Alice: So, like I said I think at first, we weren’t sure. So, with timing and the placement it felt more like a (gasp) extra work that we have to do” (Hemanth & Fisher, 2015, p. 1146). They also noted resistance to the model used (3,10,9), lack of confidence in their skills (4) and difficulties putting the strategy into practice “ANDREA: I fell asleep EVERY time I did body scan” (Killebrew, 2012, p. 53). However, refutational translation noted that practice became easier with time “VERONICA: I feel it is easier to focus and pay more attention, which also makes me feel like I put more effort. Through the practice I also found that I am getting better at training my mind to stay in one place.” (Killebrew, 2012, p. 51).

Line of argument synthesis

Third-order constructs developed through a process of meta-synthesis highlight the personal and professional benefits that some trainees gained following a psychological intervention, providing them with coping strategies for their stress, encouraging self-care and developing skills that they can share with clients in their clinical practice. Nevertheless, some reported a negative impact such as the intervention leading to negative and unhelpful feelings. Various challenges to utilising the skills taught went unaddressed, such as a difficulty understanding the

model or theory, finding time to practice skills, a lack of confidence and personal resistance to the model.

Critical appraisal

Tables 4, 5 and 6 show the quality appraisal for the quantitative, qualitative, and mixed methods studies respectively, which indicate variable methodological quality across the studies.

One quantitative report (2) lost points for only partially accounting for confounding variables. Qualitative studies scored highly, but it is noted that 4 and 5 are complete dissertations rather than journal articles. Scores for the mixed method studies were more variable. None of the mixed methods reports gave a clear rationale for study design. Furthermore, in studies 1 & 2, points were lost for participant representativeness. In study 1, a rationale is not given regarding how 8 participants are representative of the target population and in study 2 with less than half of participants completing their data and with no demographics it is hard to determine representativeness. Some studies also lost points for it not being clear if they have adhered to the criteria of the methods used e.g., a lack of reporting on controlling for biases (8, 10, 11).

Table 4.

	Study	
	1 Harris(2010)	2 Pakenham, I.(2015)
Quality criteria		
Are the participants representative of the target population?	0	1
Are measurements appropriate regarding both the outcome and intervention (or exposure)?	2	2
Are there complete outcome data?	2	2
Are the confounders accounted for in the design and analysis	2	1
During the study period, is the intervention administered (or exposure occurred) as intended?	2	2
Total (maximum 10)	**8**	**8**

Critical appraisal of quantitative studies

Table 5.

	Study		
	3 Hemanth, P., & Fisher, P. (2015).	4 Killebrew, J. L. E. (2012)	5 Lau, M. (2012)
Quality criteria			
Is the qualitative approach appropriate to answer the research question?	2	2	2
Are the qualitative data collection methods adequate to address the research question?	2	2	2
Are the findings adequately derived from the data?	2	2	2
Is the interpretation of results sufficiently substantiated by data?	2	2	2
Is there coherence between qualitative data sources, collection, analysis, and interpretation?	2	2	2
Total (maximum 10)	10	10	10

Critical appraisal of qualitative studies

Table 6.

	Study					
	6 Hopkins, A., & Proeve, M. (2013).	7 Moore, P. (2008).	8 Pakenham, K. I. (2017).	9 Pakenham, K. I., & Stafford-Brown, J. (2013).	10 Rimes, K. A., & Wingrove, J. (2011).	11 Stafford-Brown, J., & Pakenham, K. I. (2012).
Quality criteria						
Is there an adequate rationale for using a mixed methods design to address the research question?	1	0	0	0	0	0
Are the different components of the study effectively integrated to answer the research question?	1	1	0	2	0	0
Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	2	2	0	2	1	2
Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	2	2	1	2	1	2
Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	2	2	1	2	1	1
Total (maximum 10)	8	7	2	8	3	5

Critical appraisal of mixed-method studies

Discussion

The purpose of this review was to systematically identify and assess the current literature regarding the use of psychological interventions for trainee clinical psychologists and gain an understanding of the different models utilised, what they were targeting and to assess the methodological quality. With regards to intervention models, there were a range of Mindfulness and Acceptance based models utilised. The studies considered and measured a range of outcomes considering the personal and professional impact.

Meta-analysis demonstrated a significant increase in acceptance, valued living, mindfulness, self-compassion, and counsellor self-efficacy across the studies, with effect sizes ranging from small to large. No significant effect was found for stress. Heterogeneity was high and significant for acceptance and moderate but not significant for stress, the remaining outcomes were low in heterogeneity. The heterogeneity for stress may have been due to including both measures of work-related and personal stress within the analysis. The Acceptance and Action Questionnaire (Bond & Bunce, 2003) can be scored to demonstrate avoidance or reverse scored to indicate acceptance, two studies (2 & 8) reverse scored their results, and one scored it to demonstrate avoidance. This difference in scoring may explain the heterogeneity. Considering the levels of heterogeneity, the effect sizes for acceptance and stress should be interpreted with caution. The meta-synthesis demonstrated that interventions led to personal and professional benefits for trainees, but that some also experienced an increase in difficult feelings and barriers to utilising the content of the intervention.

Clinical psychology training can cause significant stress (Cushway, 1992; Kuyken, et al., 2000; Brooks, et al., 2002; Skovholt & Ronnestad, 2003; Pakenham & Stafford-Brown, 2012; Galvin & Smith, 2015), with previous research indicated that 59% of trainees meet the criteria for caseness (Cushway, 1992). Given this, and the nature of the profession, it seems particularly important for research to explore possible methods of support for trainees' personal and professional wellbeing. The results from the meta-synthesis highlighted positive effects of third-wave interventions on trainees' stress management, self-care, and self-compassion. This is consistent with research into the use of these models for individuals stress and wellbeing (Chiesa, & Serretti, 2009; Stenhoff, et al., 2020) and anxiety and depression (Kuyken et al, 2008; Godfrin, & van Heeringen, 2010; Hofmann, et al., 2010; Fjorback, et al., 2011). On the other hand, the meta-analysis did not show a significant effect for stress and in three studies there was an increase in stress post intervention. Nonetheless, these findings fit with how third-wave approaches encourage individuals to change the way they relate to difficult experiences rather than attempting to reduce them (Herbert et al., 2009). This is also supported by the significant increases in acceptance, valued living, and mindfulness, which would be expected when an individual is utilising such skills. It must, however, be acknowledged that most studies did not use a control group and therefore there is limited ability to draw causality. It could be that there were other unrelated factors that led to changes such as the trainees adjusting to

course demands, gaining support elsewhere or an increase in course demands and responsibility. This is something that future research should address.

Currently, training courses and the NHS do offer some support to trainees, such as personal therapy in some cases (NHS England, n.d.). Such options require trainees to disclose their experience, which can often be a barrier to accessing support such as a fear of the impact on training and internalised stigma (Turner, et al., 2022; Zamir, et al., 2022). It also limits access to a point of distress, rather than proactively teaching skills as a preventative measure. Given this and findings that trainees' use of such techniques with clients increases, proactively offering an intervention like those reported in this review could be valuable in simultaneously supporting trainee wellbeing and developing professional skills.

The trainees reported different challenges and barriers to utilising the skills (both personally and professionally) they learned such as difficulties putting skills into practice, a lack of time for skills practice, a lack of confidence using the skills and difficulty understanding the model itself. However, some (4,5) did reflect that this became easier with time. This is supported by the post-intervention significant increase in self-reported counsellor self-efficacy. Together, the findings suggest that, although there may be difficulties initially in utilising the skills, over time trainees are able to overcome challenges and use the skills for their personal wellbeing and in clinical practice. This is consistent with the findings that brain activity of novice mindfulness practitioners shows more effortful "top-down" processing when completing mindfulness practice, whereas more experienced practitioners brain activity indicated "bottom-up" processing (Chiesa, et al., 2013). Furthermore, research demonstrates a dose-response relationship, with increased practice of mindfulness relating to larger increases in mindfulness skills and stress reduction (Carmody, & Baer, 2008). This suggests that regularly embedding practice throughout training may be beneficial, although further investigation would be necessary to demonstrate whether this is the case.

Limitations

The current review has limitations which must be acknowledged. The first is that the first author completed the search, exclusion, data extraction and analysis, which could bias the results. Furthermore, the first author is a trainee clinical psychologist themselves and so they may be biased by the nature of their own experience. However, the first author took steps to mitigate potential bias, closely following the meta-ethnography process (Noblit & Hare's, 1988), keeping a reflective journal, meeting with their supervisors, and being open to and noting refutational translation.

A further limitation is that reports 4 & 5 contained a larger proportion of first order constructs therefore they may be overrepresented in the results.

Future directions and clinical implications

These studies highlight the potential benefits of providing trainees with a psychological intervention to support their personal wellbeing and professional development. This is particularly relevant, considering the high levels of distress reported by trainees (Galvin & Smith, 2015) and at the increased risk of vicarious

traumatisation and secondary traumatic stress because they are younger (Way, et al., 2004; Rupert & Kent, 2007; Craig & Sprang, 2010) and often have less work-related experience (Kadambi & Truscott, 2004; Sprang et al, 2007). Only studies 1 and 8 specific measures of self-care. Considering the changes in self-care reported in the meta-synthesis, it may be useful in future studies for this to also be captured quantitatively to assess if there are significant changes in these behaviours.

The studies varied in methodological quality. Most use the trainees' baselines as their control, rather than a separate control group, limiting their ability to determine causality. It would, therefore, be beneficial to complete randomised controlled trials to ensure any findings are a result of the intervention itself. It also would be valuable to compare the interventions, to determine which are most effective and cost effective to guide training courses in selecting the most appropriate intervention. Future studies could benefit from providing more direct participant quotes to support the second order constructs.

References

Abrahart, B. (2022). *Should there be a new statutory duty of care for students in higher education?* Higher Education Policy Institute. Available at: https://www.hepi.ac.uk/2022/11/07/should-there-be-a-new-statutory-legal-duty-of-care-for-students-in-higher-education/

Aggs, C., & Bambling, M. (2010). Teaching mindfulness to psychotherapists in clinical practice: The mindful therapy programme. *Counselling & Psychotherapy Research, 10*(4), 278–286. https://doi.org/10.1080/14733145.2010.485690

Beddoe, A. E., & Murphy, S. O. (2004). Does mindfulness decrease stress and foster empathy among nursing students?. *Journal of Nursing Education*, *43*(7), 305-312. https://doi.org/10.3928/01484834-20040701-07

Bondas, T., & Hall, E. O. (2007). A decade of metasynthesis research in health sciences: A meta-method study. *International Journal of Qualitative Studies on Health and Well-being*, *2*(2), 101-113. https://doi.org/10.1080/17482620701251684

British Medical Association. (2020). The mental health and wellbeing of the medical workforce–now and beyond COVID-19.

Bond, F.W., & Bunce, D. (2003). The role of acceptance and job control in mental health, job satisfaction, and work performance. Journal of Applied Psychology, 88(6), 1057–1067. https://psycnet.apa.org/doi/10.1037/0021-9010.88.6.1057

Brooks, J., Holttum, S., & Lavender, A. (2002). Personality style, psychological adaptation and expectations of trainee clinical psychologists. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *9*(4), 253-270. https://doi.org/10.1002/cpp.318

Buchanan, M., Anderson, J. O., Uhlemann, M. R., & Horwitz, E. (2006). Secondary traumatic stress: An investigation of Canadian mental health workers. *Traumatology*, *12*(4), 272-281.https://doi.org/10.1177%2F1534765606297817

Cahir, N., & Morris, R. D. (1991). The psychology student stress questionnaire. *Journal of clinical psychology*, *47*(3), 414-417. https://doi.org/10.1002/10974679(199105)47:3%3C414::AID-JCLP2270470314%3E3.0.CO;2-M

Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of behavioral medicine*, *31*(1), 23-33. https://doi.org/10.1007/s10865-007-9130-7

Chiesa, A., & Serretti, A. (2009). Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis. *The journal of alternative and complementary medicine*, *15*(5), 593-600. https://doi.org/10.1089/acm.2008.0495

Chiesa, A., Serretti, A., & Jakobsen, J. C. (2013). Mindfulness: Top–down or bottom–up emotion regulation strategy? *Clinical psychology review*, *33*(1), 82-96. https://doi-org.nottingham.idm.oclc.org/10.1016/j.cpr.2012.10.006

Cohen-Katz, J., Wiley, S. D., Capuano, T., Baker, D. M., & Shapiro, S. (2005). The effects of mindfulness-based stress reduction on nurse stress and burnout, Part II: A quantitative and qualitative study. *Holistic nursing practice*, *19*(1), 26-35. https://doi.org/10.1097/00004650-200501000-00008

Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, & Coping*, *23*(3), 319-339. https://doi.org/10.1080/10615800903085818

Cummins, I. (2018). The impact of Austerity on mental health service provision: A UK perspective. *International Journal of Environmental Research and Public Health*, *15*(6), 1145. https://doi.org/10.3990/ijerph15061145

Cushway, D. (1992). Stress in clinical psychology trainees. *British journal of clinical psychology*, *31*(2), 169-179. https://doi.org/10.1111/j.2044-8260.1992.tb00981.x

Daniels, K., Connolly, S., Woodard, R., van Stolk, C., & Patey, J. NHS staff wellbeing: Why investing in organisational and management practices makes business sense.

Dixon-Woods, M., Sutton, A., Shaw, R., Miller, T., Smith, J., Young, B., ... & Jones, D. (2007). Appraising qualitative research for inclusion in systematic reviews: a quantitative and qualitative comparison of three methods. *Journal of health services research & policy*, *12*(1), 42-47. https://doi.org/10.1258%2F135581907779497486

Farmer, P., & Stevenson, D. (2017). *Thriving at work: The Stevenson/ Farmer review of mental health and employers*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/658145/thriving-at-work-stevenson-farmer-review.pdf

France, E. F., Ring, N., Noyes, J., Maxwell, M., Jepson, R., Duncan, E., Turley, R., Jones, D., & Uny, I. (2015). Protocol-developing meta-ethnography reporting guidelines (eMERGe). *BMC Medical Research Methodology*, *15*(1), 1-14. https://doi.org/10.1186/s12874-015-0068-0

Field, A. P., & Gillett, R. (2010). How to do a meta-analysis. *British Journal of Mathematical and Statistical Psychology*, *63*(3), 665-694. https://doi.org/10.1348/000711010X502733

Galvin, J., & Smith, A. P. (2017). It's like being in a little psychological pressure cooker sometimes! A qualitative study of stress and coping in pre-qualification clinical psychology. *The Journal of Mental Health Training, Education and Practice*. https://doi.org/10.1108/JMHTEP-05-2015-0020

Galvin, J., Suominen, E., Morgan, C., O'Connell, E. J., & Smith, A. P. (2015). Mental health nursing students' experiences of stress during training: a thematic analysis of qualitative interviews. *Journal of Psychiatric and Mental Health Nursing*, *22*(10), 773-783. https://doi.org/10.1111/jpm.12273

Godfrin, K. A., & van Heeringen, C. (2010). The effects of mindfulness-based cognitive therapy on recurrence of depressive episodes, mental health and quality of life: A randomized controlled study. Behaviour Research and Therapy, 48(8), 738–746. http://dx.doi.org/10.1016/j.brat.2010.04.006.

Hannigan, B., Edwards, D., & Burnard, P. (2004). Stress and stress management in clinical psychology: Findings from a systematic review. Journal of Mental Health, 13, 235–245. https://doi.org/10.1080/09638230410001700871

Hannes, K., & Macaitis, K. (2012). A move to more systematic and transparent approaches in qualitative evidence synthesis: update on a review of published papers. *Qualitative research*, *12*(4), 402-442. https://doi.org/10.1177%2F1468794111432992

Harris, C. K. (2010). *The use of values-enhanced mindfulness-based stress reduction to increase self-care behaviors and well-being in clinical psychology trainees*. Hofstra University.

Hayes, S. C., Villatte, M., Levin, M., & Hildebrandt, M. (2011). Open, aware, and active: Contextual approaches as an emerging trend in the behavioral and cognitive therapies. *Annual review of clinical psychology*, *7*, 141-168.

Hemanth, P., & Fisher, P. (2015). Clinical psychology trainees' experiences of mindfulness: An interpretive phenomenological analysis. *Mindfulness*, *6*(5), 1143-1152. https://doi.org/10.1007/s12671-014-0365-4

Herbert, J. D., Forman, E. M., & England, E. L. (2009). Psychological acceptance. *Cognitive behavior therapy: Applying empirically supported techniques to your practice*, 4-16.

Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (Eds.). (2019). *Cochrane handbook for systematic reviews of interventions*. John Wiley & Sons.

Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of consulting and clinical psychology*, *78*(2), 169. https://psycnet.apa.org/doi/10.1037/a0018555

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., ... & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for information*, *34*(4), 285-291.

Hopkins, A., & Proeve, M. (2013). Teaching mindfulness-based cognitive therapy to trainee psychologists: Qualitative and quantitative effects. *Counselling Psychology Quarterly*, *26*(2), 115-130. https://doi.org/10.1080/09515070.2013.792998

Humphreys, L., Crino, R., & Wilson, I. (2017). Psychological functioning predicts competence development for postgraduate students of professional psychology. *Training and Education in Professional Psychology*, *11*(1), 49. https://psycnet.apa.org/doi/10.1037/tep0000139

Huprich, S. K., & Rudd, M. D. (2004). A national survey of trainee impairment in clinical, counselling, and school psychology doctoral programs and internships. Journal of Clinical Psychology, 60, 43–52. https://doi.org/10.1002/jclp.10233

Jackson, C. (2007). The General Health Questionnaire, *Occupational Medicine*, 57(1), 79. https://doi.org/10.1093/occmed/kql169

Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2018). Mental healthcare staff well-being and burnout: A narrative review of trends, causes, implications, and recommendations for future interventions. *International journal of mental health nursing*, *27*(1), 20-32. https://doi.org/10.1111/inm.12416

Jones, R. S., & Thompson, D. E. (2017). Stress and well-being in trainee clinical psychologists: A qualitative analysis. *Medical Research Archives*, *5*(8).

Kadambi, M. A., & Truscott, D. (2003). Vicarious traumatization and burnout among therapists working with sex offenders. Traumatology,9, 216–230. https://doi.org/10.1177%2F153476560300900404

Killebrew, J. L. E. (2012). *Incorporating Mindfulness into Clinical Training: A Qualitative Look at the Experience of Psychotherapists-in-Training*. Alliant International University.

Kuyken, W., Byford, S., Taylor, R. S., Watkins, E., Holden, E., White, K., et al. (2008). Mindfulness-based cognitive therapy to prevent relapse in recurrent depression. Journal of Consulting and Clinical Psychology, 76, 966–978. http://dx.doi.org/10.1037/a0013786.

Kuyken, W., Peters, E., Power, M., Lavender, T., & Rabe-Hesketh, S. (2000). A longitudinal study of the psychological adaptation of trainee clinical psychologists. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *7*(5), 394-400. https://doi.org/10.1002/1099-0879(200011)7:5%3C394::AID-CPP268%3E3.0.CO;2-O

Lau, M. (2012). *Psychology graduate students' experience in an academic course on mindfulness and its clinical application*. Alliant International University.

McCormack, H. M., MacIntyre, T. E., O'Shea, D., Herring, M. P., & Campbell, M. J. (2018). The prevalence and cause (s) of burnout among applied psychologists: A systematic review. *Frontiers in psychology*, *9*, 1897.

McManus, S., Bebbington, P. E., Jenkins, R., & Brugha, T. (2016). *Mental health and wellbeing in England: the adult psychiatric morbidity survey 2014*. NHS digital. https://files.digital.nhs.uk/pdf/q/3/mental_health_and_wellbeing_in_england_full_report.pdf

Moore, P. (2008). Introducing mindfulness to clinical psychologists in training: An experiential course of brief exercises. *Journal of Clinical Psychology in Medical Settings*, *15*(4), 331-337. https://doi.org/10.1007/s10880-008-9134-7

NHS Digital (June, 2021) https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/april-2021-to-june-2021-provisional-statistics

National Institute for Health and Care Excellence (2012). Methods for the development of NICE public health guidance (third edition). Available at: https://www.nice.org.uk/process/pmg4/chapter/introduction (Accessed 8th August 2022)

Newsome, S., Christopher, J. C., Dahlen, P., & Christopher, S. (2006). Teaching counselors self-care through mindfulness practices. *Teachers College Record*, *108*(9), 1881-1900. http://dx.doi.org/10.1111/j.1467-9620.2006.00766.x

NHS England (n.d.) *NHS*. Retrieved from https://www.england.nhs.uk/supporting-our-nhs-people/support-now/

Norcross, J. C., & VandenBos, G. R. (2018). *Leaving it at the office: A guide to psychotherapist self-care*. Guilford Publications.

Ormerod, R. (2006). The history and ideas of pragmatism. *Journal of the Operational Research Society*, *57*(8), 892-909. https://doi.org/10.1057/palgrave.jors.2602065

Rimes, K. A., & Wingrove, J. (2011). Pilot study of mindfulness-based cognitive therapy for trainee clinical psychologists. *Behavioural and Cognitive Psychotherapy*, *39*(2), 235-241https://doi.org/10.1017/S1352465810000731

Rupert, P. A., & Kent, J. S. (2007). Gender and work setting differences in career-sustaining behaviors and burnout among professional psychologists. Professional Psychology: Research and Practice, 38, 88–96. https://doi.org/10.1037/0735-7028.38.1.88

Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., & Mulrow, C.D. et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ, *372*(71), https://doi.org.10.1136/bmj.n71.

Pakenham, K. I., & Stafford-Brown, J. (2012). Stress in clinical psychology trainees: Current research status and future directions. *Australian Psychologist*, *47*(3), 147-155. https://doi.org/10.1111/j.1742-9544.2012.00070.x

Pakenham, K. I., & Stafford-Brown, J. (2013). Postgraduate clinical psychology students' perceptions of an Acceptance and Commitment Therapy stress management intervention and clinical training. *Clinical Psychologist*, *17*(2), 56-66. https://doi.org/10.1111/j.1742-9552.2012.00050.x

Pakenham, K. I. (2015). Effects of acceptance and commitment therapy (ACT) training on clinical psychology trainee stress, therapist skills and attributes, and ACT processes. *Clinical Psychology & Psychotherapy*, *22*(6), 647-655. https://doi.org/10.1002/cpp.1924

Pakenham, K. I. (2017). Training in acceptance and commitment therapy fosters self-care in clinical psychology trainees. *Clinical Psychologist*, *21*(3), 186-194. https://doi.org/10.1111/cp.12062

Pappa, S., Barnett, J., Berges, I., & Sakkas, N. (2020). Tired, worried and burned out, but still resilient: A cross-sectional study of mental health workers in the

UK during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, *18*, 4457. https://doi.org/10.3390/ijerph18094457

Posluns, K., & Gall, T. L. (2020). Dear mental health practitioners, take care of yourselves: A literature review on self-care. *International Journal for the Advancement of Counselling*, *42*(1), 1-20. https://doi.org/10.1007/s10447-019-09382-w

Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of behavioral medicine*, *21*(6), 581-599. https://psycnet.apa.org/doi/10.1037/1931-3918.1.2.105

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and education in professional psychology*, *1*(2), 105. https://psycnet.apa.org/doi/10.1037/1931-3918.1.2.105

Schütz A. Collected papers 1. The Hague, Netherlands: Martinus Nijhoff; 1962.

Skovholt, T. M., & Ronnestad, M. H. (2003). Struggles of the novice counselor and therapist. *Journal of Career Development*, *30*, 45–58 https://doi.org/10.1177%2F089484530303000103

Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue,compassion satisfaction, and burnout: Factors impacting a profes-sional's quality of life.Journal of Loss and Trauma,12, 259–280. https://doi.org/10.1080/15325020701238093

Stafford-Brown, J., & Pakenham, K. I. (2012). The effectiveness of an ACT informed intervention for managing stress and improving therapist qualities in clinical psychology trainees. *Journal of clinical psychology*, *68*(6), 592-513. https://doi.org/10.1002/jclp.21844

Stenhoff, A., Steadman, L., Nevitt, S., Benson, L., & White, R. G. (2020). Acceptance and commitment therapy and subjective wellbeing: A systematic review and meta-analyses of randomised controlled trials in adults. *Journal of Contextual Behavioral Science*, *18*, 256-272. https://doi.org/10.1016/j.jcbs.2020.08.008

Swords, B. A., & Ellis, M. V. (2017). Burnout and vigor among health service psychology doctoral students. *The Counseling Psychologist*, *45*(8), 1141-1161. https://doi.org/10.1177%2F0011000017747548

Suurmond, R., van Rhee, H., & Hak, T. (2017). Introduction, comparison, and validation of Meta-Essentials: a free and simple tool for meta-analysis. *Research synthesis methods*, *8*(4), 537-553. https://doi.org/10.1002/jrsm.1260.

Tay, S., Alcock, K., & Scior, K. (2018). Mental health problems among clinical psychologists: Stigma and its impact on disclosure and help-seeking. *Journal of Clinical Psychology*, *74*(9), 1545-1555. https://doi.org/10.1002/jclp.22614

Way, I., Vandeusen, K. M., & Cottrell, T. (2007). Vicarious trauma:Predictors of clinicians' disrupted cognitions about self-esteem andself-intimacy.Journal of Child Sexual Abuse,16,81–98. https://doi.org/10.1177%2F0886260503259050

Willets, L. (2018). *Exploring the impact of personal therapy and factors that affect disclosure of mental health difficulties in applied psychology trainees* (Doctoral dissertation, University of Liverpool).

Clearing house (2021). *Clearing house – Equal Opportunities*. Clearing House. Available at: https://www.clearing-house.org.uk/about-us/equal-opportunities/equal-opportunities-data

Yepes-Nuñez, J. J., Urrutia, G., Romero-Garcia, M., & Alonso-Fernandez, S. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Revista Espanola de Cardiologia (English ed.)*, *74*(9), 790-799. https://doi.org/10.1016/j.rec.2021.07.010

Zamir, A., Sabin-Farrell, R., & Tickle, A. (2022) “Isn’t it mad that we’re all psychologists and we can't talk about our feelings?”: A mixed-methods study exploring trainee clinical psychologists’ experience of (non)disclosure of psychological distress during training. [Unpublished Doctoral Dissertation]. University of Nottingham

Thesis Journal paper

The Acceptability and Feasibility of Acceptance and Commitment Therapy training to support work-related wellbeing for managers of homelessness services.

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Highlights:

- Brief ACT training led to some beneficial changes for managers of homelessness service however, adaptations are required to increase acceptability and feasibility.
- Engaging with an ACT intervention can significantly increase valued action, general wellbeing and marginally decrease secondary traumatic stress.
- Trainers should be aware of barriers to engagement and skills practice.

Abstract:

Objectives: To assess the acceptability and feasibility of an Acceptance and Commitment Therapy (ACT) training for work-related wellbeing for managers of homelessness services. This included assessing, participant recruitment, retention rates and measure completion and the signal efficacy.

Method: a mixed methods pre/post design was employed. Outcome measures were given at baseline and following each session and an adapted Change interview was completed post-intervention. Measures of wellbeing, workplace quality of life, psychological flexibility, feasibility and acceptability indices and group alliance were used. Quantitative analysis utilised linear mixed model analysis. Qualitative data was analysed using content analysis.

Results: A significant increase was found on the CompACT Valued action subscale and the SWEWBS measure of general wellbeing. A marginally significant decrease was found on the Proqol-5 Secondary traumatic Stress subscale (STS). Themes developed from qualitative analysis include engagement with training, beyond training, implementing skills and behavioural change or intention to change. Adaptations to future training and barriers to engagement were highlighted. Attrition was high.

Conclusions: Initial findings regarding acceptability and efficacy were promising but there needs to be adaptations to the training and delivery to further increase and assess acceptability and feasibility.

Keywords

Acceptance and Commitment therapy, staff wellbeing, homelessness services.

Introduction

It is estimated that over 271,000 people were experiencing homeless on any given night in 2022 (Shelter, 2023). This includes living in council arranged or other temporary accommodation and rough sleeping. The rates of core homelessness – the most severe forms of homelessness- were already rising, with an estimated rise of 14% between 2012 and 2019 (Watts et al, 2022), but recently have been significantly intensified by the cost-of-living crisis in the UK (Allard, 2022). Homelessness services were already facing significant challenges, their staff are often on low wages, on short-term contracts, face precarious working circumstances (European Observatory on Homelessness, 2020; Peters et al, 2022) and staff may experience little "success" (Wirth et al, 2019). Difficulties such as burnout, high staff turnover and stress are present (European Observatory on Homelessness, 2020). The COVID-19 pandemic exacerbated levels of burnout, Secondary traumatic stress (STS) and impacted wellbeing in homelessness staff (Schneider et al, 2022).

A further challenge is the complex nature of clients' needs. Individuals experiencing homelessness have often been exposed to some form of trauma, frequently in childhood (Sundin & Baguley, 2015). Traumatic experiences also occur once someone becomes homeless, for example being the victim or witness to violence or sexual assaults and the act of becoming homeless itself (Ayano et al, 2020; FEANTSA, 2017). They are consequently more likely than the general population to be living with a mental health difficulty and be diagnosed with a "personality disorder" (Homeless Link, 2017). The client's experience of trauma can also impact on staff who are at risk of vicarious traumatisation and STS (Schiff & Lane, 2019).

There has been a move in homelessness services towards "Psychological Informed Environments" ([PIEs], Johnson & Haigh, 2010). These are services that have been designed and delivered in a way that is trauma informed and sensitive to client's psychological needs. It is expected that within PIEs, staff are given training and support to allow them to develop a greater understanding of their clients' psychological needs and utilise psychological techniques. A range of models have been trialled such as Cognitive Behaviour Therapy (CBT)

(Maguire, 2006), a Psychodynamic framework and Mentalisation Based Therapy and Dialectical Based Therapy (Pathway, 2012). It is expected that staff within PIEs also receive training to support their own mental wellbeing (Homeless Link, 2017). However, with staff and services themselves facing significant pressure, opportunities for further training are limited. Therefore, it is important to investigate psychological training and support that is feasible.

One model that could underpin staff training is Acceptance and Commitment Therapy (ACT). ACT is a third-wave psychological theory and therapy which aims to increase an individual's psychological flexibility (PF). PF is defined as "the ability to contact the present moment more fully as a conscious human being, and to change or persist in behaviour when doing so serves valued ends"(Hayes et al., 2006a, p. 7). PF is underpinned by 6 core processes; Acceptance, Values, Present moment awareness, Committed action, Cognitive defusion and Self-as-context (see figure 8.). The six processes are often referred to as the Hexaflex with the inverse processes contributing to psychological inflexibility (see figure 9). These processes are sometimes also split into three overarching concepts; being present, opening up, and doing what matters – this is referred to as the Triflex (Harris, 2009; see figure 10). In contrast to other psychological models, rather than aiming to reduce symptoms, ACT aims to change the way that clients relate to their thoughts, feelings, memories, and physical sensations etc. In changing how they relate to their internal experiences; this enables them to engage with their values and what matters to them.

Figure 8.

ACT Hexaflex (Hayes et al, 2006a)

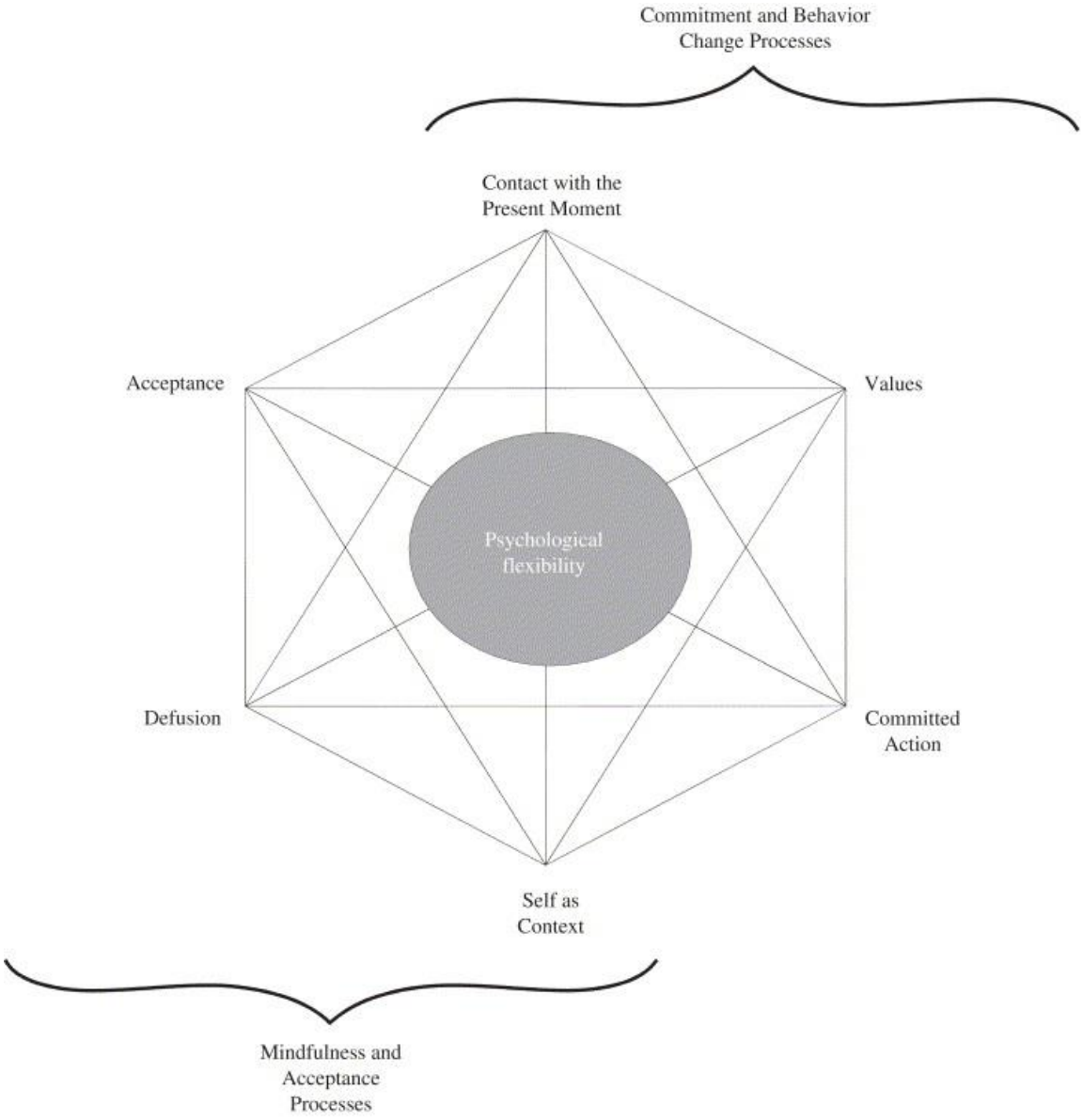


Figure 9.

ACT inverse Hexaflex (Hayes et al, 2006a)

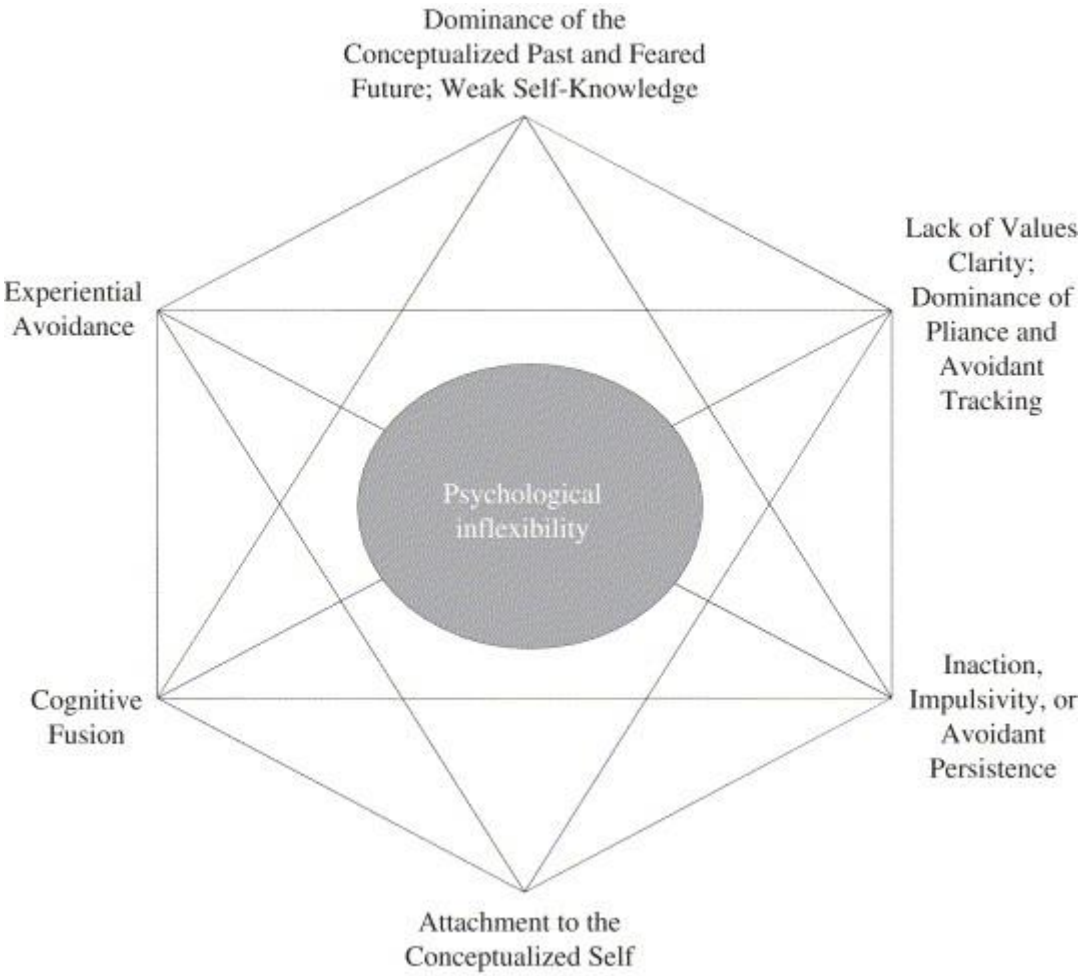
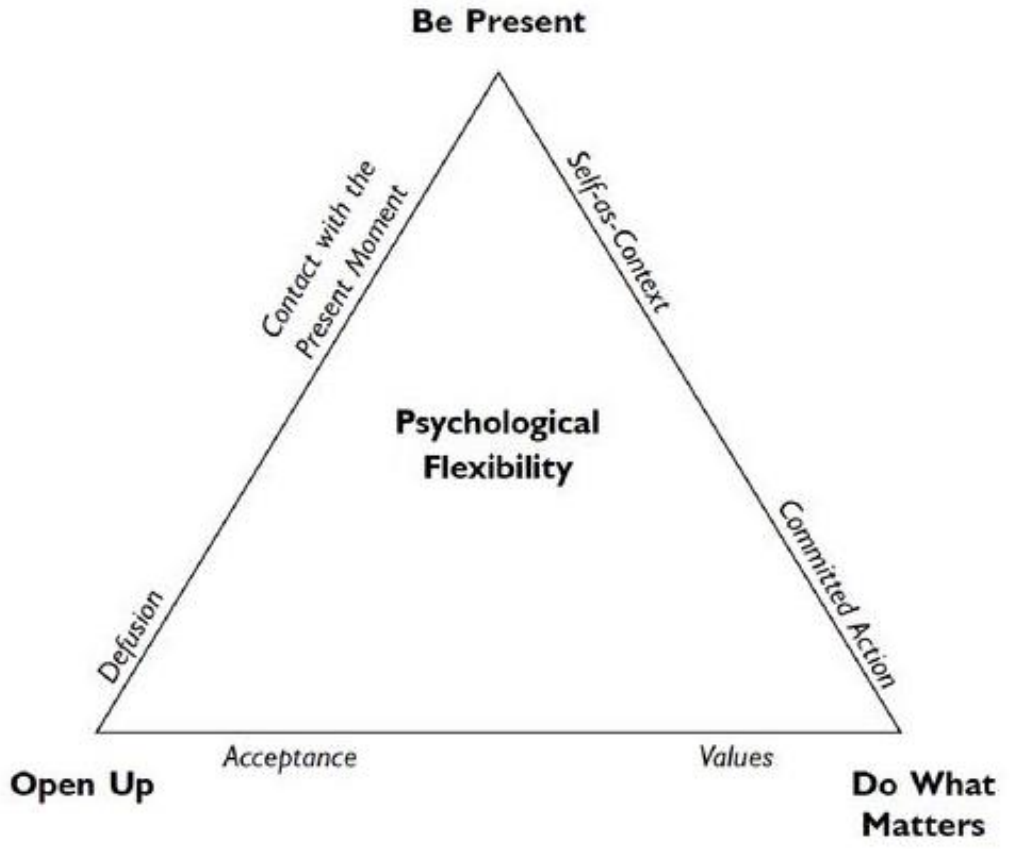


Figure 10.

ACT Triflex (Harris, 2009)



ACT has been investigated across different workplaces and staff teams and has been found to be effective in reducing psychological distress (Flaxman & Bond, 2010a; Waters et al, 2018), burnout (Flaxman & Bond, 2010b; Lloyd et al, 2013; Puolakanaho et al, 2020; Reeve et al, 2021; Towey-Swift et al, 2023), general stress and workplace stress (Bond & Bunce, 2000: Brinkborg et al, 2011; Hayes et al, 2006b; McConachie et al, 2014; Prudenzi et al, 2021; Prudenzi et al, 2022). ACT can also increase self-care behaviours (Pakenham, 2017). Nevertheless, in a systematic review and meta-analysis assessing ACT for burnout in care staff, Reeve et al (2018) found that whilst ACT led to reductions in psychological distress (in a subgroup with higher baseline distress), there were no significant changes for burnout or increases in PF. Furthermore, a recent meta-analysis found that there was a difference in the benefit gained from ACT training, depending upon work role. ACT led to increases in PF and

wellbeing in office workers, but the significant effect was not replicated in social and healthcare workers relative to other interventions and control conditions (Unruh et al, 2022). The authors suggest this may relate to the type of work they conduct, with social and healthcare workers enduring challenging work environments and responsibilities (e.g., working night shifts, supporting clients with histories of trauma) which can further impact on their wellbeing (Burgard & Lim, 2013). Given the wealth of evidence for ACT within the workplace, it could be offered as an evidence-based form of training to promote personal and professional wellbeing homelessness services. However, considering the findings that healthcare workers are potentially less likely to see changes in wellbeing post ACT-training it is important that the feasibility and acceptability is initially assessed.

Only one study has assessed ACT for staff wellbeing within a homelessness service (Reeve et al, 2021), focusing on frontline staff. However, there is a substantial need for support for managers. Managers have significant responsibilities, having a key role in developing PIEs (Haigh et al, 2012) and responsibility for supporting their staff team practically and emotionally, dealing with emergencies and serious incidents and ensuring adequate staffing levels. Considering the demand on managers it is logical that they are also provided support. Nonetheless, there are barriers to managers accessing training, anecdotally in the sector they report not having time, a fear of the team not feeling contained if they are seen accessing support and a stigma of “not coping”. Therefore, it is important to assess how feasible and acceptable an intervention is for managers specifically.

One training package is The Mindful and effective employee (Flaxman et al (2013) which offers a three-session ACT training for the workplace. An early version of this (Bond & Bunce, 2000) assessing the training within a large media company, showed post-training significant reductions in the ACT group compared to the controls. Further evaluations of this training package across a range of occupations (e.g., social workers, government agency, nurses) have shown significantly reduced psychological distress (Brinkborg et al, 2011; Flaxman & Bond 2010a; Flaxman & Bond, 2010b; Frogeli et al, 2016). Importantly these results appear to be mediated by an increase in PF, rather

than a change in dysfunctional beliefs (Bond & Bunce, 2010; Flaxman & Bond, 2010b) which we would expect to see given the tenet of ACT is that clients change their relationship with their experiences, rather than changing their experiences. The Mindful and Effective Employee (Flaxman et al, 2013) could be a useful training package to assess for use with managers in homelessness services for their wellbeing and professional quality of life. However, given the differences between managers in homeless services and other workplaces which have been assessed (e.g., in Bond & Bunce, 2000) it is important to investigate the acceptability and feasibility for this group.

It must be acknowledged that focusing on individual interventions can appear to locate the "problem" within the individual and may not prompt organisations to tackle wider organisational challenges (Taylor, 2019; Fleming, 2023). The National Workforce Skills Development Unit (2019) has developed a framework that moves away from individual resilience and coping and towards organisational resilience. Whilst this framework highlights the importance of organisational change, it acknowledges how individual interventions can also be beneficial and states that organisations have a responsibility to support employee's wellbeing. Furthermore, the World Health Organization (2022) state that employers can improve mental health through action to "prevent work-related mental health conditions by preventing the risks to mental health at work; protect and promote mental health at work; support workers with mental health conditions to participate and thrive in work; and create an enabling environment for change" (World Health Organisation, 2022, p.1). Farmer and Stevenson's (2017) "Thriving at work" report highlights the significant cost of work-related mental health difficulties. They, therefore, developed a framework of "mental health core standards" which includes developing mental health awareness by making information and support accessible and "enhanced standards" which encourage tailored mental health support. This highlights the importance of considering ways to support employee's mental health and wellbeing as well as encouraging organisation shifts.

The use of webinar-based interventions increased during the pandemic (Peters, 2020; Thorp-Lancaster, 2020). Webinars offer benefits of reducing geographical

barriers, commuting and costs. However, the evidence for effectiveness of face-to-face vs online interventions is mixed. For example, Gayed et al (2019) found that whilst both face-to-face and online training led to increases in confidence (in supporting their staff), the face-to-face training led to larger increases. Nonetheless, ACT has been evaluated for various conditions in online formats and demonstrated increases in PF (Calderwood et al, 2023; Sheperd et al, 2022) and wellbeing (Sheperd et al, 2022; Thompson et al, 2021)Therefore, when assessing the feasibility and acceptability, it could be useful to offer both formats for comparison.

In summary, given the pressure on managers working in homelessness services, the impact of their work on wellbeing and the responsibility of employers to provide wellbeing support it would be prudent to assess the feasibility of ACT training for this group. The main aim of this study was to investigate if group-based ACT training for wellbeing was both feasible and acceptable for managers within homelessness services, including assessing the acceptability of the delivery format and outcome measures, participant recruitment, retention rates, measure completion and the signal efficacy. Feasibility and acceptability criteria were not set a priori due to a lack of data regarding multi-session group-based wellbeing training for homelessness staff from which to develop criteria.

(Please see extended method for further details of concepts, research, and critique of the research).

Method

Design

A mixed methods pre-post design was employed which included quantitative measures and an adapted Client Change Interview (Elliot & Rodgers, 2008, see appendix B). Two delivery formats were available for the training, one run face-to-face and another run online. This was so that the delivery format could be assessed with regards to feasibility and acceptability.

Epistemological position

The epistemological position adopted for this research is Pragmatism. Pragmatism is most often associated with mixed methods (Johnson & Onwuegbuzie, 2004) and with research that aims to solve practical problems (Kaushik, & Walsh, 2019). Pragmatism proposes that the research question is of primary importance and that researchers should apply the philosophical and/or methodological approach that is most appropriate (Tashakkori and Teddlie 1998; Johnson & Onwuegbuzie, 2004).

Ethical considerations

Ethical approval was sought and approved by the Faculty of Medicine and Health Sciences Research Ethics Committee at the University of Nottingham. All participants were given an information sheet which explained the research, expectations, and their rights to withdraw and provided informed consent.

Participants

Participants were managers within homelessness services across England. Managers were defined as defined as “any employee of an organisation with direct line management responsibility for staff working in direct service delivery” which excluded operations managers.

Recruitment

For the face-to-face format, the authors connected with the Practice Development Unit which is a local organisation which facilitates learning amongst colleagues working with individuals experiencing multiple disadvantage. Participants were recruited via advertisements sent out via email

by the Practice Development Unit to individuals who were subscribed to their mailing list. Participants were asked to email the first author who then sent the participant information sheet and consent form (see extended method for further details). The authors aimed to recruit 12 participants to the face-to-face participant group, in line with recommendations for feasibility research (Julious, 2005).

Online recruitment was supported by Homeless link, which is a national membership charity for organisations working directly with people who become homeless in England. Participants for the online sessions were recruited via advertisements that were sent out via email by Homeless Link. The email advertisement was sent to everyone in Homeless Link's network. Participants were directed on the adverts to sign up via Eventbrite which included the participant information sheet and consent form.

Training and materials

The training was be based on the three-session training within the "Mindful and Effective Employee" (Flaxman et al, 2013). This training is offered in a "2+1" format which provides two sessions over the course of two weeks and a final session as a "booster" a month later (Flaxman et al, 2013). This training splits the ACT formulation model (Hexaflex) into two overarching themes: Mindfulness and values-based living. The sessions cover mindfulness and present moment skills, cognitive defusion, values and using values to guide their daily actions and goal planning (see Table 7 for overview). The participants were also provided with handouts from the "Mindful and Effective Employee" (Flaxman et al, 2013).

Table 7.

Mindful and Effective Employee sessions overview (Flaxman et al, 2013).

Session number	*Session aim*	*Session length*	*Content of session*
1	*Offer participants an initial overview of the training and provide a conceptual and experiential introduction to mindfulness and values-based action skills.*	*3 hours (including 20-minute break)*	*<u>Part I</u>* *<u>Welcome and introductions.</u>* *a values or mindfulness-based exercise (80th birthday party) and participants share two activities they complete on autopilot and two activities they complete with more awareness.* *<u>Overview of the training.</u>* *Presentation of the two-skills diagram.* *<u>Part II</u>* *<u>Introduction to mindfulness</u>*

Session number	*Session aim*	*Session length*	*Content of session*
			Raisin exercise and brief mindfulness of body and breath *<u>Introduction to values-based action</u>* *Values card sort, compass metaphor, exercise encouraging participants to define one value and translate to a specific action for home practice* *<u>Part III</u>* *<u>Rational for the programme</u>* *Two sheets of paper technique* *<u>Discussion of home practice</u>* *Home practice handouts and discussing reminders in the environment*
2	*The trainer employs a range of intervention strategies with the*	*3 hours (including 20-minute break)*	*<u>Part I</u>* *<u>Opening mindfulness practice</u>*

Session number	*Session aim*	*Session length*	*Content of session*
	aim of helping participants develop the minfulness and values-based action skills in session 1. There is the introduction of new techniques and opportunity to practice exercises from session 1		*Mindfulness of breath exercise, noticing thoughts and feelings and allowing them to come and go.* *<u>Home practice review.</u>* *Pairs and group discussion reflecting on the past weeks practice.* *<u>Further training rationale</u>* *Passengers on the bus metaphor (and video)* *<u>Part II</u>* *<u>Untangling from thoughts barriers to valued action</u>* *Self-reflection on unhelpful thought content, cartoon voices technique, physical demonstration of fusion/defusion, thoughts on a screen/leaves on a stream* *<u>Mindfulness of mood/emotion</u>* *Physicalizing technique*

Session number	*Session aim*	*Session length*	*Content of session*
			<u>Part III</u> *<u>Defining values and values-based goal and action planning</u>* *Construction of four-week values-based goal and action plan* *<u>Discussion of home practice</u>* *<u>Home practice handouts and commitment to one values-based goal</u>*
3	*To consolidate and build on the participants progress and encourage participants to generalise to additional life areas.*	*3 hours (including 20-minute break)*	*<u>Part I</u>* *<u>Welcome back</u>* *Two-skills diagram – summarising and reminding participants of skills being covered* *<u>Opening mindfulness practice</u>* *Mindfulness of body and breath* *<u>Home practice review</u>*

Session number	*Session aim*	*Session length*	*Content of session*
			Pairs and group discussions *<u>Assessing value consistency</u>* *Self-reflection on value-consisted and inconsistent actions over the past two weeks.* *Part II* *<u>Mindfulness of thought and feelings</u>* *Thoughts on a cloud, physicalising exercise, contacting the resilient observer perspective* *<u>Part III</u>* *<u>Values-based goal and action planning</u>* *Short-, medium- and long-term values-based goal setting*

Session number	*Session aim*	*Session length*	*Content of session*
			Recommendations for continued home practice *Final reflections*

Fidelity

Fidelity to the ACT model was assessed using the ACT Fidelity Measure ([ACT-FM], O'Neill et al, 2019). The ACT-FM is a 25-item measure which is structured around the Triflex and when tested had moderate to excellent inter-rater reliability (see appendix E for measure). The facilitators stance (whether ACT consistent or inconsistent) is rated, along with the facilitators aware response style, open response style, engaged response style and whether the facilitator encourages the participants to notice aspects related to ACT theory – see appendix E for definitions of response styles (O'Neill et al, 2019). The online sessions were recorded and subsequently viewed by the third author who rated the fidelity to the model. Whilst the face-to-face sessions were not fidelity checked, the material and format were the same as the online sessions.

(See extended paper section 2.4.1 for more detailed information on the intervention content and rationale).

Measures

Participants completed a range of validated outcome and self-report measures see Table 8.

(See extended paper methods section 2.4 for further details, including rationale and psychometric properties on each measures).

Table 8.

Measures and psychometric properties.

Measure	Authors and Year	Aim of measure	Psychometric properties	Cut-off score/expected direction of change
The Comprehensive Assessment of Acceptance and Commitment Therapy Processes (CompACT)	Francis et al (2016)	Psychological flexibility (total score), and its subscale scores of Openness to experience (OE), Behavioural awareness (BA) and Valued action (VA).	Cronbach's alpha score of .91. The CompACT also has good convergent validity with an established ACT measure (AAQ-II) (Francis et al, 2016).	↑ (total and all subscales)

Measure	Authors and Year	Aim of measure	Psychometric properties	Cut-off score/expected direction of change
Professional Quality of Life Scale version 5 (PROQOL-5)	Stamm (2010)	Quality of life at work including subscales of Compassion satisfaction (CS), STS, and Burnout (BO).	Cronbach's alpha scores for the subscales were Compassion Satisfaction (.87), Burnout (.72), and STS (.80) Stamm (2005a)	Cut-off scores indicate whether scores on these subscales are low (22 or less), Moderate (23-41) or high (42+). CS ↑ BO ↓ STS ↓

The Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)	Stewart-Brown et al, (2009; 2021)	General wellbeing	Good concurrent validity, it was strongly positively correlated with World Health Organisation Five Well-being Index (WHO-5) in a Danish adult population (Koushede *et al*., 2019). Cronbach's alpha in a UK population was 0.82 (Ng Fat, et al, 2017).	↑ Scores range from 7 to 35 and higher scores indicate higher wellbeing. Scores 7-17 are considered in the very low range and indicate significant mental health difficulties. Scores 18-20 are in the below average range and indicate some mental health difficulties. Scores 21-27 are in the normal range. Scores 27+ are in the above average range indicating above

Measure	Authors and Year	Aim of measure	Psychometric properties	Cut-off score/expected direction of change
				average wellbeing relative to peers.
The Acceptability of Intervention Measure (AIM), Intervention Appropriateness Measure (IAM) and Feasibility of Intervention Measure (FIM)	Weiner et al (2017)	Acceptability, feasibility, and appropriateness of the intervention.	Cronbach alphas for the scales were 0.85 for acceptability, 0.91 for appropriateness, and 0.89 for feasibility,	No cut off scores but higher scores indicate higher acceptability, appropriateness, and feasibility. ↑

Measure	Authors and Year	Aim of measure	Psychometric properties	Cut-off score/expected direction of change
Group Session Rating Scale (GSRS)	Duncan & Miller (2007)	Group therapy alliance. The items are presented as bipolar anchors, for example 'I felt understood, respected, and accepted by the leader and the group' to 'I did not feel understood, respected, and/or accepted by the leader and/or the group.'	Cronbach's alphas were over 0.8 and there is good concurrent validity (Quirk, Miller, Duncan, & Owen, 2013).	Items are scored out of 40 and scores below 36 would prompt exploration. For this project, this was adapted with participants giving a score out of 100 with a cut off of 90.

Note. Arrows indicate expected direction of change post intervention. See appendix A for permission to use SWEMWB.

Procedure

The first two sessions of the training were run one week apart with the final session a month after (Flaxman et al, 2013). Measures were completed at baseline and repeated following each session with participants sent a link via Question Pro (2023). Data was not available for the online group at time one due to a technical error. Change interviews were conducted post-intervention, these were completed by an independent colleague for the face-to-face condition and notes were made which tried to capture the participants' own words as much as possible. The change interview was conducted online using Question Pro (2023) in a free-text survey format for the online group due to participant numbers (there were too many participants to complete face-to-face change interviews when it was time for theirs to be completed). (See table 9 for study schedule of enrolment, interventions, and assessments following).

Table 9.

Schedule of enrolment, interventions, and assessments

	Study Duration				
TIMEPOINT	**Screening**	**Baseline (pre-training)**	**Time 1 (within the week following session 1)**	**Time 2 (within the week following session 2)**	**Time 3 (immediately post training)**
Eligibility assessment	X				
Informed consent and participant information sheet	X				
Training					
ACT training (based on Flaxman et al, 2013)					
Assessments					
Demographics		X			
CompACT		X	X	X	X
SWEMWBS		X	X	X	X
PROQOL-5		X	X	X	X
AIM, FIM and IAM			X	X	X
GSRS			X	X	X
Change interview					X

Analysis

Qualitative

Content analysis was used to analyse the data from both groups change interviews to address the main aim of the study – the acceptability and feasibility of the training. Whilst the face-to-face and online group data were analysed separately, at the time of developing themes, these were similar between groups and so will be explored together whilst taking account of the differences. Content analysis is regarded as a flexible method for analysing textual data (Cavanagh, 1997). For this study, a latent pattern analysis approach was used (Kleinheksel et al, 2020, [see appendix C]).

The first author developed initial codes a priori utilising the theoretical framework of Acceptability (Sekhon et al, 2017 – see appendix D). The first author ran a pilot coding and then explored this with the second author to determine if this was a rigorous strategy. At this point it was decided by the authors that the framework did not capture the nuance of the data and so more codes were inductively created and coded. The focus of the coding remained on the feasibility and acceptability of the training. Categories and themes were then formed from the codes. From this analysis reasons for dropout, feedback regarding the training and possible future adaptations were drawn out. Along with the codes which demonstrated participants engagement with the training.

Quantitative

To further address acceptability and feasibility – the AIM, FIM, IAM and group session rating scales were analysed descriptively. Further quantitative analysis was conducted using IBM SPSS Statistics (Version 28). Where participants had completed the questionnaires more than once, the most complete version was included in the analysis. Some participants provided multiple responses to the same questionnaires at the same time point - such that some responses were extraneous. In such cases, the authors retained just one set of responses: prioritising completeness and temporal proximity to the relevant session. An initial analysis using an independent samples t-tests was conducted to determine if there were significant differences between participants who completed follow-up measures and

those who only completed baseline measures to determine if they could be analysed as one group.

To evaluate the aggregate effectiveness of the intervention, (in terms of *group-level changes*) a linear mixed model (LMM) approach was employed. This method was chosen due to its robustness in handling missing data and its ability to model individual trajectories over time. Primary outcome variables assessed in LMMs were the CompACT (psychological flexibility), SWEMWBS (general wellbeing), and ProQOL-5 (professional quality of life). These outcomes were measured at three time points: pre-, mid-, and post-intervention. A separate LMM was fitted for each outcome variable. Time (coded as 0 for pre-intervention, 1 for mid-intervention, and 2 for post-intervention) was included as a fixed effect to assess the main effect of the intervention over the three time points. Random intercepts were included to account for the within-subject correlation of repeated measurements. Full Information Maximum Likelihood (FIML) estimation was used to handle missing data. FIML is advantageous as it uses all available data points in the estimation process, providing unbiased parameter estimates under the assumption that data are missing at random. Fixed effects were tested using F tests, and the significance level was set at $\alpha = .05$. For post-hoc analyses, pairwise comparisons between time points were not adjusted for multiple testing. Given the preliminary and exploratory nature of analysis, the cost of missing a true effect (Type II error) was considered higher than the cost of falsely identifying one (Type I error). Effect sizes (Cohen's *d*) were computed for pairwise comparisons (where *d*s of 0.2 = 'small', 0.5 = 'medium', and 0.8 = 'large'). Model assumptions, including normality of residuals and homoscedasticity, were assessed through diagnostic plots (residual plots and Q-Q plots).

[See extended method for further details].

Results

Participant recruitment, retention, and measure completion

In the face-to-face sessions four participants attended the first session, three participants attended session two and at the final session all three cancelled due to childcare and work emergencies. This represents an attrition rate of 100%. For the online sessions, 51 participants attended the first session, 39 the second session and 27 the final session. This represents a 52% attrition rate. (See Table 10 for demographics collected prior to session 1).

Table 10.

Demographics for participants

Demographic	**Face to face participants**	**Online participants**
Age range	38-46	25-65
Gender	1 Male 3 Female	12 Male 45 Female 1 Non-binary/ Third gender
Ethnicity	2 White British 1 other not listed. 1 Black Caribbean	43 White British 1 White Irish 1 Asian – Indian 2 Black Caribbean 7 Other not listed here. 4 Mixed/Multiple ethnic groups
Have they accessed therapy before?	4 yes 0 no 0 prefer not to say	33 Yes 20 No 5 Prefer not to say

Reasons for drop-out

Table 11 outlines quotes from the qualitative analysis and participant feedback directly to the first author regarding reasons for non-attendance or drop-out where these were offered. These highlight barriers to attendance to sessions, both online and face to face.

Table 11.

Quotes from content analysis (and some from personal correspondence) that outline drop-out reasons.

Session type	Reason for drop out or missed sessions
Face to face	Workplace emergency x 2 Childcare (could not find childcare to allow them to attend session) x 1
Online	Personal difficulties (unspecified) X 1 Covering work shifts for colleagues X 1 Increased demands at work X1 Death in service X 1 Unspecified x 20

Missing data and measure completion

There were no significant differences on the SWEMWBS, CompACT or PROQOL-5 (ps. .072-.866) between those who completed the measures and those who did not, indicating they could be analysed together. Table 12 shows the number of participants who completed the questionnaires. Participants who did engage with the measures mostly completed them. Exceptions were two participants who only completed the SWEMWBS and no other outcome measures, and two participants who completed all measures except the Proqol-5.

Table 12.

Participants who completed the measures at each time point

Session type	Time point				
	Baseline	**Time 1**	**Time 2**	**Time 3**	**Time 3 change interviews**
Face to face	3	1	2	N/A	3
Online	54	N/A	12	12	14

Note. Some participants did not complete the measures fully, therefore please see participant numbers for each reported measure. Baseline measures were taken pre-training. Time one falls in the week after the session, time two in the week after the second session and time three in the following the third and final session.

Acceptability of delivery format and treatment fidelity

Fidelity

The total scores on the ACT-FM (O'Neill et al, 2019) were 35/36 for ACT consistent behaviours indicating "Therapist consistently enacts ACT-congruent behaviours". For ACT inconsistent behaviours the mean score was 1/36 indicating non-occurrence of ACT-inconsistent behaviours.

Recommendations from the qualitative analysis

Below is table 13 which focuses on suggested adaptations based on the qualitative data, which are mapped onto the aim of the study to assess feasibility and acceptability. Table 7 also highlights barriers to practice and engagement with the session and outside of the session.

Table 13.

Feedback on training from the qualitative data.

Aspect of training	Feedback from qualitative data
Delivery format	There was no consensus regarding delivery format, some participants preferred face to face and some preferred online.
Training duration and number of sessions	There was no consensus regarding number of sessions or duration of each session. Some participants suggested having fewer sessions (though did not share why) and others suggested more sessions (e.g., another follow-up session or another session covering ACT theory).
Training content	Two participants wanted more ice-breaker tasks to get to know one another. Some participants shared that more time to practice the practical skills would have been helpful. Three participants shared they would have liked more information about the underlying theory. Furthermore, several participants wanted to have space to think about how to use the skills with their staff teams (e.g., in supervision) and practice this in the session.

	Two participants shared they would have liked a train the trainer option for the training.
Barriers to engagement	There were some barriers to engagement with the session; some online participants found it hard to engage with the tasks due to being online, more screen breaks were noted for the online group, participants also found it challenging completing the training during work hours and often in their office (for some of those joining online). A face-to-face participant shared that the small group number meant discussions were not as interactive as they felt it would be in a larger group. Some participants found it difficult to complete the homework tasks in the time that they had and suggested more time between sessions.

Participant engagement with training, acceptability, and feasibility

Below (table 14) outlines the themes drawn from the content analysis, along with quotes to illustrate the themes. These relate to the way participants engaged with the training and their perceptions of the content and delivery.

Table 14.

Content analysis themes and examples.

Theme	Example
Engagement with training	“It was delivered in a manner that was friendly and interactive”. “- felt like had a conscious lack of academic language where it was possible to do so, which made it easy to engage with” “It was helpful that we shared the similar struggles it felt nice to have a supportive space to share experiences”
Implementing skills	“Having to realise my values and that I do not necessarily live by them which is upsetting”. “I have tried to be more mindful. Tried to take moments to reflect. Tried to not doom scroll when I get home and be more present.” “I thought the training was excellent. It gave me a lot of insight into how and why I do what I do”
Training let to behavioural change or intention to change	“I have set time aside for me twice a week I would not have done this before”. “Better at shutting the laptop on an evening and advising staff around their wellbeing.”
Beyond training	“Not a huge shift there as it needs wider change within our communities”.

Theme	Example
	“I feel like I have a better way to develop development points for myself that feel fulfilling rather than being organisation led”.

AIM, IAM, and FIM

Scores for the AIM, IAM and FIM for the face-to-face and online group are shown in Table 15.

Table 15.

AIM, IAM, and FIM scores for the face-to-face group.

	Item mean (*n*)					
Time	**Face to face group**			**Online group**		
	AIM	**IAM**	**FIM**	**AIM**	**IAM**	**FIM**
Session 1	16 (2)	16 (2)	16 (2)			
Session 2	20 (1)	20 (1)	19 (1)	16.4 (12)	15.8 (12)	15.75 (12)
Session 3	N/A	N/A	N/A	17.4 (13)	16.8 (13)	16.2 (13)

Note. Maximum score for each measure is 20. There is no cut off scores, but higher scores indicate better acceptability, appropriateness, and feasibility. (*n*) Notes the number of participants completing the measures at the time points.

Group session rating scale.

Table 16 for means and standard deviations (SD) of the ratings by session for the face-to-face and online group. For the face-to-face group, the scores increased at session two relative to session one. For the online group, scores decreased at session two but then increased again at session three.

Table 16.

Group session rating scale means and standard deviations (SD) by session for face-to-face and online groups.

Time	Item Mean (SD)							
	Face-to-face group				Online group			
	Item 1	**Item 2**	**Item 3**	**Item 4**	**Item 1**	**Item 2**	**Item 3**	**Item 4**
Session 1	93 (5)	95 (0)	100 (0)	80 (11)	80.2 (15.9)	71.7 (20.6)	80.7 (14.9)	73.5 (16.7)
Session 2	100 (0)	100 (0)	100 (0)	100 (0)	78.3 (16.1)	70.7 (17.8)	77.5 (15.1)	73.6 (17.4)
Session 3	N/A	N/A	N/A	N/a	89.7 (12.02)	81.3 (15.4)	88.8 (10.9)	77 (21.6)

Note. Scores below 90 would prompt further exploration of the group dynamics and participants experiences

Signal efficacy.

Group level change – LMM.

The outcome variables for which there was a significant main effect of time was CompACT VA subscale (Francis et al, 2016), Proqol-5 STS subscale (Stamm, 2010) the SWEWBS total score (Stewart-Brown et al, (2009; 2021). There were no other statistically significant differences (pre- to post-training), however there was a general trend in the expected directed in the means from pre- to post training for all measures except the CompACT BA subscale which decreased. The effect sizes for both the SWEMWBS, Proqol-5 STS subscale and the CompACT VA subscale were large (0.943, 0.829 and 1.816 respectively) (See Table 17 for full details).

Table 17.

Means, Standard Deviation (SD) and effect sizes from linear mixed model analysis.

Measure	N	Baseline Mean (SD)	N	Mid-point Mean (SD)	N	End point Mean (SD)	Significance level (baseline vs time 3)	Effect size Cohens d (baseline vs time 3)
CompACT total	56	82.25 (15.491)	14	88.64 (18.826)	14	89.57 (18.11)	.104	0.723
CompACT OE	56	34.45 (8.056)	14	38.71 (10.61)	14	37.50 (9.82)	.190	0.588
CompACT BA	56	19.09 (5.73)	14	19.43 (4.91)	14	18.21 (7.22)	.668	0.200
CompACT VA	56	28.71 (6)	14	30.50 (5.93)	14	33.86 (7.2)	.002	1.816
SWEMWBS total	58	23.53 (3.68)	14	24.86 (3.72)	14	25.71 (3.931)	.040	0.943
PROQOL-5 STS	55	21.33 (5.87)	14	19.07 (5.98)	13	18.31 (4.7)	.052	0.829

Measure	N	Baseline Mean (SD)	N	Mid-point Mean (SD)	N	End point Mean (SD)	Significance level (baseline vs time 3)	Effect size Cohens d (baseline vs time 3)
PROQOL-5 BO	55	21.84 (5.29)	14	21 (5.349)	13	20.15 (5.257)	.144	0.869
PROQOL-5 CS	55	34.98 (5.14)	14	34.86 (4.753)	13	35.92 (3.50)	.423	0.302

Note. Means and Standard deviations (SD) were taken from the estimates the linear model provided. Measures and subscales are as follows; CompACT total score (overall scale total), CompACT OE (openness to experience subscale), CompACT BA (behavioural awareness), CompACT VA (valued action), SWEMWBS total (total score on the SWEMWBS), PROQOL-5 BO (burnout subscale), PROQOL-5 STS (secondary traumatic stress subscale) and PROQOL-5 CS (compassion satisfaction subscale). Effect sizes interpretation: small = 0.2, medium = 0.5, and large = 0.8. Cut-off scores on the PROQOL-indicate whether scores on these subscales are low (22 or less), Moderate (23-41) or high (42+).

Discussion

The main aim of this study was to assess the acceptability and feasibility of group-based ACT training for managers of homelessness services. This included assessing the acceptability of the delivery format and outcome measures, participant recruitment, retention rates, measure completion and the signal efficacy. Feasibility and acceptability criteria were not set a priori due to a lack of data regarding multi-session group-based wellbeing training for homelessness staff. The feasibility and acceptability will therefore be considered in relation to the aims of the study.

When considering the feasibility and acceptability of the intervention we must attempt to separate it from the additional research burden. Despite limiting measures to minimise burden there were many more participants attending the sessions than completing measures which indicates a desire to attend despite barriers to measure completion. The attrition was high in both groups, this was 52% from session 1 to 3 in the online format and 100% from session 1 to 3 in the face-to-face format. Participants noted issues such as childcare, workplace emergencies and increasing workplace demands that led to dropout from the training. Despite the attrition, from the change interviews participants in both groups reported finding the training was useful, interesting and led to changes in their behaviour. There were mixed views about the delivery format, however, the number of participants attending the first session indicate that the online format was a preferable or more feasible option (51 online vs 4 face-to-face for the first session). In both formats the participants' scores across the IAM, AIM and FIM (Weiner et al, 2017) began at 15 points (out of 20) and increased each session. Though there are no cut-off scores for these measures, a higher score indicates higher levels of acceptability, feasibility, and appropriateness.

Scores on the GSRS (Duncan & Miller, 2007) on average remained above the cut-off across the face-to-face sessions. Conversely, the scores were lower for the online group and the group mean dropped below the cut off (90). In hindsight, it may have been beneficial to include further questions regarding group processes and participant's experience of the other group members, as you would in practice (Duncan & Miller, 2007). Nevertheless, participants did share that they found sharing experiences with others and hearing others' experiences beneficial. Some participants also provided positive feedback about the facilitation style and skills. Some participants suggested adaptations to the training that they felt would improve

it, such as more icebreaker tasks, follow-up sessions supervision sessions, and more screen breaks. Nonetheless it would have been helpful to include more questions about participants preferences for future sessions. Whilst the focus of the sessions was the participants' personal wellbeing, the themes from the qualitative analysis demonstrate the intention to also use ACT with their teams (e.g., staff supervision, team meetings) and with service-users. This is one of the benefits of ACT being transdiagnostic and helpful for non-clinical populations (Smout et al, 2012): it can be used in all areas of life and for any experience that shows up.

Signal efficacy results were promising, there was a significant increase on the SWEMWBS and the CompACT VA subscale and a marginal significant decrease on the Proqol-5 STS subscale. There was also a general trend in the means in the expected direction and in effect sizes (except for the BA subscale). Small effect sizes were found on the CompACT BA subscale and the PROQOL-5 CS subscale, moderate effect size on the CompACT OE subscale and large effect sizes on the CompACT VA subscale, SWEMWB total and PROQOL-5 STS and BO subscales. The current results somewhat contrast with prior studies, which have generally found significant increases in PF (Bond & Bunce 2000; Flaxman & Bond, 2010b; Frogeli et al 2016; Waters et al, 2018) and that this change in PF mediates the increases in wellbeing (Bond & Bunce, 2000; Flaxman & Bond 2010b). It is therefore interesting that the only change on the CompACT in this study is on the VA subscale. However, the timing of measurement may account for this. Previous mindfulness-based studies have found not immediate change in ACT processes, with significant change only seen longer-term (Hayes et al 2004a; Hayes et al 2004b). Given that our final measurement was the week post-training it may be that there was not enough time to see significant change across all the subscales or on the CompACT total. Though it may also be that other aspects of the training were mediating the changes in wellbeing and STS.

The significant change on the CompACT VA (Francis et al, 2016) subscale may also reflect the focus and content of the training. Each session ends with values exercises and much of the in-between session tasks are based on using values-guided action in daily life (Flaxman et al, 2013). This emphasis on values-guided actions may explain why a significant change was seen in this area. Participants also reported more challenges implementing mindfulness skills which may have led to less skills

practice in that area. Furthermore, some participants reported in the change interviews that they experienced difficulties with practice due to time constraints and external demands which may have led to them being unable to practice the skills sufficiently to see significant changes across all the measures. Whilst it is valuable for staff to be able to attend relevant training, deliberate practice is required to develop skills (Campitelli, & Gobet, 2011). This may reflect the wider systemic and organisational changes that are required to support participants to engage in further practice outside of sessions when taking part in workplace training and interventions. This is especially important considering the impact of the workplace on mental health and the responsibilities of employers to support their staff (Farmer & Stevenson, 2017; WHO, 2022).

In line with prior research, our current study found significant increases in wellbeing in ACT intervention groups (Bond & Bunce; Brinkborg et al, 2011; Flaxman & Bond, 2010a, 2010b; Prudenzi et al, 2022) and that ACT can lead to an increase in self-care behaviours (Pakenham, 2017). Whilst we did not measure self-care specifically, many participants noted that self-care formed part of their values-guided actions they chose to complete. In some prior research there has been a significant reduction in burnout and/or perceived stress or emotional strain following an ACT intervention (Brinkborg et al, 2011; Frogeli et al 2016; Lloyd et al 2013; Puolakahano et al 2020; Waters et al, 2018). However, in recent reviews of healthcare staff specifically, it has been found that ACT does not always lead to significant changes in burnout (Reeve et al, 2018) psychological flexibility (Reeve et al, 2018; Unruh et al, 2022) or wellbeing (Unruh et al, 2022). The authors (Unruh et al, 2022) suggest that the nature of the work of healthcare staff could account for this lack of change post-intervention due to factors such as working hours and the complex difficulties their clients experience. This could explain the lack of significant change in burnout in the current study, the work that managers in homelessness services carry out can be particularly distressing, working with clients with experiences of trauma (Schiff & Lane, 2019), dealing with deaths in service and supporting their teams' post-incidents. The current study found a marginally significant decrease in STS, but no significant decrease in burnout. These are two similar but unique constructs, they both are relate to occupational stressors; however, STS is often considered unique to those working with clients who have experienced trauma (McCann & Pearlman,

1990) and can present similarly to post-traumatic stress disorder with intrusive thoughts and flashbacks (Figley, 1995). The marginally significant decrease in STS but not burnout may reflect the participants' use of strategies to manage with such difficulties as they arise (e.g., step back from intrusive thoughts) or the values-guided actions they chose to carry as part of their skills practice. It could also be that the reported use of self-care and skills practice was beneficial for the participants' experiences of STS but there were wider work-related challenges and difficulties that were impacting on their experiences of burnout.

The unexpected non-significant decrease in behavioural awareness may reflect a re-evaluation of participants' awareness, with participants later reflecting on how unaware they initially were. It has been found that measures assessing processes targeted in mindfulness-based interventions can lead to "response shifts" as participants understanding of a concept develop, which can in turn be misinterpreted by researchers as a change in the underlying concept (Levin-Aspenson et al, 2023). It could be that this accounts for the non-significant decrease in BA. It could also be linked to participants reporting difficulties with the tasks that aim to develop their awareness (e.g., mindfulness/ present moment). Some participants also reported that their increased awareness was challenging, in that it also increased focus on less pleasant internal experiences which may have paradoxically increased avoidance.

Finally, it must also be acknowledged that this training itself may not have been enough to produce changes in PF for managers in homelessness services. It could be that other training or support would lead to larger changes across the ACT processes measured in the study or that further adaptations are required to this training to see change in PF. This could be considered in future studies by including an active control condition and including the adaptations mentioned in this study.

Limitations

One limitation of the current study is the small number of participants completing the follow-up measures. This may have introduced bias, as it could be that participants who did not enjoy or find the training useful chose not to complete the measures to provide feedback. Though all the participants were encouraged to complete the final change interview even if they had not attended all sessions. Furthermore, a

statistical analysis between those who completed data at baseline but did not complete measures at follow-up did not indicate any significant differences.

Another limitation was the time of intervention delivery. The final sessions were delivered during the school holidays which may have influenced ability to attend and engage. For the face-to-face group, two participants cited that this was part of the reason they could not attend the final session, as well as workplace emergencies. Therefore, future trainers need to be mindful of practice barriers such as the timing of training that may impact engagement.

A further limitation is the lack of a priori feasibility and acceptability criteria. Whilst this was not completed due to a lack of studies assessing wellbeing interventions for homelessness staff from which to develop a feasibility criterion, other ACT for workplace wellbeing studies could have been used as a benchmark. This could have been helpful to determine what aspects required adaptation for future training offerings. Nonetheless, the current study collected data that is typically assessed in feasibility studies such as retention, participant measure completion, signal efficacy etc which guided the conclusions regarding feasibility and acceptability. Furthermore, whilst the number of questionnaires was limited to minimize burden for participants, it may have been helpful to include more questions specifically relating to participants experience of the training, such as the session quantity, timing and other aspects which relate to the feasibility. A traffic light system or framework could be developed to guide the criteria for acceptability and feasibility.

Conclusions and Future research directions

Overall, participants found the training to be helpful and acceptable. However, there was high attrition and participants shared their difficulties attending the sessions for a variety of reasons, therefore adaptations need to be made to increase feasibility. It would be beneficial considering the training to be re-assessed using the recommended adaptations and addressing the current studies limitations. Incorporating suggested adaptions in a trial would evidence whether these increase engagement and benefit and hopefully develop a feasible training offering for this population. It may be important for future training to encourage buy-in from higher

management to support employees to engage with the training. An important part of offering training is participants having the opportunity to use what they have learned and engage in deliberate practice (Campitelli, & Gobet, 2011). Some participants noted how workplace issues, demands and other barriers prevented them from being able to engage with skills practice or engage with sessions in the way they would have liked to. Given that employers have a duty to support their employees' wellbeing (WHO, 2022), it is not enough to simply deliver training; protected time to make use of that training should also be provided. This is beyond the scope of this paper but highlights the need for wider organisational and systemic changes.

(See extended paper section 4 for further details including past literature, limitations, and critical reflective section).

References

Allard, M. (2022). *"I don't know what the winter's going to bring:" Experiences of homelessness during a cost of living crisis.* Retrieved from https://www.crisis.org.uk/ending-homelessness/homelessness-knowledge-hub/cost-of-homelessness/experiences-of-homelessness-during-a-cost-of-living-crisis

Ayano, G., Solomon, M., Tsegay, L., Yohannes, K., & Abraha, M. (2020). A systematic review and meta-analysis of the prevalence of post-traumatic stress disorder among homeless people. *Psychiatric quarterly*, *91*, 949-963. https://doi.org/10.1007/s11126-020-09746-1

Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5*(1), 156. https://doi.org/10.1037/1076-8998.5.1.156

Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011). Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour Research and Therapy, 49*(6-7), 389-398. Doi:https://doi.org/10.1016/j.brat.2011.03.009

Burgard, S. A., & Lin, K. Y. (2013). Bad jobs, bad health? How work and working conditions contribute to health disparities. *American Behavioral Scientist*, *57*(8), 1105-1127. https://doi.org/10.1177/0002764213487347

Campitelli, G., & Gobet, F. (2011). Deliberate practice: Necessary but not sufficient. *Current Directions in Psychological Science*, *20*(5), 280-285. https://doi.org/10.1177/0963721411421922

Cavanagh, S. (1997). Content analysis: concepts, methods and applications. *Nurse Researcher*, *4*(3), 5-16. https://doi.org/10.7748/nr.4.3.5.s2

Duncan, B. L., & Miller, S. D. (2007). The group session rating scale. *Jensen Beach, FL: Author*.

European observatory on homelessness. (2020). *Comparative studies on homelessness 10: Staffing homelessness services in Europe.* *https://www.feantsaresearch.org/en/comparative-studies/2020/12/16/comparative-studies-on-homelessness-10-staffing-homelessness-services-in-europe?bcParent=763*

FEANTSA. (2017). Recognising the link between trauma and homelessness. Retrieved from https://www.feantsa.org/en/feantsa-position/2017/02/28/recognising-the-link-between-trauma-and-homelessness?bcParent=27

Figley, C. R. (1995). Compassion fatigue: Toward a new understanding of the costs of caring.

Flaxman, P. E., Bond, F. W., & Livheim, F. (2012). *The mindful and effective employee: An acceptance and commitment therapy training manual for improving well-being and performance.* (1st edition ed.) New Harbinger Publications.

Flaxman, P. E., & Bond, F. W. (2010a). Worksite stress management training: Moderated effects and clinical significance. *Journal of Occupational Health Psychology, 15*(4), 347–358. https://doi.org/10.1037/a0020522

Flaxman, P. E., & Bond, F. W. (2010b). A randomised worksite comparison of acceptance and commitment therapy and stress inoculation training. *Behaviour research and therapy*, *48*(8), 816-820. https://doi.org/10.1016/j.brat.2010.05.004

Fleming, W. J. (2023). Employee well-being outcomes from individual-level mental health interventions: Cross-sectional evidence from the United Kingdom. *Industrial Relations Journal*.

Francis, A. W., Dawson, D. L., & Golijani-Moghaddam, N. (2016). The development and validation of the comprehensive assessment of acceptance and commitment therapy processes (CompACT). *Journal of Contextual Behavioral Science, 5*(3), 134-145. https://doi.org/10.1016/j.jcbs.2016.05.003

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology, 13*(1), 1-8. https://doi.org/10.1186/1471-2288-13-117

Gayed, A., Tan, L., LaMontagne, A. D., Milner, A., Deady, M., Milligan-Saville, J. S., Madan, I., Calvo, R. A., Christensen, H., Mykletun, A., Glozier, N., & Harvey, S. B. (2019). A comparison of face-to-face and online training in improving managers' confidence to support the mental health of workers. *Internet Interventions, 18*, 100258. https://doi.org/10.1016/j.invent.2019.100258

Haigh, R., Harrison, T., Johnson, R., Paget, S., & Williams, S. (2012). Psychologically informed environments and the "Enabling environments" initiative. *Housing, Care and Support, 15*(1), 34-42. https://doi.org/10.1108/14608791211238412

Harris, R. (2009). ACT made simple: A quick-start guide to ACT basics and beyond. *Oakland, CA: New Harbinger*.

Hayes, S. C., Bunting, K., Herbst, S., Bond, F. W., & Barnes-Holmes, D. (2006b). Expanding the scope of organizational behavior management: Relational frame theory and the experimental analysis of complex human behavior. *Journal of Organizational Behavior Management, 26*(1-2), 1-23. https://doi.org/10.1300/J075v26n01_01

Hayes, S. C., Bissett, R., Roget, N., Padilla, M., Kohlenberg, B. S., Fisher, G., Masuda, A., Pisterello, J., Rye, A.R., Berry, K., & Niccolls, R. (2004a). The impact of acceptance and commitment training and multicultural training on the stigmatizing attitudes and professional burnout of substance abuse counselors. *Behavior Therapy*, *35*(4), 821-835. https://doi.org/10.1016/S0005-7894(04)80022-4

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006a). Acceptance and commitment therapy: Model, processes and outcomes. *44*(1), 1-25. https://doi.org/10.1016/j.brat.2005.06.00

Hayes, S. C., Wilson, K. G., Gifford, E. V., Bissett, R., Piasecki, M., Batten, S. V., Byrd, M., & Gregg, J. (2004b). A preliminary trial of twelve-step facilitation and acceptance and commitment therapy with polysubstance-abusing methadone-maintained opiate addicts. *Behavior Therapy*, *35*(4), 667-688. https://doi.org/10.1016/S0005-7894(04)80014-5

Health and Safety Executive. (2022). *Health and safety statistics. Key figures for Great Britain 2021/2022.* Retrieved from https://www.hse.gov.uk/statistics/?utm_source=press.hse.gov.uk&utm_medium=referral&utm_campaign=annual-stats-22

Homeless Link. (2017). An introduction to psychologically informed environments and trauma informed care briefing for homelessness services. https://homeless.org.uk/knowledge-hub/trauma-informed-care-and-psychologically-informed-environments/

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come.*33*(7), 14-26. https://doi.org/10.3102/0013189X033007014

Johnson, R., & Haigh, R. (2010). Social psychiatry and social policy for the 21st century-new concepts for new needs: The 'psychologically-informed environment'. *Mental Health and Social Inclusion, 14*(4), 30-35. https://doi.org/10.5042/mhsi.2010.0620

Julious, S. A. (2005). Sample size of 12 per group rule of thumb for a pilot study. *Pharmaceutical Statistics: The Journal of Applied Statistics in the Pharmaceutical Industry*, *4*(4), 287-291. https://doi.org/10.1002/pst.185

Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social Sciences, 8*(9), 255. https://doi.org/10.3390/socsci8090255

Kleinheksel, A. J., Rockich-Winston, N., Tawfik, H., & Wyatt, T. R. (2020). Demystifying content analysis. *American Journal of Pharmaceutical Education*, *84*(1). https://doi.org/10.5688/ajpe7113

Koushede, V., Lasgaard, M., Hinrichsen, C., Meilstrup, C., Nielsen, L., Rayce, S. B., Torres-Sahli, M., Gudmundsdottir, D.G., Stewart-Brown, S., & Santini, Z. I. (2019). Measuring mental well-being in Denmark: Validation of the original and short version of the Warwick-Edinburgh mental well-being scale (WEMWBS and SWEMWBS) and cross-cultural comparison across four European settings. *Psychiatry Research*, *271*, 502-509. https://doi.org/10.1016/j.psychres.2018.12.003

Levin-Aspenson, H. F., Marks, R. M., Dalrymple, K. L., & Zimmerman, M. (2023). Does the Five Facet Mindfulness Questionnaire measure the same constructs before and after ACT-based treatment? Examination of the longitudinal measurement invariance of the 24-item FFMQ-SF. *Journal of Contextual Behavioral Science*, *29*, 131-139.

Lloyd, J., Bond, F. W., & Flaxman, P. E. (2013). The value of psychological flexibility: Examining psychological mechanisms underpinning a cognitive behavioural therapy intervention for burnout. *Work & Stress, 27*(2), 181-199. https://doi.org/10.1080/02678373.2013.782157

Maguire, N. (2006). Cognitive behavioural therapy and homelessness: a case series pilot study. *Behavioural and Cognitive Psychotherapy*, *34*(1), 107-111. DOI: https://doi.org/10.1017/S1352465805002493

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of traumatic stress*, *3*, 131-149. https://doi.org/10.1007/BF00975140

McConachie, D. A. J., McKenzie, K., Morris, P. G., & Walley, R. M. (2014). Acceptance and mindfulness-based stress management for support staff caring for individuals with intellectual disabilities. *Research in Developmental Disabilities*, *35*(6), 1216-1227. https://doi.org/10.1016/j.ridd.2014.03.005

National Workforce Skills Development Unit. (2019). *Workforce stress and the supportive organisation: A framework for improvement through reflection, curiosity and change.* https://www.hee.nhs.uk/news-blogs-events/news/meeting-challenge-reducing-stress-building-resilience-nhs-workforce

Ng Fat, L., Scholes, S., Boniface, S., Mindell, J., & Stewart-Brown, S. (2017). Evaluating and establishing national norms for mental wellbeing using the short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS): findings from the Health Survey for England. *Quality of Life Research*, *26*, 1129-1144. https://doi.org/10.1007/s11136-016-1454-8

O'Neill, L., Latchford, G., McCracken, L. M., & Graham, C. D. (2019). The development of the acceptance and commitment therapy fidelity measure (ACT-FM): A delphi study and field test. *Journal of Contextual Behavioral Science, 14*, 111-118. https://doi.org/10.1016/j.jcbs.2019.08.008

Pakenham, K. I. (2017). Training in acceptance and commitment therapy fosters self-care in clinical psychology trainees. *Clinical Psychologist*, *21*(3), 186-194.

Pathway. (February 2012). Good Practice Guide – Psychologically Informed Services for Homeless People. https://www.pathway.org.uk/publication/good-practice-guide-psychologically-informed-services-for-homeless-people/

Peters, P. (2020). Google's meet teleconferencing service now adding about 3 million users per day. https://www.theverge.com/2020/4/28/21240434/google-meet-three-million-users-per-day-pichai-earnings

Peters, L., Hobson, C. W., & Samuel, V. (2022). A systematic review and meta-synthesis of qualitative studies that investigate the emotional experiences of staff working in homeless settings. *Health & Social Care in the Community*, *30*(1), 58-72. https://doi.org/10.1111/hsc.13502

Prudenzi, A., Graham, C. D., Clancy, F., Hill, D., O'Driscoll, R., Day, F., & O'Connor, D. B. (2021). Group-based acceptance and commitment therapy interventions for improving general distress and work-related distress in healthcare

professionals: A systematic review and meta-analysis. *Journal of Affective Disorders, 295*, 192-202. https://doi.org/10.1016/j.jad.2021.07.084

Prudenzi, A., Graham, C. D., Flaxman, P. E., Wilding, S., Day, F., & O'Connor, D. B. (2022). A workplace Acceptance and Commitment Therapy (ACT) intervention for improving healthcare staff psychological distress s: A randomised controlled trial. *PloS one*, *17*(4), e0266357. https://doi.org/10.1371/journal.pone.0266357

Puolakanaho, A., Tolvanen, A., Kinnunen, S. M., & Lappalainen, R. (2020). A psychological flexibility-based intervention for burnout: A randomized controlled trial. *Journal of Contextual Behavioral Science, 15*, 52-67. https://doi.org/10.1016/j.jcbs.2019.11.007

Quirk, K., Miller, S., Duncan, B., & Owen, J. (2013). Group Session Rating Scale: Preliminary psychometrics in substance abuse group interventions. *Counselling and Psychotherapy Research*, *13*(3), 194-200. https://doi.org/10.1080/14733145.2012.744425

Reeve, A., Moghaddam, N., Tickle, A., & Young, D. (2021). A brief acceptance and commitment intervention for work-related stress and burnout amongst frontline homelessness staff: A single case experimental design series. *Clinical Psychology & Psychotherapy, 28*(5), 1001-1019. https://doi.org/10.1002/cpp.2555

Ritche, J., & Spencer, L. (2002). Qualitative data analysis for applied policy research. In Alan Bryman and Robert G Burgess (Ed.), *Analyzing qualitative data* (pp. 173-194) Routledge.

Schneider, C., Masztalerz, N., Hobson, C. W., Ahmed, M., & Shelton, K. H. (2022). 'It's intense'–A mixed-methods analysis of how the early COVID-pandemic impacted on the wellbeing of practitioners in a UK homeless organization. *Journal of Social Distress and Homelessness,* , 1-12. https://doi.org/10.1080/10530789.2022.2141870

Sekhon, M., Cartwright, M., & Francis, J. J. (2017). Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Services Research*, *17*(1), 1-13. https://doi.org/10.1186/s12913-017-2031-8

Shepherd, K., Golijani-Moghaddam, N., & Dawson, D. L. (2022). ACTing towards better living during COVID-19: The effects of acceptance and commitment therapy for individuals affected by COVID-19. *Journal of Contextual Behavioral Science, 23*, 98-108. https://doi.org/10.1016/j.jcbs.2021.12.003

Smout, M. F., Hayes, L., Atkins, P. W., Klausen, J., & Duguid, J. E. (2012). The empirically supported status of acceptance and commitment therapy: An update. *Clinical Psychologist*, *16*(3), 97-109. https://doi.org/10.1111/j.1742-9552.2012.00051.x

Stamm, B. H. (2005). The proQOL manual. *Retrieved July, 16*, 2007.

Stamm, B. (2010). The concise manual for the professional quality of life scale.

Stevenson, D. (2017). Thriving at work: The Stevenson/Farmer review of mental health and employers. *London: Department for Work and Pensions and Department of Health*.

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2009). *Short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS)*

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2021). Short Warwick–Edinburgh Mental Well-being Scale. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation*. https://psycnet.apa.org/doi/10.1037/t80221-000

Sundin, E. C., & Baguley, T. (2015). Prevalence of childhood abuse among people who are homeless in western countries: A systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology, 50*, 183-194. https://doi.org/10.1007/s00127-014-0937-6

Tasshakkori, A., & Teddie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Sage.

Taylor, R. A. (2019). Contemporary issues: Resilience training alone is an incomplete intervention. *Nurse Education Today, 78*, 10-13. https://doi.org/10.1016/j.nedt.2019.03.014

Thompson, E. M., Destree, L., Albertella, L., & Fontenelle, L. F. (2021). Internet-based acceptance and commitment therapy: a transdiagnostic systematic review and meta-analysis for mental health outcomes. *Behavior Therapy*, *52*(2), 492-507. https://doi.org/10.1016/j.beth.2020.07.002

Thorp-Lancaster, D. (2020). Microsoft teams hits 75 million daily active users, up from 44 million in March. https://www.windowscentral.com/microsoft-teams-hits-75-million-daily-active-users

Towey-Swift, K. D., Lauvrud, C., & Whittington, R. (2023). Acceptance and commitment therapy (ACT) for professional staff burnout: a systematic review and narrative synthesis of controlled trials. *Journal of Mental Health*, *32*(2), 452-464. https://doi.org/10.1080/09638237.2021.2022628

Schiff, J., & Lane, A. M. (2019). PTSD symptoms, vicarious traumatization, and burnout in front line workers in the homeless sector. *Community Mental Health Journal, 55*, 453-462. https://doi.org/10.1007/s10597-018-00364-7

Unruh, I., Neubert, M., Wilhelm, M., & Euteneuer, F. (2022). ACT in the workplace: A meta-analytic examination of randomized controlled trials. *Journal of Contextual Behavioral Science*. https://doi.org/10.1016/j.jcbs.2022.09.003

Waters, C. S., Frude, N., Flaxman, P. E., & Boyd, J. (2018). Acceptance and commitment therapy (ACT) for clinically distressed health care workers: Waitlist-controlled evaluation of an ACT workshop in a routine practice setting. *British Journal of Clinical Psychology, 57*(1), 82-98. https://doi.org/10.1111/bjc.12155

Watts, B., Bramley, G., Fitzpatrick, S., McMordie, L., Pawson, H., & Young, G. (2022). *The homeless monitor: Great Britain 2022.* https://www.crisis.org.uk/ending-homelessness/homelessness-knowledge-hub/homelessness-monitor/about/the-homelessness-monitor-great-britain-2022/

Weber, R. P. (1990). *Basic content analysis* (Vol. 49). Sage.

Weiner, B. J., Lewis, C. C., Stanick, C., Powell, B. J., Dorsey, C. N., Clary, A. S., Boynton, M. H., & Halko, H. (2017). Psychometric assessment of three newly developed implementation outcome measures. *Implementation Science, 12*(1), 1-12. https://doi.org/10.1186/s13012-017-0635-3

Wirth, T., Mette, J., Prill, J., Harth, V., & Nienhaus, A. (2019). Working conditions, mental health and coping of staff in social work with refugees and homeless individuals: A scoping review. *Health & Social care in the Community*, *27*(4), e257-e269. https://doi.org/10.1111/hsc.12730

World Health Organisation (2022, 28 September). *Mental Health at work*. https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work

Journal appendices.

Appendix A – Permission to use SWEMWB measure.

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Thank you for completing the registration for a Licence to use WEMWBS for non-commercial purposes.
You now have access to the scales and the associated resources here on our website: https://warwick.ac.uk/wemwbs/using/register/resources
We suggest you bookmark this page for future reference.
The information declared on your Registration Form is documented below. Please retain a copy of this email as a record of your Licence together with the Terms and Conditions you have accepted.
https://warwick.ac.uk/wemwbs/using/non-commercial-licence-registration/shrink-wrap_licence_-wemwbs_non-_commercial_v3_8.9.20.pdf.
If you have any questions please contact us via email:
wemwbslicence@warwick.ac.uk

Question: Type of use
Answer:
Other

Question: If other, please specify
Answer:
Feasbility study with managers within homelessness services

Question: Type of intervention (if applicable) *Tick all that apply*
Answer:
Workplace wellbeing provison

Appendix B - Adapted Change interviews based on Elliot & Rodgers (2008) Client Change Interviews

1. General questions (5 mins)

1a. How are you doing now in general?

1b. What was the training like for you? How has it felt to be in the training?

2. Changes (10 mins)

2a. What changes, if any, have you noticed in yourself since training started?

(Interviewer: reflect back change to client and write down brief versions of the changes one per change sheet. Optional follow-up questions: "Are you doing, feeling or thinking differently from the way did before?" "What specific ideas, if any, have you got from training, including ideas about yourself or other people?" "Have any changes been brought to your attention by other people?"

2b. Has anything changed for the worse since training started?

2c. Is there anything that you wanted to change that hasn't since training started?

3. Change ratings (10 mins). [see separate change sheet with rating scales a, b and c).

3a. For each change, please rate how much you expected it vs. were surprised by it?

3b. For each change, please rate how likely you think it would have been if you hadn't been in training?

3c. How important or significant to you personally do you consider this change to be?

4. Helpful aspects (10 minutes).

Can you sum up what has been helpful about the training? Please give examples (e.g. general aspects, specific events).

5. Attributions (5 minutes):

In general, what do you think has caused the various changes you described? What do you think might have brought them about, including things both outside of training and inside of training?

6. Resources (5 minutes):

6a. What personal strengths do you think have helped you make use of the training to deal with your problems? (what you're good at; personal qualities)?

6b What things in your current life situation have helped you make use of training to deal with your problems? (within the workplace and outside of work).

7. Problematic aspects (5 minutes)

7a. What kinds of things about the training have been hindering, unhelpful, negative, or disappointing for you? (general aspects of specific events).

7b. Were there things in training which were difficult or painful but still OK or perhaps helpful? What were they?

7c. Has anything been missing from training? (What would have made the training more effective or helpful?

8 Limitations (5 minutes)

8a. Are there things about you that you think have made it harder for you to use the training? If so, what?

8b. Are there things in your life situation that have made it harder for you to use the training to deal with your problems? (family, relationships, living arrangements etc.

9. Suggestions (5 minutes)

Do you have any suggestions for us, regarding the research or the training?

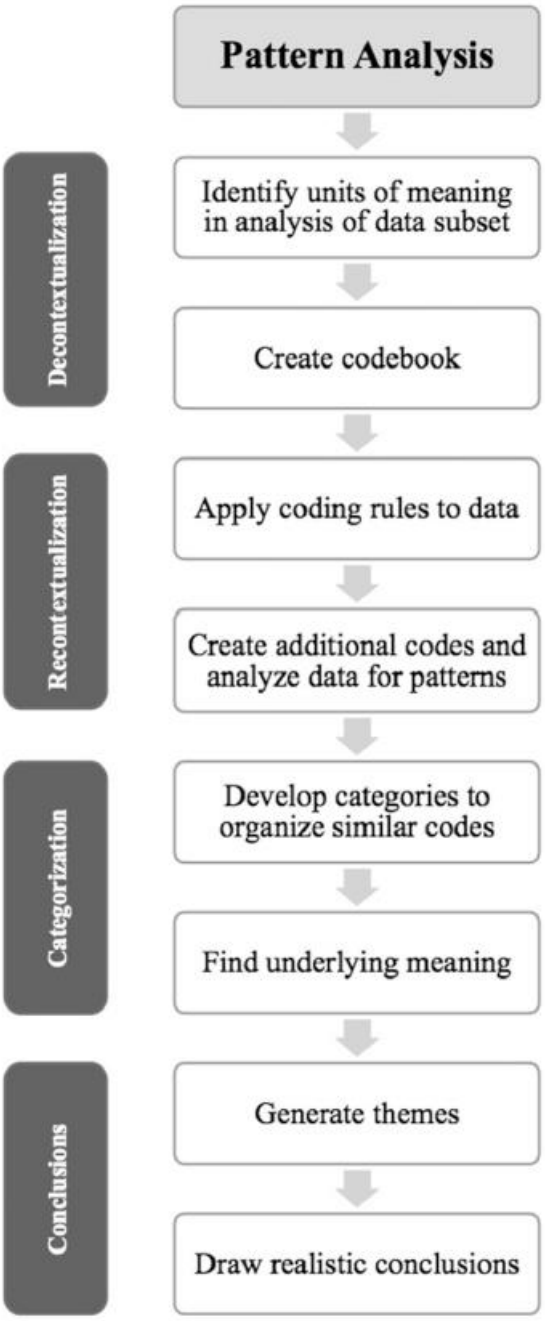
Do you have anything else that you want to tell me?

10. How acceptable was the training, did it appeal to you?

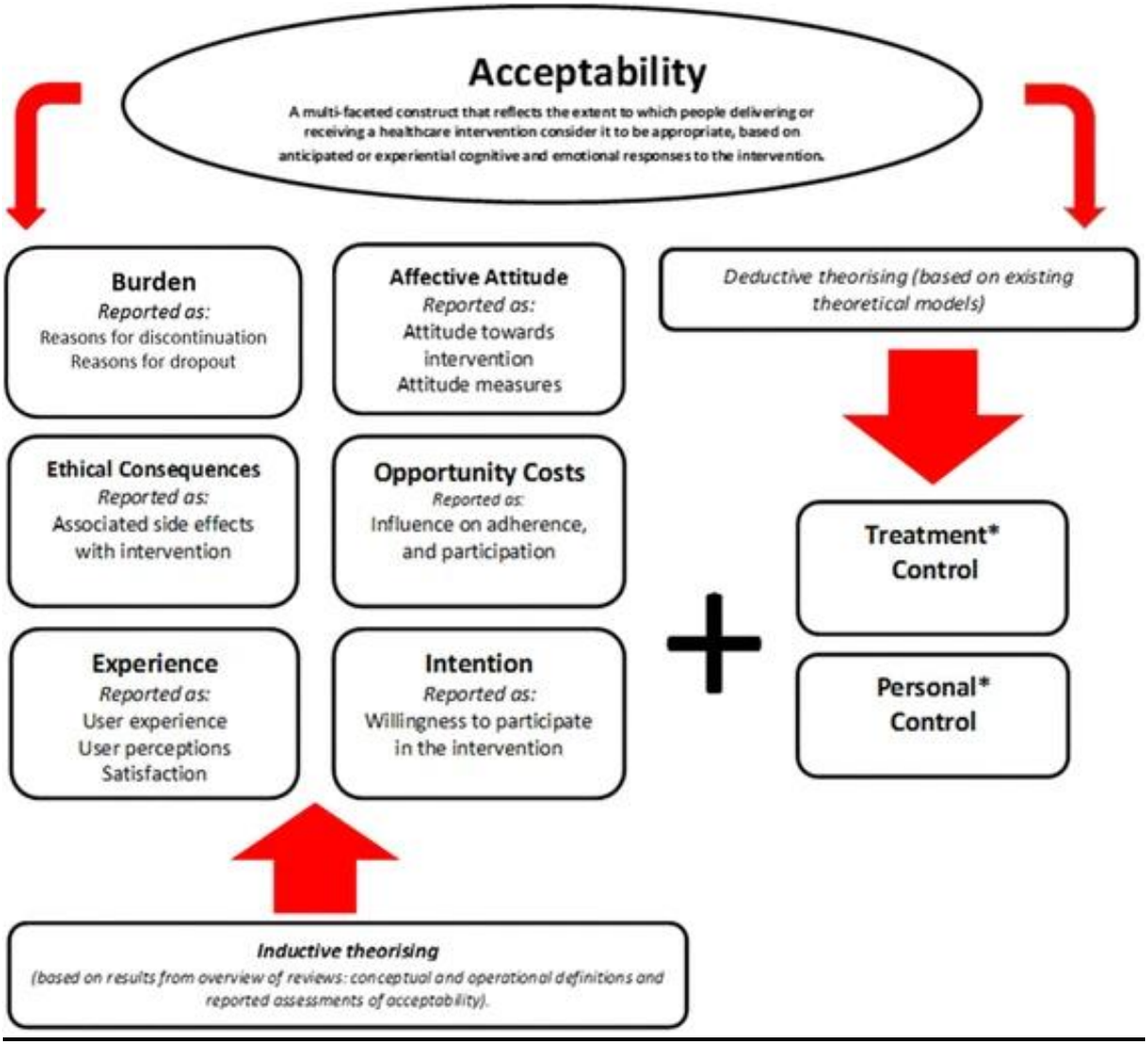
11. How appropriate was the training for you? Did you find it relevant to your work and challenges?

12. How feasible was the training for you? Was it manageable to attend all sessions and complete the measures and exercises?

Appendix C – Content analysis - Latent pattern analysis Kleinheksel et al (2020)



Appendix D – Theoretical Framework of Acceptability and Feasibility Sekhon et al (2017)



Appendix E – ACTFM (O'Neill et al 2019)

The ACT Fidelity Measure (ACT-FM)

ACT-FM

About the ACT-FM

This measure is intended to be used by clinicians who are experienced in ACT and understand the principles of the approach. It can be used to rate clinician fidelity to ACT in a variety of contexts (e.g. as a tool to evaluate your own or another clinician's practice, or as a research tool). The items capture four key areas within ACT: **Therapist Stance, Open Response Style, Aware Response Style** and **Engaged Response Style**. These are outlined below with definitions. There are items to score the therapist's behaviours as consistent and inconsistent with these areas. For example, within the Open Response Style section, an ACT consistent item is 'Therapist gives the client opportunities to notice how they interact with their thoughts and/or feelings (e.g. whether avoidant or open)' and an ACT inconsistent item is 'Therapist encourages the client to "think positive" or to substitute negative for positive thoughts as a treatment goal'. This is because it is possible to be both ACT consistent and inconsistent within the same therapy session, which may be useful to record for research or training purposes. The consistent and inconsistent items are not opposites of each other. If rating the inconsistent items is not relevant for your purposes, then please feel free to omit these items.

Definitions

Therapist Stance

The stance taken by the therapist is equal, compassionate and non-judgemental. The therapist should show empathy and warmth and be guided by what the client brings. The therapist does not try to change the client's mind, but to guide noticing of their own experience using experiential techniques. The therapist encourages responsibility, focuses on context and models psychological flexibility responses and behaviour.

Aware Response Style

This is the ability to flexibly contact the present moment. This might involve practicing exercises designed to enhance the client's ability to nonjudgementally attend to the present moment. The therapist may encourage the client to take an observer perspective on their psychological experiences, when doing so helps increase the effectiveness of client behaviour.

Open Response Style

This is the ability to open-up to experiences, and to observe and describe these without becoming entangled in them or trying to diminish them. The therapist might work on skills that promote the client's willingness to sit with difficult thoughts, emotions or sensations, when in the service of their values and goals. They might use defusion techniques or exercises with the client, giving them the opportunity to notice or distance themselves from their thoughts.

Engaged Response Style

This is the ability to identify, clarify and act according to one's values on an ongoing basis. The therapist might give the client opportunities to identify their values. They may help the client to define goals and actions that support their values, and to plan and do these actions.

How to use the ACT-FM

Procedure

- The focus of this measure is on the therapist's behaviour.
- Therapists may not have the opportunity to demonstrate all behaviours captured by the ACT FM, especially in short sessions.
- Only score based on behaviours you have observed, not what you think the therapist would have achieved if they had further time available.
- A single therapist behaviour can be coded for all relevant items, not just the most suitable one.
- Before scoring the session, familiarise yourself with the measure and the items so that you can easily find an item when you see the clinician evidence it.
- Make notes as you listen to or view the session in the space below each item.
- Have specific examples in mind when scoring.
- Score the items at the end of the session not throughout, as ratings may change.

Scoring

Give a rating for each item based on the behaviours you have heard or observed by circling the number next to each item. Items are rated as 0 if the behaviour did not occur, and from 1-3 if the behaviour did occur, only assign a score higher than 0 if you hear or see examples of the behaviour. Higher scores are given for the behaviour occurring more consistently. Only give whole point answers, e.g. do not score 2.5. You will need to use your clinical judgment when scoring, bearing in mind the context of the therapy session and considering the function of the therapist behaviour.

The ACT Fidelity Measure (ACT-FM)

ACT-FM

Raters name and professional qualification: _____ Date of rating: _____

Therapist name and professional qualification: _____

Client ID: _____ Session No: _____ Date of session: _____

Length of session being rated: _____

☐ Direct observation ☐ Audio recording ☐ Video recording

Scoring

0 = This behaviour never occurred
1 = Therapist rarely enacts this behaviour
2 = Therapist sometimes enacts this behaviour
3 = Therapist consistently enacts this behaviour

Therapist stance

ACT consistent		Rating
1	Therapist chooses methods that are sensitive to the situation and context (i.e. in a flexible and responsive way rather than a 'one size fits all' approach).	0 1 2 3
2	Therapist uses experiential methods/questions (i.e. helps the client to notice and use their own experience rather than thoughts about their experience).	0 1 2 3
3	Therapist conveys that it is natural to experience painful or difficult thoughts and feelings when one is in circumstances such as those experienced by the client.	0 1 2 3
4	Therapist demonstrates a willingness to sit with their own and the client's painful thoughts and feelings and the situations that give rise to these.	0 1 2 3

ACT inconsistent		Rating
5	Therapist lectures the client (e.g. gives advice, tries to convince the client, etc).	0 1 2 3
6	Therapist rushes to reassure, diminish or move on from "unpleasant" or "difficult" thoughts and feelings when these arise.	0 1 2 3
7	Therapist conversations are at an excessively conceptual level (i.e. therapist overly emphasises verbal understanding of concepts rather than using experiential methods for behaviour change).	0 1 2 3

Open response style

ACT consistent		Rating
8	Therapist helps the client to notice thoughts as separate experiences from the events they describe.	0 1 2 3
9	Therapist gives the client opportunities to notice how they interact with their thoughts and/or feelings (e.g. whether avoidant or open).	0 1 2 3
10	Therapist encourages the client to "stay with" painful thoughts and feelings (in the service of their values).	0 1 2 3

ACT inconsistent		Rating
11	Therapist encourages the client to control or to diminish distress (or other emotions) as the primary goal of therapy.	0 1 2 3
12	Therapist encourages the client to "think positive" or to substitute negative for positive thoughts as a treatment goal.	0 1 2 3
13	Therapist encourages or reinforces the view that fusion or avoidance are implicitly bad, rather than judging them on basis of workability.	0 1 2 3

The ACT Fidelity Measure (ACT-FM)

ACT-FM

Scoring

0 = This behaviour never occurred
1 = Therapist rarely enacts this behaviour
2 = Therapist sometimes enacts this behaviour
3 = Therapist consistently enacts this behaviour

Aware response style

ACT consistent	Rating
14 Therapist uses present moment focus methods (e.g. mindfulness tasks, tracking, noticing, etc) to increase awareness of the moment, including thoughts and feelings.	0 1 2 3
15 Therapist helps the client to notice the stimuli (thoughts, feelings, situations, etc) that hook them away from the present moment.	0 1 2 3
16 Therapist helps the client to experience that they are bigger than and/or separate from their psychological experiences.	0 1 2 3

ACT inconsistent	Rating
17 Therapist introduces or uses mindfulness and/or self-as-context methods as means to control or diminish or distract from unwanted thoughts, emotions and bodily sensations	0 1 2 3
18 Therapist introduces or uses mindfulness and/or self-as-context methods to challenge the accuracy of beliefs or thoughts.	0 1 2 3
19 Therapist introduces mindfulness and/or self-ascontext methods as formulaic exercises.	0 1 2 3

Engaged response style

ACT consistent	Rating
20 Therapist gives the client opportunities to notice workable and unworkable responses (e.g. whether their actions move them towards or away from their values).	0 1 2 3
21 Therapist gives the client opportunities to clarify their own values (overarching life goals and qualities of action).	0 1 2 3
22 Therapist helps the client to make plans and set goals likely to meet reinforcing consequences (i.e. shapes action that is consistent with their values).	0 1 2 3

ACT inconsistent	Rating
23 Therapist imposes their own, other's or society's values upon the client (i.e. suggests what the client should or should not value or what valuing something should look like).	0 1 2 3
24 Therapist encourages action without first hearing, exploring or showing curiosity regarding the client's psychological experiences (e.g. painful thoughts, feelings and emotions).	0 1 2 3
25 Therapist encourages the client's proposed plans even when the client has noticed clear impracticalities.	0 1 2 3

Scoring

A total score for each subscale can be calculated by adding the 3 items together. The Therapist stance – ACT consistent section has 4 items, so please convert this to give a total out of 9 in line with the other sections by adding the 4 items, dividing by 4 and multiplying by 3. The ACT consistent items can be added to give a total ACT consistency score and the ACT inconsistent items can be added to give a total ACT inconsistency score.

ACT Consistent Therapist Stance (0-9) =
ACT Consistent Open Response Style (0-9) =
ACT Consistent Aware Response Style (0-9) =
ACT Consistent Engaged Response Style (0-9) =
Total ACT Consistency Score (0-36) =

ACT Inconsistent Therapist Stance (0-9) =
ACT Inconsistent Open Response Style (0-9) =
ACT Inconsistent Aware Response Style (0-9) =
ACT Inconsistent Engaged Response Style (0-9) =
Total ACT Inconsistency Score (0-36) =

Extended paper

1.0 Extended Introduction

Overview

This section covers further details about homelessness and homelessness services, occupational stress in general and concepts such as Secondary Traumatic Stress and burnout. This extended introduction will also cover in more detail Acceptance and Commitment Therapy, including its history, development and use both generally and within the workplace.

Extended background

1.1 Homelessness rates and contributors

Between January and March 2023 83,240 households were assessed as homeless or threatened with homelessness, this represents a 5.7 increase since the previous year (Department for Levelling up, Housing & Communities, 2023). There are many risk factors that increase a person's chances of becoming homeless such as the end of short-term leases, relationship breakdowns, poverty, physical health difficulties, discrimination and experiencing trauma or bereavement (Homeless Link, 2022). The COVID-19 pandemic also significantly impacted on rates of unemployment and poverty, especially in those already at a disadvantage (Whitehead et al, 2021). This is important because, especially for young people, with childhood poverty being found to be the largest predictors of homelessness (Bramley & Fitzpatrick, 2018).

1.2 Occupational stress and its impact

This section will further highlight the impact of occupational stress and explore how this affects those working within homelessness services, particularly those in management positions. It will also explore the concepts of Secondary traumatic stress, burnout, and vicarious traumatisation and consider critiques of the concepts. Finally, this section will briefly consider employers and the government's responsibility to workers.

1.2.1 The global impact of occupational stress

Globally is it estimated that 12 billion days a year are lost to depression and anxiety, and this costs the economy 1 trillion in lost productivity (World Health Organisation [WHO], 2022a). In the UK in 2023 workplace absences per year rose to 7.8 days from 5.8 pre-Pandemic (Chartered Institute of Personnel and Development [CIPD], 2023). Across 2021 to 2022 in the UK 914,000 workers reported suffering from work related stress, depression, or anxiety and 17 million workdays were lost due to work-related stress, depression, or anxiety (Health and Safety Executive, 2022). The CIPD published in 2023 a large-scale study of workplace absences and noted that mental ill-health and stress remain two of the most common causes of long-term absences (CIPD, 2023). Work-related stress and burnout have been linked to physical and mental health problems such as an increased risk of cardiovascular disease and stroke (Kivimaki & Kawachi, 2015) insomnia and depression (Salvagioni et al, 2017). These figures and findings demonstrate the widespread and significant impact of stress and mental health difficulties associated with work.

1.2.2 Secondary traumatic stress, burnout, and vicarious traumatisation

Vicarious Traumatisation

Vicarious traumatisation (VT) was first coined by McCann and Pearlman (1990). It is considered a cumulative process “through which the therapists' inner experience is negatively transformed through empathic engagement with clients' trauma material” (Pearlam & Saakvitne, 1995 p. 279). McCann and Pearlman (1990) using constructivist self-development theory, explored and discussed the effects on therapists of engaging with the traumatic material their clients brought to sessions. They explained that engaging with traumatic material can lead to changes in cognitive schema which is cumulative, leading to both personal and professional views of oneself, others, and the world being altered permanently (McCann & Pearlman, 1990; Saakvitne & Pearlman, 1996). VT is considered a normal response to the challenges of working in such areas, but clearly carries a cost for the professional. However, there have been criticisms of the validity of VT, with research into the concept methodologically flawed and inconsistent (Hafkenscheid, 2005; Sabin-Farrell & Turpin, 2003).

Secondary traumatic stress

Secondary traumatic stress (STS), also referred to in some literature as compassion fatigue, is defined as “the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person” (Figley, 1995, p.10). The effects of STS parallel PTSD symptoms and include anxiety, fear, intrusive thoughts and memories of the traumatic event, sleep difficulties and avoidance of situations that may be a reminder of the trauma (Figley, 1995). Whilst STS and VT and compassion fatigue are different concepts, the difficulties associated with them are often considered to be similar and thus they are often used interchangeably within research (Baird & Kracen, 2006) which can cause confusion (Devilly et al, 2009; Sabin-Farrell & Turpin, 2003).

Burnout

Burnout was initially conceptualised as three associated dimensions (see Table 18 for full definitions); including emotional exhaustion, cynicism or depersonalisation of clients and a reduced sense of personal achievement/self-efficacy (Maslach, & Leiter, 1976; 2016). The concept of burnout has been widely researched and evaluated in relation to occupational stress and wellbeing. The WHO (2022b) has recently included burnout in their latest revision of the Internal Classification of Diseases version 11 (ICD-11). The WHO recognises burnout as an occupational phenomenon “resulting from chronic workplace stress that has not been successfully managed” (WHO, 2022b). Burnout and STS are similar in some ways, both stemming from occupational stress; however, McCann & Pearlman (1990, p.134) argue that STS is distinct from burnout because “the potential effects of working with trauma survivors are distinct from those of working with other difficult populations because the therapist is exposed to the emotionally shocking images of horror and suffering that are characteristic of serious trauma”. Though both can impair the work that individual carries out with clients.

Table 18.

Burnout definition (Maslach & Leiter, 2016, p.38)

Dimension	Definition
Emotional Exhaustion	This refers to feelings of being overextended and depleted of one's emotional and physical resources. Workers feel drained and used up without any source of replenishment
Cynicism or depersonalisation	This represents the interpersonal context component of burnout. It refers to a negative, callous, or excessively detached response to various aspects of their job.
Inefficacy	This represents the self-evaluation component of burnout. It refers to feelings of incompetence and a lack of achievement and productivity in work. This lowered sense of self-efficacy is exacerbated by a lack of job resources as well as by a lack of social support and of opportunities to develop professionally.

1.2. 3 Occupational stress and the experiences of staff in homelessness services

Staff working with individuals and families experiencing homelessness are often supporting people with complex histories including experiencing trauma, abuse, violence, mental health difficulties and may utilise coping strategies such as substance use or self-harm and are often be considered "hard to engage" by a

range of services (Hopper et al, 2009; Liu et al, 2021). Staff working within homelessness services are often exposed vicariously to the traumatic experiences of those they support, but also to traumatic situations during the workplace, such as overdoses, client deaths and self-harm (Lakeman 2011; Lemieux-Cumberlege et al, 2023; Wirth et al, 2019). Such experiences can lead to staff experiencing secondary traumatic stress (Baird & Kracen, 2006) and high rates of secondary traumatic stress (STS), burnout and Post-Traumatic Stress Disorder (PTSD) symptomology have been found in staff working within homelessness services (Schiff & Lane, 2019). Despite working in these challenging circumstances, staff in homelessness services report that they often feel that they lack training and support for their wellbeing (Peters et al, 2022). Given that burnout is associated with poorer client outcomes and service delivery, effective care is dependent upon staff being supported with their mental health, stress, and wellbeing (Bodenheimer, & Sinsky, 2014).

The current cost of living crisis has also had an impact on services with a fifth of homeless charities having to reduce services (Butler, 2023) despite the high numbers of people experiencing homelessness. A survey by Dr Grassian for Homeless Link (2022), a national membership charity for organisations working with people experiencing homelessness, found that staff are reporting chronic staff shortages, high turnover, and funding shortages. They expressed that the pandemic and cost of living crisis have made and will continue to make these challenges worse (Grassian, 2022).

1.2.4 Psychologically informed environments

The psychologically informed environments framework was developed as a guide to help organisations to identify how they ensure that their services most effectively meet the needs of the clients that are accessing them (Homeless Link, 2017; Keats et al, 2012). The PIE framework has been updated since the 2012 version (Keats, 2012). PIE 2.0 consists of 5 overarching components which are 1) Developing more 'psychological awareness' of the needs of service users 2) Valuing training and support for staff (and volunteers) as well as service users. 3) Creating a service culture of constant learning and enquiry 4)

Creating and/or working with 'spaces of opportunity' 5). PIE 2.0 also provides the 3 Rs - the rules, roles, and responsiveness of the service (PIE link NET, n.d) which guide the day-to-day focus of work within PIEs.

1.2.5 Government and Organisations responsibilities to workers

Whilst this study is focused on individual interventions and the way in which these can be used for both professional and personal wellbeing, the responsibilities of employers and organisations must also be explored. There are laws and legislation which set out employers and organisations responsibilities. For example, The Health and Safety at Work Act 1974 provides some guidance and duties that employers must abide by. This law specifies that employers must protect the health, safety, and welfare at work of all their employees “so far as is reasonably practicable”. This was further developed by the creation of the Management of Health and Safety at Work regulations 1999 which explain that an employer must identify any risks to employees, contractors, or members of the public and take steps to mitigate these through formal risk assessment.

It is especially important to understand employers’ duties to their employees considering the UK is facing a significant mental health challenge at work (Farmer & Stevenson, 2020). In an independent report for the government, it was found that 300,000 people with long term mental health difficulties lose their jobs every year and that 15% of people in the workplace have symptoms associated with a mental health difficulty (Farmer & Stevenson, 2020). Farmer and Stevenson (2020) set out 6 basic principles that they believed all employers should follow to ensure the wellbeing of their employees. These principles are “1. Produce, implement, and communicate a mental health at work plan 2. Develop mental health awareness among employees 3. Encourage open conversations about mental health and the support available when employees are struggling 4. Provide your employees with good working conditions 5. Promote effective people management 6. Routinely monitor employee mental health and wellbeing.” (Farmer & Stevenson, 2020. p.8). They then set out further enhanced standards which they suggest should be followed by all public

and private sector companies with more than 500 staff members. These enhanced standards are Increase transparency and accountability through internal and external reporting. 2. Demonstrate accountability 3. Improve the disclosure process 4. Ensure provision of tailored in-house mental health support and signposting to clinical help (Farmer & Stevenson, 2020. p.9). Both the basic and enhanced principles highlight the importance of mental health and wellbeing provisions by employers, given their duty of care to their employees.

1.3 Acceptance and Commitment Therapy theoretical and philosophical basis

1.3.1 Functional Contextualism and Relational Frame Theory

ACT is based on the philosophy of functional Contextualism (FC). Contextualism (Pepper, 1942) is another name for pragmatism (Hayes et al, 1993). FC is defined as “an organized system of empirically based verbal concepts and rules that allow behavioral phenomena to be predicted and influenced with precision, scope, and depth” (Biglan & Hayes, 1996 p. 50–51). More simply, FC seeks to devise theories and interventions which are beneficial for clinicians and clients with the aim of producing change (Boone et al, 2015). FC proposes that any behaviour must be considered and understood in the context it occurs (Gifford & Hayes, 1999). FC assumptions are reflected in ACT in that there is minimal focus on what is “true” in an ontological sense, but rather a focus on what is workable for a client in a given context (Hayes et al, 2012). Therefore, emotions, thoughts, behaviours, and sensations are not inherently problematic, it depends on the context in which they occur. ACT consequently views distress as a function of context – there is nothing maladaptive within the client (Dawson & Goljani-Moghaddam, 2015).

ACT has theoretical underpinnings in Relational Frame Theory ([RFT] Hayes et al, 2001; Roche et al, 2002). RFT suggests that at the core of human language and cognition is our ability for identifying and creating relational links between stimuli and/or events which is made possible by our “arbitrarily applicable relational responding” (or relational framing) (Cullinan & Vitale, 2009 p.133).

Humans can abstract features of relational responding and apply contextual information, so that relational learning transfers to stimuli that are not necessarily formally related but are so based on arbitrary cues (Hayes 2004a). Our understanding of relationships between stimuli is derived from our life experiences, they are not taught or based on physical properties, but arise because of specific contextual cues. We develop these vast relational networks (relational frames) which identifies how stimuli are related to one another. Therefore, relating is contextually established via our language.

1.4 ACT processes

This section will discuss the main aim and processes of ACT and consider each process in turn. The main aim of ACT is to increase an individual's psychological flexibility (PF). PF can be defined as "contacting the present moment as a conscious human being, fully and without defense, as it is and not what it says it is and persisting or changing in behaviour in the service of the chosen values" (Hayes et al, 2012. p. 985).

PF is an overarching concept that is made up of six interrelated processes, being present, values, committed action, self-as-context, acceptance and cognitive defusion (see Table 12 for definitions). The inverse of these processes is referred to as psychological inflexibility (see Table 19). The six processes are often organised into the Hexaflex or condensed into 3 processes; being present, open and do what matters – this is referred to as the Triflex.

ACT interventions are not designed to challenge or change an individual's beliefs or emotions but encourage people to acknowledge their internal experience and using processes such as defusion, mindfulness and acceptance to create psychological distance. Creating this psychological distance allows individuals to connect with their values and engage in value-driven action no matter what shows up (Hayes et al, 2006b).

Table 19.

Psychological flexibility definitions and psychological inflexibility definitions adapted from Harris (2009) and Hayes et al (2012).

Psychological flexibility	Psychological inflexibility	Definition of psychological inflexibility
Acceptance	Experiential avoidance	This refers to efforts to alter the frequency or form of unwanted private events, even when doing so causes personal harm
Cognitive defusion	Fusion	
Being present	Lack of contact with present moment	Attention is often deployed rigidly to the past and future instead of the present
Committed action	Inaction	
Values	Lack of connection to values	
Self-as-context	Self-as-content	

1.4.1. ACT: Cognitive defusion

Cognitive fusion occurs when our internal experiences, our thoughts, emotions, physical sensations etc have too much control over our actions (Livheim et al, 2013). This often occurs in ways that are self-defeating or problematic (Harris, 2009). Fusion can manifest in two ways; the first is that it may dominate our actions in a problematic way (Harris, 2009). For example, if the manager has the thought that they cannot protect their team from harm, they may take on more work for themselves to protect their team, but ultimately putting pressure on themselves.

Fusion can also dominate our awareness in a problematic way (Harris, 2009). This may look like a manager getting so caught up in their anxiety about an upcoming bid for funding, that they cannot focus on the work they need to do in front of them.

ACT aims to reduce an individual's cognitive fusion and stimulate defusion. Cognitive defusion in ACT attempts to change the way that an individual relates to or interacts with an internal experience (Hayes et al, 2006b). This allows the client to create psychological distance from the internal experience and see it for what it is and in doing so, gives them space to engage with what matters. There are a range of different techniques that have been developed and the client can be creative in the way that they respond to their internal experiences. For example, a client may be encouraged to visualise their thought on a computer screen and manipulate the thought, changing its size, colour, or shape. A person could "thank their mind" (Harris, 2009) or even simply labelling the thought can allow defusion. Defusion usually results in a decrease in the individual's belief in or attachment to internal experiences such as thoughts, rather than a change in their frequency (Hayes et al, 2006b).

Considering the way this may impact on staff in homelessness services– this could show up as fusion with worries about workload, service users, and their staff team. Fusion at work may also present as judgements about their own work or abilities which could interfere with their progression and development. This may also influence their ability to step back from work when at home, staff may find that they become fused thinking about past events at work even whilst they are at home.

1.4.2 ACT: Present moment awareness and contact

ACT encourages a non-judgmental contact with the clients own psychological and environmental events as they occur (Hayes et al, 2006b). Present moment contact is strongly linked to the process and concept of acceptance in that it promotes the client's ability to engage with what is occurring in the here and now. This is important because for a client to be able to respond in a value-driven way, they must be in contact with it (Dawson & Goljani-Moghaddam,

2015). This does not mean clients cannot reflect on past events, their internal experiences or consider their future, it is when doing so interferes with their life that is becomes problematic that we would encourage them to take action. Present moment awareness is often encouraged using mindfulness activities that encourage clients to notice their internal experiences and the environment around them. Often these skills link with defusion exercises, in that clients are encouraged to non-judgementally notice their experiences, step back from internal experiences if they are too caught up in them and engage with the present moment.

In relation to managers' experiences, there may be a range of ways in which they lose contact with the present moment. They are under competing demands, working with, and supporting their team, engaging in service-related changes, managing their own workload and may also have their own personal concerns or worries. All these aspects could take the manager away from the present if they become hooked or fused with them.

1.4.3 ACT: Acceptance

Acceptance from an ACT perspective does not mean that an individual should tolerate their experiences or resign themselves to the situation. ACT encourages individuals to make any workable changes to their environment where possible. Acceptance refers to an active stance that is to "take what is offered" (Hayes & Strosahl, 2004; Dawson & Goljani-Moghaddam, 2015). In this way it encourages individuals to be aware and embrace their internal experiences (thoughts, emotions, physical sensations) without attempts to change their frequency or form (Hayes et al, 2006a). Acceptance (and defusion) on their own are not an end necessarily but are promoted to encourage the client to let go of the struggle and to be able to engage with values-based action, rather than putting all their energy into struggling against their internal experiences or attempting to avoid them. However, it must be acknowledged that this can be challenging for clients in practice, as with all the processes and takes time for clients to develop their skills.

In practice, acceptance is developed and encouraged by supporting clients to see the cost of experiential avoidance. Often this might be by introducing "Creative Hopelessness" as an initial task (Harris, 2009). This involves exploring all the ways in which a client has attempted to manage their experiences and difficulties and encourages them to evaluate how helpful their ways of coping have been and what short- and long-term consequences have arisen because of these strategies. It is important that this is done in a way that is validating, normalising and non-self-blaming, explaining to the client that it is understandable they may have responded in these ways, but allowing them to see that there can be other ways of responding. Metaphors such as the "tug of war with a monster" (Hayes et al, 1999; p.101) can also be helpful to illustrate the way in which experiential avoidance impacts their life. This metaphor suggests to clients that they are in a "tug of war" with the monster (their difficult internal experiences) and that no matter how hard they struggle they cannot beat the monster. This takes up all the clients' energy and focus and can prevent them from engaging with what matters. Therefore, the first step clients must take is to drop the rope, to allow them to engage with what matters. The monster has not left, but they are now free to engage with their valued action.

1.4.4 ACT: Values

In ACT values are the chosen qualities of action that cannot be obtained but the client can work towards these moment by moment (Hayes et al, 2006b). Individuals may not have reflected on their values in this way before, and so this can take time for them to identify what is important to them and learn how to use their values to guide their action. In practice, there are values clarifying activities that can be used to support their identification of values. For example, clients can be asked to imagine their retirement party and reflect how they would like to be described by the people they work with. Card sort activities can also be helpful to encourage values clarification. This activity provides the client with cards listing various values which correspond to different life domains (relationships, work, leisure etc) and asks the client to rate how important they

are. The client eventually sorts the cards to capture their top or most important values which they can then begin to work towards in and out of sessions.

1.4.5 ACT: Self-As-Context

The aim of Self-as-context processes is to support clients to distinguish between their conceptualised self (self-as-content) and the self that can step back from their internal experiences and see the larger view (self-as-context). This encourages the client to see that they are not their internal experiences, that they are not defined by them. Self-as-context encourages clients to be able to adopt a standpoint from which they can be aware of and notice the flow of their experiences without becoming hooked by them, encouraging defusion and acceptance (Hayes et al, 2006b). Self-as-Context can be considered as a way of flexible perspective taking (Harris, 2009). Clients can be encouraged to develop this observer perspective by engaging in mindfulness activities that ask them to step back from and observe internal experiences.

1.4.6 ACT: Committed Action

ACT at its heart is a behavioural therapy and thus, draws on the above processes to elicit behavioural change in clients. As with other behavioural therapies, ACT encourages clients to start with small goals, drawing on their values as a guide. It is expected that natural reinforcement will maintain these changes that the clients make (Dawson & Goljani-Moghddam, 2015). It is crucial that clients are prepared for barriers and difficulties that may arise, because behaviour change can in turn lead to barriers (e.g., fused with thoughts of failure). ACT processes such as acceptance and defusion can be utilised to deal with these barriers (Hayes et al, 2006b).

1.5 ACT Meta-analyses and systematic reviews

There has been an increasing interest in using ACT therapeutically for a range of psychological experiences and difficulties. This has led to many meta-analyses and systematic reviews to assess the feasibility, acceptability, and effectiveness of ACT for a range of topics and in comparison, to other therapeutic modalities (such as Cognitive Behavioural Therapy [CBT]). Across a

range of meta-analyses, ACT in 1:1 and group therapy has been found to be generally effective for reducing depression (Bai et al, 2020) and anxiety (Coto-Lesmes et al, 2020; Ferreira et al, 2022), increasing pain acceptance in individuals living with chronic pain (Feliu-Soler et al, 2018; Hughes et al, 2017), various outcomes related to long term-conditions (Graham et al, 2016), and reducing stress, anxiety, and depression in family caregivers (Han et al, 2020).

A recent review of ACT meta-analyses by Gloster et al (2020) aimed to investigate what the aggregate effect sizes were, compared to controls and for various target populations across published ACT meta-analyses. They found that ACT was efficacious for a range of conditions (depression, anxiety, substance use, pain and transdiagnostic groups) and that ACT was generally superior to inactive controls, treatment as usual and many active intervention comparisons (excluding CBT). However, these reviews are not without limitations, which must be considered when interpreting the findings and the studies they review also have their own limitations which influence the extent to which conclusions can be drawn from the meta-analyses. For example, in Gloster et al's (2020) review of meta-analyses, some studies were used for multiple comparisons and in more than one meta-analysis which meant that some effects from studies factored more than others, though it was unclear to what extent, if any this impacted on the findings. There was also a range of quality across the included studies which the authors were not able to balance. They recommended that future studies need to be transparent regarding their own methodological limitations. Other reviews have further highlighter some of their methodological limitations including heterogeneity of included studies (Bai et al, 2020; Ferreira et al, 2022), not searching grey literature (Bai et al, 2020) and including studies having small, very specific populations (e.g., university students) which limits generalisability (Coto-Lesme et al, 2020).

1.6 ACT in the workplace

1.6.1 Psychological flexibility and the workplace

There has been a growing body of research investigating the relationship between PF and occupational outcomes. For example, Bond and Bunce (2003)

conducted a longitudinal research study assessing the influence of PF on workers mental health and work performance within a financial services organisation in the UK. They found that PF predicted both mental health and work performance even after controlling for potential confounding factors such job control, negative affectivity, and locus of control (Bond & Bunce, 2003; Donaldson et al, 2004). PF has also been linked to workers abilities to learn new skills (Bond & Flaxman, 2006), psychological wellbeing and quality of life (Garner & Goljani-Moghaddam, 2021; Mitmansgruber et al, 2008), work-related stress (McCracken & Yang, 2008) and burnout (Vilardaga et al, 2011).

In the workplace, increasing an individual's PF is likely to allow staff to notice and acknowledge their difficult thoughts and feelings and create distance from these to engage with their work in a present and meaningful way. This means that thoughts like "I cannot cope with this workload" is not challenged or pushed away, but the relationship to the thought is altered using cognitive defusion, to create psychological distance (Hayes et al, 2006a). This is also likely to benefit their work-life balance, allowing them to notice when thoughts of work are impacting their personal time and being able to engage with what is important within their personal lives, even when things may be difficult at work. Nonetheless, reviews and experimental studies assessing the impact of ACT workplace training on PF have been mixed. Many studies and reviews found that ACT-based workplace training led to post-training increases in PF (e.g., Flaxman & Bond, 2010b; Archer et al, 2018; Rudaz et al, 2017). On the other hand, two meta-analyses have found no significant pooled effect in post-training PF (Prudenzi et al, 2021; Reeve et al, 2018). However, these mixed effects have been attributed to a previous overreliance on the AAQ and AAQ-II (Hayes et al, 2004; Bond et al, 2011) as measures of PF (Reeve et al, 2018; Towey-Swift et al, 2023).

1.6.2 Interventions in the workplace – why ACT?

Intervention within the workplace generally fall into three categories – primary, secondary, and tertiary. Primary interventions can be considered organisation focused interventions which aim to modify environmental and work-related

sources of stress e.g., job control, workplace support (Bond & Hayes, 2002). Secondary interventions have utilised stress management interventions or traditional CBT to provide clients with psychological skills to reduce the impact of work-related stress and increase resilience (Robertson et al, 2015). Tertiary interventions are considered more therapeutic for clinical levels of distress. However, in practice there can often be overlap between these categories in that workplace secondary and tertiary interventions may also function at a primary level (Quick et al 1997).

Workplace interventions at the secondary and tertiary levels were initially based on stress management programmes, traditional CBT, and a combination of both. Work-based stress management training programmes have traditionally been based on Meichenbaum's (1985) stress inoculation training. This training combines cognitive restructuring, relaxation skills and behavioural skills (Murphy, 1996) and can function at a preventative level and used with high-risk nonclinical populations (Meichenbaum 1977; Meichenbaum & Novaco, 1985). Following from these original interventions was the emergence of third wave CBT models and theories such as ACT (Hayes et al, 1999). Third wave authors, when explaining the emergence and need for third wave therapies highlight several anomalies, which question the core assumptions of second wave approaches (Hayes et al, 2004b; Hayes et al, 2006b; Orsillo et al 2004). These anomalies include the findings that changes in dysfunctional cognitions are not unique to second wave CBT, clients often improve prior to cognitive restructuring has been implemented and there are inconsistencies in the findings that cognitive restructuring mediates reductions in anxiety and depression (e.g., Orsillo et al, 2004; Hayes et al 2004c; Teasdale et al, 1995). In response, ACT shifts away from altering dysfunctional cognitions, instead offering a way to change the way in which people relate to their cognitions to reduce distress and allow them to engage with the present moment.

One reason that ACT can be especially beneficial within the workplace is that it takes a transdiagnostic approach to human difficulties and experiences. Instead of classifying a client's experiences according to a diagnostic framework (e.g.,

the Diagnostic and Statistical Manual of Mental Disorders 5th edition [DSM, American Psychiatric Association 2013), ACT suggests that all problematic behaviour (including difficulties at work) can largely be explained by the impact of challenging internal experiences leading to experiential avoidance and loss of contact with the present moment (Hayes et al, 1999). Another benefit is that ACT can be beneficial for both clinical levels of distress and for non-clinical populations (Smout et al, 2012). ACT's ability to be used for non-clinical and clinical populations means that it can be offered within a workplace where individuals may be experiencing various levels of psychological distress, and it will still be appropriate.

It is also important to note that ACT has been found to be equally as effective as other workplace wellbeing intervention approaches. For example, when compared to an innovation Promotion Programme (which draws on the theory of problem- and emotion- focused coping [Folkman & Lazarus, 1980, 1985] and the conceptualisation of Innovation at work [West & Farr, 1989]) it was found to be equally as effective leading to significant reductions on the Becks Depression Inventory (Beck et al, 1961) and General-Health Questionnaire ([GHQ], Goldberg, 1978) (Bond & Bunce, 2000). When compared to a more traditional stress inoculation training programme and found to be equally effective across a three-month period with significant decreases on the GHQ (Goldberg, 1978) relative to controls (Flaxman & Bond, 2010b).

2.0 Extended Method

Overview

This section is designed to extend the method section of the journal paper. This section will cover in further detail the rationale behind the study design, the chosen intervention and chosen measures. Additionally, ethical considerations and further detail of recruitment will be included.

2.1 Epistemological position

2.1.1 Pragmatism

Pragmatism as a research paradigm does not get involved with metaphysical concepts such as truth and reality. It postulates that there can be single or multiple realities which are open to empirical enquiry (Creswell & Clark, 2011). Some pragmatist researchers have suggested that there is an objective reality that exists separately to our human experience, but that reality ultimately can only be accessed via our experience and understanding (Tashakkori & Teddlie, 2008; Morgan, 2013). An important belief that underpins pragmatism is that knowledge and reality are based on beliefs which are socially constructed (Yefimov, 2004). A central principle to pragmatic inquiry within research is the notion that research should come from the desire to elicit useful and "actionable knowledge, solve existential problems or re-determine indeterminate situations, drawn from examination of effective habits or ways of acting" (Kelly & Cordeiro, 2020 p. 3; Corbin & Strauss, 2008; Feilzer, 2010).

2.1.2 ACT's epistemological position

It must be acknowledged that ACT holds a critical realist position epistemologically which has often been thought to conflict with pragmatism. Critical realism is an overarching approach that sits between positivism (the belief that knowledge is measurable via scientific enquiry) and social constructionism (no single truth or knowledge exists). Despite differences between approaches there are also considerable overlaps between positions too (Elder-Vass, 2022). Critical realism accepts that there are objective realities and agreements about these but put forward that we cannot rely on these alone

to understand the world around us. Despite the potential conflict, for this project, a pragmatic approach was utilised because it felt most appropriate for the study aims and mixed methods utilised.

2.2 Participant recruitment

For the face-to-face sessions, participants were emailed by the Practice Development Unit (PDU) who are a Nottingham-based unit which promotes collaborative learning between individuals and organisations who are working with people who experience multiple disadvantage. The PDU sent out the advert contained in appendix C which asked participants who were interested to email me. Once a participant had emailed me, I sent them the participant information sheet to read through and the consent form (see appendix D) to complete if they were happy to be a part of the research. At this point there was some drop-out because some participants had emailed but were not managers (three individuals), six participants also emailed but could not make all the dates for the training and four did not respond to emails.

2.3 Ethical Considerations and amendments

2.3.1 Ethical considerations

To ensure both scientific and ethical rigour, the project went through various stages of development. The project was taken to several research proposal panels to be discussed with research members of the course and service user advisors. This provided feedback on the suitability of the project, allowed troubleshooting and further discussions about ethical considerations. Ethical approval was sought and granted by the Faculty of Medicine and Health Sciences Research Ethics Committee at the University of Nottingham. Due to the second author being involved within homeless services clinically, it was agreed that the first author would facilitate the training and the third author would complete the fidelity check.

Throughout the project, supervision was sought to shape the project and explore ethical considerations. For example, the participants of the project were already under significant work-related pressure and so the training, measures

and participation in the research needed to be developed in a way to minimise burden. Measures were chosen to minimise burden whilst ensuring that we would be able to assess the training with regards to feasibility, acceptability, and efficacy. Change interviews were optional for participants due to the demand on time.

2.3.2 Confidentiality and Data protection

The first author completed a data management plan which was submitted as part of the ethical approval process. Hard copies of consent forms were scanned and saved electronically. They were then password protected and stored on the student's University of Nottingham OneDrive account along with virtual copies of consent forms. The hard copies were then be shredded. The measures were anonymised by asking participants to create their own unique code, using the second letter of their last name, the month of their birthday in numbers and the last two digits of their mobile number. This allowed me to compare the measures over time but keep the participants data anonymous. The participants also used the same code for the change interviews.

The anonymised outcome measures were then inputted to an excel spreadsheet. The change interviews were completed by a colleague and anonymised prior to being sent to the first author (using the participant created codes). The electronic files were password protected and stored on the student's University of Nottingham OneDrive account. Access was also given to the DClinPsy programme administrator, to support data retention and destruction following the completion of the student's studies. Data was stored according to the University of Nottingham data management policy (2018).

2.3.3 Ethical amendment

Initially, a cap had been included on the number of participants for the online sessions. This was set at 50 participants; this felt a manageable amount for an online session with one facilitator. However, there was significant demand for the online sessions and there were 20 people on the waiting list. Therefore, it was agreed to submit an amendment to the ethics committee to ask for the cap

on participant numbers to be removed. This was accepted (see appendix B) and the training was offered to all the participants on the waiting list.

2.4 Rationale for chosen measures and psychometric properties.

The Comprehensive Assessment of Acceptance and Commitment Therapy Processes (CompACT) (Francis et al, 2016). The CompACT is a measure of psychological flexibility. ACT interventions and training aim to increase an individual's psychological flexibility; therefore, I expected to see a change in the participants scores following the training and so wanted to use an appropriate measure to assess for potential change. The CompACT has good internal reliability with a Cronbach's alpha score of .91. The CompACT also has good convergent validity with an established ACT measure (AAQ-II) (Francis, Dawson, & Golijani-Moghaddam, 2016). The CompACT was chosen over the AAQ-II (Bond et al, 2010) due to the limitations of the AAQ-II. For example, there is criticism that the AAQ-II (Bond et al, 2010) conflates ACT processes with distress outcome variables (Wolgast, 2014). The measure was completed by participants at baseline, time 1, 2 and 3.

The CompACT (Francis et al, 2016) has been used in a range of workplace wellbeing studies to measure ACT related processes in staff groups. For example, it has been used in frontline homelessness staff (Reeve et al, 2021), nurses (Chong et al, 2023), staff working with individuals with intellectual disabilities (ID) (Axenova, 2022; Paris et al, 2021), palliative care staff (Finucane, et al, 2023), behaviour technicians (Larson, 2023) and Firefighters (Gribbons, 2023).

Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) (Stewart-Brown et al, 2009; 2021). The SWEMWBS has good concurrent validity, it was strongly positively correlated with World Health Organisation Five Well-being Index (WHO-5) in a Danish adult population (Koushede *et al*., 2019). Furthermore, in a general UK population the Cronbach's alpha for the SWEMWBS was high at 0.82 (Ng Fat, et al, 2017). This measure was used to assess any potential increase or decrease in the participant's wellbeing. Whilst the main aim of the study was to assess acceptability and feasibility of the

training, it is prudent to also consider signal efficacy and ensure that the training does not cause iatrogenic harm. The measure was completed by participants at baseline, time one, two and three.

The Acceptability of Intervention Measure (AIM), Intervention Appropriateness Measure (IAM), and Feasibility of Intervention Measure (Weiner et al. 2017). These three measures were used to aid the assessment of the main aim of the study; is the training acceptable and feasible? There are currently no cut-off scores for the measures, but higher scores indicate higher acceptability, appropriateness, and feasibility respectively. Cronbach alphas for the scales were 0.85 for acceptability, 0.91 for appropriateness, and 0.89 for feasibility, indicating good internal reliability. (Weiner et al, 2017). These measures were completed post-training at times one, two and three. This measure was used because it was a brief way to quantitatively assess the participant's views of the acceptability, appropriateness and feasibility of the intervention whilst limiting burden.

Group Session Rating Scale (GSRS) (Duncan & Miller, 2007). This measure was e used to assess any group alliance and response to the facilitator. This measure was included because it can be useful to understand the components of the intervention for future studies. When assessed, Cronbach's alphas for the GRS were over 0.8 and the GRS has good concurrent validity (Quirk, Miller, Duncan, & Owen, 2013). This measure was completed following each session (as indicated in the original paper: Quirk, Miller, Duncan, & Owen, 2013). Due to measures being anonymised this was used post-intervention to see if there were areas/ sessions that dropped below this threshold to consider adaptions for future training.

Professional Quality of Life Scale version 5 (PROQOL-5) (Stamm, 2005a, 2005b, 2010). This is a 30-item measure of participant's professional quality of life including burnout, compassion satisfaction and compassion fatigue/secondary traumatic stress. Stamm (2005a) assessed reliability for the three subscales for a sample of 463 as follows: Compassion Satisfaction (.87), Burnout (.72), and STS (.80). The PROQOL-5 has been used across a range of

research within workplaces and professions with 2674 citations for the PROQOL-5 measure itself on google scholar.

The PROQOL-5 has been used to consider workplace wellbeing, ACT and mindfulness training and quality of life in healthcare professionals (Cascales-Pérez, 2021; Sansó, 2019), professional dementia caregivers (Montaner et al, 2021), palliative care staff (Finucane et al, 2023), special educators or staff working with ID (Calderwood, 2023; Zelek, 2023) and medical students (Watanabe et al, 2023).

2.4.1 Intervention and rationale

The intervention used within this study was based on the training within the "Mindful and Effective Employee" (Flaxman et al, 2013). This is a three-session training package which covers the six core ACT processes: Present moment awareness, Values, Committed Action, Defusion, Acceptance and Self-As-Context. This training programme was chosen because it was designed and testing within workplaces and had a focus on individual wellbeing. The authors were contacted prior to the project to ask for their permission for use of the training programme to which they consented.

The first session begins with "icebreaker" activities, these include the 80th birthday activity where participants are asked to share how they hope they would be described by friends on their 80th birthday, and another activity exploring the activities the participants complete mindfully and on autopilot. The facilitator then explains the training programme, shares the rationale behind the training, and gathers hopes and expectations from the group. Group rules are also devised so that participants can agree on their conduct (e.g., be respectful) throughout training. Participants are then introduced to mindfulness and taken through some mindful activities with space and time for discussion and reflections afterwards. Values based living is then introduced and participants are encouraged to identify their own values and values-based actions for in between session tasks.

Session two begins with a check in to see how participants are, how they found completing their values-based actions or if they found that they were unable to. This gives participants time to reflect on their experiences and if they were unable to complete the in-between session tasks, reflect on what was a barrier. The session then introduces defusion and gives the participants a chance to practice using different cognitive defusion techniques. Mindfulness practice then continues with mindfulness of mood and emotion. Finally, participants then continue their values-based action work expanding on their chosen values and actions from the previous week.

Session three is a "booster" session that takes place a month after the second session. This gives participants a chance to review their progress and how they have found the training and using ACT so far. This session then encourages further mindfulness practice and bring sin Self-as-context, introducing it as the observer perspective to participants.

This training programme was chosen because it is a programme that has been designed for workplace wellbeing, encouraging staff to incorporate ACT based skills in their daily lives, whilst also considering their workplace and experiences at work. The authors have worked, researched, and written about ACT within the workplace extensively (e.g., Bond & Bunce, 2000; Bond et al, 2010; Bond et al, 2015; Bond et al 2016; Flaxman & Bond, 2006; Flaxman & Bond, 2010a, 2010b, 2010c; Flaxman, 2006; Frogeli et al, 2016; Hayes et al, 2006c; Lloyd et al, 2013; Macías et al, 2019; Wardley et al, 2018; Waters et al, 2018)

2.5.1 Analysis

2.5.2 Additional data analysis

At the beginning of this project, the authors set out to recruit more participants for the face-to-face condition (12 participants was the initial goal) than we eventually were able to. Despite offering the training widely and opening it to everyone on the initial waiting list, we had fewer participants attend than we had anticipated. Whilst this challenge to recruitment offers information regarding the feasibility of face-to-face training for managers of homelessness services, it

meant that our analysis for the face-to-face group was limited compared to our analysis for the online group. If there had been more participants and fuller completion of measures, then there are additional analyses we would have liked to complete. To illustrate, we would have completed a linear Mixed model on the face-to-face data to assess if, at the group level, there were significant changes across the measures of wellbeing such as the PROQOL-5 (Stamm 2005a, 2005b, 2010), SWEMWB (Stewart-Brown et al, 2009; 2021) and CompACT (Francis et al, 2018). It would have also been useful and interesting to be able to compare the two groups (face-to-face vs online) to see if there were significant differences between them across the measures. This would allow us to assess if one group format led to greater changes than the other, which would be beneficial to guide future training offers.

2.5.3 Individual level change

To assess *individual-level* changes across the intervention period, Reliable Change Index (RCI) analyses (Jacobson & Truax, 1991) were conducted for the wellbeing and PF outcome measures (CompACT, PrOQOL-5, and SWEMWBS). RCI analyses were only conducted for participants who had completed both baseline and one follow-up data point. Cut off scores to indicate reliable change (RC) on the CompACT (Francis et al, 2016), SWEMWB (Stewart-Brown et al, 2009; 2021) and PROQOL-5 (Stamm 2010) were created using the reported internal consistencies and the standard deviations from this current study.

2.5.4 Qualitative data coding

Content analysis was used for the qualitative data analysis. Content analysis refers to a group of approaches with the specific type of analysis being chosen by the researcher based on the theoretical and substantive interests of the researcher and the phenomena being studied (Weber, 1990).

The first author initially planned to utilise the Theoretical Framework of Acceptability (Sekhon, Cartright & Francis, 2017) to complete the coding. The framework was developed with the aim to inform acceptability research due to

an increasing need to determine the acceptability and feasibility of health and wellbeing interventions. The authors of the framework completed a review of existing systematic reviews that claimed to define acceptability of healthcare interventions and holding in mind inductive and deductive reasoning principles, developed a framework to define what is important when completing a feasibility and acceptability study. This framework was used because it fits with the main aims of the research project - to assess the feasibility and acceptability of the ACT training for managers.

The first author began coding the face-to-face change interview notes using the framework but found that a lot of the nuance of the data was being missed. For example, the notion of “participant experience” as a code did not express what the participants experience was, was it positive, negative, neutral etc? Therefore, the first author decided that coding using the framework alone was not enough. This was discussed with the second author and agreed that coding would be completed in a more inductive way, although still holding the framework in mind when coding. Coding was completed for the face-to-face interview notes and then for the online participants data which had come from the online version (using Question Pro, 2023) of the change interview. At this point codes were shared with the second author to help reduce the potential bias from the first author and to consider alternative ways to code the data. The coding was then completed by the first author who then began devising categories and themes. At this point it was clear that there was significant overlap between the categories arising from the face-to-face data set and the online data set. It was therefore decided that the data sets would be presented in the journal paper together, whilst also considering any differences between the groups and the additional theme that arose from the online participant’s data set. Again, these categories and themes were discussed with the second author, with changes made to the wording of some over-arching themes and two themes being merged.

3.0 Extended Results

3.1 Quantitative

3.1.1 means, standard deviations and effect size – further time point comparisons.

Table 20 shows the means, standard deviations and effect sizes for the online group data comparing baseline data vs time two and time two vs time three. From baseline to time 2 there is a small effect size for the PROQOL-5 CS subscale and the CompACT BA subscale. There are moderate effect sizes for the CompACT total, and PROQOL-STS and BO subscales. There are large effect sizes for the CompACT Oe and VA subscales and the SWEMWB total. When comparing time two to time three data there were small effect sizes for the CompACT total, OE and BA subscales, PROQOL-5 STS, CS and BO subscales. A large effect size was found for the CompACT VA subscale.

Table 20.

Means, standard deviations and effect sizes for the online group data comparing baseline vs time 2 and time 2 vs time 3.

Measure	N	Baseline Mean (SD)	N	Mid-point Mean (SD)	N	End point Mean (SD)	Significance level and Effect size Cohens d (baseline vs time 2)	Significance level and Effect size Cohens d (time 2 vs time 3)
CompACT total	56	82.25 (15.491)	14	88.64 (18.826)	14	89.57 (18.11)	0.68	0.04
CompACT OE	56	34.45 (8.056)	14	38.71 (10.61)	14	37.50 (9.82)	0.89	0.21
CompACT BA	56	19.09 (5.73)	14	19.43 (4.91)	14	18.21 (7.22)	0.11	0.22
CompACT VA	56	28.71 (6)	14	30.50 (5.93)	14	33.86 (7.2)	1.03	0.75
SWEMWBS total	58	23.53 (3.68)	14	24.86 (3.72)	14	25.71 (3.931)	0.80	0.28

Measure	N	Baseline Mean (SD)	N	Mid-point Mean (SD)	N	End point Mean (SD)	Significance level and Effect size Cohens d (baseline vs time 2)	Significance level and Effect size Cohens d (time 2 vs time 3)
PROQOL-5 STS	55	21.33 (5.87)	14	19.07 (5.98)	13	18.31 (4.7)	0.56	0.15
PROQOL-5 BO	55	21.84 (5.29)	14	21 (5.349)	13	20.15 (5.257)	0.72	0.18
PROQOL-5 CS	55	34.98 (5.14)	14	34.86 (4.753)	13	35.92 (3.50)	0.04	0.27

Note. Means were taken from the estimates the linear model provided. SDs were calculated from the standard errors provided. Measures and subscales are as follows; CompACT total score (overall scale total), CompACT OE (openness to experience subscale), CompACT BA (behavioural awareness), CompACT VA (valued action), SWEMWBS total (total score on the SWEMWBS), PROQOL-5 BO (burnout subscale), PROQOL-5 STS (secondary traumatic stress subscale) and PROQOL-5 CS (compassion satisfaction subscale).

Reliable change

A reliable change analysis (Jacobson & Truax, 1991) was applied to consider participants individual level change. The reliable increases and decreases for the face-to-face and online participants who had follow-up data and is shown in Tables 21 and 22, respectively.

Table 21.

Reliable change for face-to-face participants.

Measure	Number of participants demonstrating change				
	Baseline vs time 1	**Baseline vs time 2**	**Baseline vs time 3**	**Time 1 vs time 2**	**Time 2 vs time 3**
CompACT total score		1 ↑	1 ↑		
CompACT OE		1 ↓ 1 ↑	1 ↑	1↑	
CompACT BA		1 ↓ 1 ↑	1 ↑	1 ↑	
CompACT VA			1 ↑		1 ↑
SWEMWBS			1 ↑		
PROQOL-5 BO					
PROQOL-5 STS					
PROQOL-5 CS					

Note. Data was available for one participant at baseline, time one and time two and for the other participant at baseline, time two and time three. Measures and subscales are as follows; CompACT total score (overall scale total), CompACT OE (openness to experience subscale), CompACT BA (behavioural awareness), CompACT VA (valued action), SWEMWBS total (total score on the SWEMWBS), PROQOL-5 BO (burnout subscale), PROQOL-5 STS (secondary traumatic stress subscale) and PROQOL-5 CS (compassion satisfaction subscale). Empty table cells indicate no data and/or change. Upwards arrow indicates a reliable increase and a downwards arrow indicates a reliable decrease.

Table 22.

Reliable change for online participants

Measure	Number of participants demonstrating change		
	Baseline vs time 2	**Baseline vs time 3**	**Time 2 vs time 3**
CompACT total score	2 ↑	1 ↓	1 ↑
		2 ↑	
CompACT OE	2 ↑	1 ↓	
CompACT BA	2 ↓	2 ↓	
	1 ↑	1 ↑	
CompACT VA	1 ↑	2 ↑	
SWEMWBS	2 ↑	1 ↓	
		1 ↑	
PROQOL-5 BO	1 ↓	1 ↓	
PROQOL-5 STS	1 ↓	1 ↓	
PROQOL-5 CS			

Note. Four participants had baseline and time two data, four participants had baseline and time three data, one participant had data at all three time points and one participant had data at time two and time three. Measures and subscales are as follows; CompACT total score (overall scale total), CompACT OE (openness to experience subscale), CompACT BA (behavioural awareness), CompACT VA (valued action), SWEMWBS total (total score on the SWEMWBS), PROQOL-5 BO (burnout subscale), PROQOL-5

STS (secondary traumatic stress subscale) and PROQOL-5 CS (compassion satisfaction subscale). Empty table cells indicate no data and/or change. Upwards arrow indicates a reliable increase and a downwards arrow indicates a reliable decrease.

3.1.2 Change ratings

See appendix D for face-to-face participants change ratings. See table 23 below for online participant change ratings.

Table 23.

Online participants change ratings.

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
That I was more values-driven in my actions that I initially perceived	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
I tend to think things through lot more.	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Very important
My workload has increased.	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Moderately important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
Being more aware of what is going on both inner working and external stressors	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Very important
I have strong will	Somewhat surprised by it	Very likely (Would have happened anyway)	Extremely important
Reminding myself to be present	Neither expected nor surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
wellbeing	Somewhat expected it	Somewhat unlikely without training (probably would have not happened)	Moderately important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
Time for self	Neither expected nor surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
Reflecting more on my values	Very much surprised by it	Very unlikely without training (clearly would not have happened)	Moderately important
Completing day to day tasks with more awareness	Somewhat surprised by it	Very unlikely without training (clearly would not have happened)	Moderately important
ability to pause and think before responding	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
willingness to try something new to support mental resilience / health	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
I am more confident	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
Reasoning skills have improved - more calm and measured less agitated by decision making tasks I perceive to be challenging.	Somewhat surprised by it	Very unlikely without training (clearly would not have happened)	Very important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
Taking more time to reflect on issues and concerns	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Extremely important
I write down my thoughts	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Slightly important
I have been offered a new role	Very much surprised by it	Neither likely nor unlikely (no way of telling)	Very important
i have decided to change jobs	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Extremely important
Proud for giving up smoking	Neither expected nor surprised by it	Somewhat likely without training (probably would have happened)	Slightly important
Trying to be more positive	Neither expected nor surprised by it	Neither likely nor unlikely (no way of telling)	Very important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
more time with relatives	Somewhat surprised by it	Somewhat unlikely without training (probably would not have happened)	Very important
More relaxed	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Very important
More reflection on self-care routine	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Moderately important
Noticing, recognising and accepting my emotions.	Very much surprised by it	Very unlikely without training (clearly would not have happened)	Extremely important
letting myself get on and off of the bus so to speak!	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
not as judgemental of myself for not achieving something	Neither expected nor surprised by it	Somewhat unlikely without training (probably would have not happened)	Moderately important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
Feeling more calm	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Extremely important
Self-care practice - in particular taking time out of the working day to use guided meditation/mindfulness.	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Extremely important
Focus on future goals and the journey I want to take in my career	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
I found it straightforward and beneficial to complete the 'grounding' tasks	Somewhat surprised by it	Somewhat likely without training (probably would have happened)	Moderately important
I reflect on thoughts I have written down at a later time	Somewhat expected it	Somewhat unlikely without training (probably would have not happened)	Very important
Considering importance of relationships and trying to spend more time with family and friends	Very much surprised by it	Somewhat unlikely without training (probably would have not happened)	Moderately important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
More disciplined getting up earlier	Somewhat surprised by it	Somewhat likely without training (probably would have happened)	Moderately important
Thinking about reducing my phone usage	Somewhat expected it	Somewhat likely without training (probably would have happened)	Extremely important
better at completing wellbeing plans for staff	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Extremely important
Reminded to be more aware of others possible reactions	Neither expected nor surprised by it	Somewhat likely without training (probably would have happened)	Very important
Recognised importance of grounding/mindfulness - still struggling to be mindful	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Moderately important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
shift in my reactions by link them to my values.....what really matters to me	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
I am more organised	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Very important
Increased instances of being present.	Very much surprised by it	Very unlikely without training (clearly would not have happened)	Extremely important
More present with family and friends	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Very important
I will contemplate my future	Very much surprised by it	Very unlikely without training (clearly would not have happened)	Extremely important
Considering values staff hold when delivering supervision	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Moderately important
Preparing lunch before work	Somewhat surprised by it	Somewhat likely without training (probably would have happened)	Very important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
No more	Neither expected nor surprised by it	Neither likely nor unlikely (no way of telling)	Not at all important
better advice to staff	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Very important
Booked and attended gym now 3 times per week	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Very important
Greater patience	Very much surprised by it	Very unlikely without training (clearly would not have happened)	Extremely important
Tolerance is more noticeable	Somewhat expected it	Very likely (Would have happened anyway)	Extremely important
better work life balance	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Very important

Change - please write one change you have noticed in the box and then complete the subsequent ratings.	Please rate how much you expected it vs. were surprised by it (the change):	Please rate how likely you think (the change) would have been if you had not had training?	How important or significant to you personally do you consider this change to be?
Deep breathing if in queue of traffic	Somewhat surprised by it	Neither likely nor unlikely (no way of telling)	Moderately important
More structured routine	Somewhat surprised by it	Somewhat unlikely without training (probably would have not happened)	Moderately important
Diet and exercises - wellbeing	Somewhat expected it	Neither likely nor unlikely (no way of telling)	Extremely important

Note. Some participants noted multiple changes and so participants may be represented multiple times in the table.

3.2 Qualitative

The qualitative analysis aimed to partially address the main aim of the study of assessing the acceptability and feasibility of the training. Across both the face-to-face group and the online group, the content analysis generated the themes of; *Engagement with training, Implementing skills, and Beyond training.* The online group had the additional theme of*; Training led to behavioural change or intention to change*. Examples provided in speech marks indicate direct quotes from participants, those with inverted commas are examples from interview notes and are not the participants' exact words.

Below is Table 24 and Table 25 respectively shows the categories and themes devised from the change interviews with the face-to-face and online participants. Table 26 which shows the full list of codes from the face-to-face data set and Table 27 for the online data set. This shows the way in which the initial coding led to the categories and themes which are presented within the journal paper. Below are further examples from the themes that were not included within the journal paper. Examples provided in speech marks indicate direct quotes from participants, those with inverted commas are examples from interview notes and are not the participants' exact words.

Engagement with training

The theme of Engagement within training highlighted participants' perceptions of training, their ability both practically and personally to engage with the sessions and suggestions for future training. This theme in particular addresses the main aim of the project considering if the training was feasible and acceptable. Participants had mixed views regarding both the delivery format and session length, some thought that extra peer supervision and longer breaks between sessions would be helpful, and others suggested to condense the training to fewer sessions "two sessions would have been better". Participants also wanted to consider how to use their ACT skills within the workplace more broadly "I think it would be even more helpful if it also specifically looked with managers at how to implement this within their teams rather than all the focus being on us as individuals in the training if that makes sense?"

Many participants had suggestions for future training sessions and ideas to make the training more accessible such as “needs more screen breaks” and some more visual materials “timeline of learning would have been good”. Overall participants reflected that they found the sessions accessible, useful, relevant, and appealing. Participants also generally rated the facilitator skills as friendly and accessible “It was delivered in a manner that was friendly and interactive”.

Whilst the focus of the training was on the individual and their own personal wellbeing at work, participants also held in mind how they would like to use the training within the wider workplace. For example, two participants shared that they would like a “train the trainer option” and ‘Train the trainer option for further training if to be used for people we support’. Train the trainer programmes aim to upskill participants to go on to train colleagues or service users with the skills they have learned. Whilst this is not the focus of this training programme, it is positive that participants want to be able to share this training with their wider teams/colleagues and service users. This has been offered by other ACT researchers such as Frederik Livheim, as explained in the manual used within this project (Flaxman et al, 2013). Similarly, other participants were keen to spend more time considering how the training could be utilised at work in their roles as managers. For example, “Plus looking at how managers can implement it” and “it might have been good to practice completing ACT with someone such as team members like a role play of how it may work in a supervision setting.” Two participants from the face-to-face group were keen to include more theory within the training ‘Limited knowledge of ACT before the training and felt it would be helpful to perhaps have a session introducing the underlying theory of the model first’ and ‘Another session on the theoretical aspects of ACT to help to understand some of the foundations of the model which felt would make it easier to apply in practice if understood it better’. This could be easily included within training, although it would extend the amount of time required for training sessions which is challenging considering the time demands for managers. It is also arguable that a participant or client does not need to understand the underlying theory to benefit from psychological theory and approaches.

Nonetheless, this could be a training option for those who wish to learn more about the theory itself. The second author is currently running ACT training for staff within homelessness and drug and alcohol services with this focus.

It was interesting within this theme, there were some suggestions of activities that had been covered in sessions such as ice breakers and values exercises for example “to help keep track link to mindful resources for practice perhaps give us tasks to work on around values.”. Although one participant did share that an introduction to everyone’s workplace may have been beneficial “I know there was a lot of us, but an introduction and brief work overview may have helped to connect with our peers. Maybe done in an ice breaker way”. Though for the others, it’s unclear from participant’s feedback whether this reflects a lack of clarity about the focus of exercises from the facilitator or reflects participant’s ability to engage fully with the sessions due to workplace or personal demands.

Implementing skills

Implementing skills demonstrated the way that participants had used the strategies and skills they had learned. For example, many participants talked about using the mindfulness and present moment skills “tried to take moment to reflect, tried to not doom scroll when I get home and be more present” and ‘Mindfulness exercises made you be more in that moment e.g., when driving home, driving to the training, encouraged you to be more in the present’. Participants reflected how they were able to recognise and sit with their emotions reflecting their use of acceptance and defusion based skills “Noticing emotions and not trying to change them but accept that they are there and giving myself time to understand it”.

On the other hand, this theme also acknowledged the challenges of practicing skills. For example, some individuals found it hard to engage with the exercises ‘Struggled with the mindfulness exercises, particularly the body scan’. Some people found an increased reflection and focus on themselves difficult “having to realise my values and that I do not necessarily live by them which is upsetting” and “due to paying more attention to how I feel at times, I have to sit

with difficult emotions". However, some of these challenges came from misunderstanding ACT processes 'struggled to concentrate and stay present without becoming distracted by other thoughts.'

In the face-to-face group, one participant shared how the training had provided them with a framework and language that they felt was helpful 'Training has given a language and framework for talking to others, without seeming dismissive or invalidating around acceptance'. However, it's unclear if they also applied this validating language to themselves. Despite there not being a specific self-compassion focus within the training (though it is implicit in making time for yourself, considering one's own values and what they want from life etc.) some participants shared how their self-compassion changed "I think I've learnt to give myself thinking space. By being kinder to myself I can identify my achievement and feel good about them".

Across both groups there were a range of ways in which they utilised ACT based skills and processes. Participants shared their use of mindfulness, acceptance, and present moment awareness and defusion skills. Further examples not included within the journal paper are; "I think taking time to let trouble float away so I can see the bigger picture has opened my eyes to see the issues" and 'Used an example of a challenge around son's school and finding some of the policies / rules rigid and difficult, but using some of the ideas from the training to take perspective on this' and "let it go" and "I thought the training was excellent. It gave me a lot of insight into how and why I do what I do".

Beyond training

Beyond training captured the way in which ACT related to and could be used in their workplace, in the face-to-face group this included how relevant the training was, not just to their own wellbeing, but their role as a manager and what this meant for their future practice. For example, 'Not sure if the training offering was wider than just to framework, but felt the training was something worth pursuing as being available to other managers.' This theme also highlighted some of the limitations of individual training, in that change needs to occur within the

organisation “not a huge shift there as it needs wider change within our communities”.

This theme captured the participants’ considerations of the workplace and how they were using the training in their wider contexts and systems. For example, ‘Felt the training had been the cause of the noticed changes encouraging reflection and being able to practice the tasks and exercises both in and outside of work. Being able to use these within your team at work, supportive manager, and team where they feel appreciated’ and ‘more understanding of ACT in the service context has been helpful for understanding whether a future ACT related offering would be a worthwhile investment for the service in terms of time and money’.

Training led to behaviour change or intention to change.

Training led to behavioural change or intention to change described the behavioural changes that participants attributed to the training, with many participants noting changes to their own self-care practices. However, it was also noted that they considered training as just the beginning and that they would need to continue to utilise the skills they get the most out of the sessions. For instance, “[training] offered a new perspective and refresher on importance of looking after self” and “More reflection on self-care routine.” When asked if there was anything since training they wanted to change, but hadn’t one participant noted “no, some things I haven’t had time to embed yet but nothing that hasn’t been considered” another shared similar sentiments “will take time, and more than can be addressed in a couple of weeks”.

Participants frequently mentioned changes to self-care practices and how the training had increased their awareness of their self-care but also an intention or actual behavioural changes. For example, “Self-care practice - in particular taking time out of the working day to use guided meditation/mindfulness” and “and allow time for self”. Participants also identified specific behaviours they intended to change or already had, such as smoking, their diet and screen time.

Table 24.

Categories and themes devised from the face-to-face group.

Category	Theme
Participants experiences of training	Engagement with training
Prior expectations of training	
Personal resources that aided practice	
Obstacles to engagement	
Suggestions for future sessions	
Skills gained from training	Implementing skills
Changes in relating to internal experiences	
Training influencing reflection and awareness	
Barriers to skills practice	
Difficulties with utilising ACT theory and processes	
ACT within their wider context	Beyond training
Relevance of training	

Table 25.

Categories and themes devised from the online group.

Categories	Theme
Considerations for future training Participant's perception of training Engagement with training sessions Prior knowledge and expectations Participant's personal resources Group processes	Engagement with training
Using mindfulness skills Exercises and skills practice during training Skills gained from training Barriers to engaging in Practice Relating differently to internal experiences Developing awareness and reflection Difficulties utilising ACT theory and processes.	Implementing skills
Changes related to experiences during training. Training influencing self-care. Training as the starting point	Training led to behavioural change or intention to change
ACT in the organisational context	Beyond training

Table 26.

Codes, categories, and themes from the face-to-face group

Codes	**Category**	**Theme**
Training providing a language.	**Skills gained from training.**	**Implementing skills**
Acceptance as a useful skill		
Training developing		
communication skills		
Developing psychological toolkit		
Developing ACT knowledge		
Utilising acceptance: personally		
Creating psychological distance		
Importance of skills practice	**Training influencing reflection and awareness.**	
Importance of allowing time for practice		
Increased awareness: values		
Increased awareness: self-care		
Increased awareness: internal experiences		
training developing self		
-reflection.		

Codes	Category	Theme
Flexible perspective taking willing to embrace internal experiences. becoming less hooked by internal experiences training developing self-compassion Increasing resilience feeling able to cope Increased confidence: personally No changes noted. Integrating skills with personal resources Being flexible with values No detrimental changes noted.	**Changes in relating to internal experiences.**	
barrier to practice: time Balancing competing demands Difficulty concentrating practical challenge: needs further peer supervision.	**Barriers to skills practice**	
Reflecting with colleagues Considering benefit for the workplace using training with teams	**ACT within their wider context.**	**Beyond training**

Codes	Category	Theme
No changes noticed by others.		
Considering how to put training into practice.		
Increased confidence: at work		
seeking development		
Training as relevant: workplace	**Relevance of training**	**Engagement with training**
Training as relevant: service users		
Training as relevant: personal life		
Skills as relevant to workplace		
Training as relevant: personally, and professionally		
	Prior expectations and experiences	
Prior psychological knowledge		
Unsure what to expect.		
Expected more theory.		
Mindfulness refreshers		
Open minded about training		
Training support prior knowledge		
Refresher of prior knowledge - Contributing to prior knowledge		

Codes	Category	Theme
Training as interesting Training as enjoyable Clear concepts Training as relaxing Training as appealing	**Participant's experiences of training**	
misunderstanding ACT process: control Misunderstanding of ACT processes: mindfulness Misunderstanding of ACT processes: thoughts Exercises as challenging mindfulness as challenging	**Difficulties and misunderstanding with utilising ACT theory and processes.**	
Being open to new experiences Being open minded Supportive others	**Personal resources that aided practice**	
Practical challenge: lack of others participation Practical challenge: needs more participants.	**Obstacles to engagement**	

Codes	Category	Theme
practical challenge: needs a follow up session. Barrier to engagement: travel		
training as responsible for changes Training as normalising and validating. Training as feasible: time and resources Training as possible to implement in service. Training as feasible: resources Training as acceptable Training structure appropriate training as challenging but beneficial Training bridging the theory practice gap. Enjoying group setting	**Perceptions of training**	
Needs more theory. More time for practical applications More links to workplace practices	**Suggestions for future sessions**	

Table 27.

Codes, categories, and themes from the online group.

Code	Category	Theme
No further suggestions	**Considerations from future training**	**Engagement with training**
Suggestion: ice breaker		
Suggestion: face to face		
Suggestion: clearer handouts		
Facilitator suggestion: change voice for exercises		
Suggestion: only 2 sessions		
Suggestion: train the trainer		
Suggestion: more screen breaks		
Suggestion: implementation at work		
Suggestion: timeline for session		
Suggestion: more training		
Suggestion: more values-based tasks		
Suggestion: shorter version		
Suggestion: brief extra sessions		
Suggestion: diary		

Code	Category	Theme
facilitator skills: friendly	**Participants perception of training**	**Engagement with training**
training as accessible		
training as useful		
Training as useful		
training as enjoyable		
training as accessible		
training as relevant		
training as enjoyable		
Facilitator skills: positive		
Training well-paced		
Session time and duration as helpful		
strengthened prior skills.		
no detrimental effects		
Training as interesting		
Fused with self-judgement.		
Training as feasible: enjoyed setting.		
Training as relevant: workplace		
Training as feasible		
Training as accessible		

Code	Category	Theme
Training as well pitched.		
Training as relevant: role		
Training as interesting		
Training providing protected time.		
Training as well executed.		
Training as appealing		
Good timing personally	**Engagement with training sessions**	**Engagement with training**
Boundaries encouraging engagement with training.		
Flexible work hours and location support engagement		
Barrier to engagement: within work hours		
Barrier to engagement: their technical issues		
Barrier to engagement: online		
Barrier to engagement: personal difficulties		
Practical challenge: would prefer fewer sessions.		
Barriers to engagement: missed sessions		
Barrier to engagement: workplace demands.		
Difficulties being vulnerable		
Barrier to engagement: time between sessions		
Barrier to engagement: workplace distractions		

Code	Category	Theme
Barrier to engagement: time scales		
Barrier to engagement: protected work time		
Commitment to engagement and materials as vital		
Prior knowledge	**Prior knowledge and expectations**	**Engagement with training**
Refresher of prior knowledge		
Unsure what to expect.		
Reaffirming prior knowledge		
Prior understanding of emotions		
Supportive group dynamic	**Group processes**	**Engagement with training**
Good group dynamics		
Working through issues together as helpful		
Others as beneficial		
Similar experiences/roles as helpful		
Nothing missing from training.		
Being open as scary but beneficial		
Honesty as beneficial		

Code	Category	Theme
Mindfulness practice Intention to practice mindfulness but struggling. Mindfulness as challenging	**Using mindfulness skills**	**Implementing skills**
Supportive others: family Supportive others: workplace grounding as useful practical exercises as beneficial Videos as helpful Enjoyed learning Exercises: good balance Tools to slow things down SMART goals helpful Exercises as helpful Homework as beneficial Exercises as enjoyable Training as a skills refresher Group discussions as beneficial No unhelpful aspects of training Nothing painful or difficult	**Exercises and skills practice during training**	**Implementing skills**

Code	Category	Theme
Exercises as variable: ease of application		
Exercises as variable		
Exercises positively impact wellbeing		
Less fused with emotions	**Skills gained from training**	**Implementing skills**
Perceived improved decision making.		
Developing psychological toolkit		
Putting training into practice: personally		
External factors: difficulties with work	**Barriers to engaging in practice**	**Implementing skills**
Barrier to exercises: personal fatigue		
Barrier to practice: time		
Barrier to practice: time and concentration		
No barriers to using training.		
Barriers to practice: workplace issues		
Barrier to practice: personal circumstances		
Barrier to practice: difficulty prioritising wellbeing		
Barriers to practice: personal circumstances		
Barrier: lack of participation		
Barrier to practice: procrastination		
increased confidence	**Relating differently to internal experiences**	**Implementing skills**

Code	Category	Theme
Creating psychological distance		
Embracing defusion		
Increased present moment awareness.	**Developing awareness and reflection**	**Implementing skills**
Developing awareness: values and emotions		
Increased awareness: values		
Increased awareness: emotions		
Increased awareness as challenging		
Increased awareness: importance of mindfulness		
Training encouraging awareness of others.		
Being more aware of internal experiences		
Values gap as upsetting		
Allowing reflection before action		
Training encouraging self-reflection: coping mechanisms.		
Increased present moment awareness with others.		
Training encouraging self-reflection: burnout.		
Noticing impact: autopilot		
Understanding impact and importance: mindfulness		
Increased awareness and acceptance: emotions		
training developing self-reflection		

Code	Category	Theme
Misunderstanding act processes: autopilot Misunderstanding act process: control	**Difficulties utilising ACT theory and processes**	**Implementing skills**
Change: allowing time to reflect Change: making note of thoughts Change: using values within staff team Change: making lunch Change: making time for others Change: positive outlook Change: completing work more efficiently Change: More relaxed Change: Linking actions to values Change: Reduced self-judgement Change: More organised Change: focus on career goals Training encouraging behaviour change. Training prompting change. Content causing change. Gain from training despite difficulties Training as encouraging change	**Changes related to experience during training**	**Training led to behavioural change or intention to change**

Code	Category	Theme
Reminder that it is okay to be the priority. Training encouraging focus on personal wellbeing. Self-care: screen time Self-care: increased awareness Change: creating boundaries Self-care: refresher Self-care: time for self Self-care: trying new things Self-care: reflection on routine Self-care: guided meditation at work Self-care: giving up smoking Self-care: reducing phone usage Training encouraging self-care. Training encouraging self-compassion	**Training influencing self-care**	**Training led to behavioural change or intention to change**
Wanting to see significant changes. Needing time after training to make changes. Needing more time to embed changes. Desiring more insight into behaviour Enjoying the journey	**Training as the starting point**	**Training led to behavioural change or intention to change**

Code	Category	Theme
Desire to know outcome. wanting to be assertive		
Service users require integrative work. Training encouraging personal vs organisational values. Considering their role Changes in responsibility at work External factors: new role External factor: changing routine Change in role helpful. Personal difficulties encourage attendance. Wider changes needed.	**ACT within their workplace context**	**Beyond training**

4.0 Extended Discussion

4.1 Current research in relation to prior studies and theory

4.1.1 Efficacy and prior literature

The efficacy of ACT for general wellbeing, mental and physical health and has been demonstrated across a range of meta-analyses and systematic reviews (Bai et al, 2020; Coto-Lesmes et al, 2020; Feliu-Soler et al, 2018; Ferreira et al, 2022; Han et al 2020; Hughes et al, 2017; Gloster et al, 2020; Graham et al 2016). As outlined in both the journal paper and the extended introduction there is also a significant amount of literature documenting the use of ACT within the workplace and more specifically ACT for workplace wellbeing (e.g., Bond & Bunce, 2000; Brinkborg et al, 2011; Flaxman & Bond, 2010a, 2010b, 2010c; Hayes et al 2006a; Lloyd et al, 2013; McConachie et al, 2014; Pakenham, 2017; Prudenzi et al, 2022; Puolakanaho et al, 2020; Reeve et al, 2021; Waters et al, 2018). Whilst one previous study tested ACT for frontline homelessness staff (Reeve et al, 2021) this current study is the first to assess ACT training for workplace wellbeing managers.

Prior studies have investigated the use of a version of the Mindful and Effective Employee training (Lloyd et al, 2013). For example, Flaxman and Bond (2010a) offered a workplace ACT intervention for workers across two government organisations. They found that the training led to significant improvements in mental health and that this was moderated by initial level of distress in that significant change was only seen in a subgroup of participants with higher levels of baseline distress. This is important to consider in relation to the current study, with the average scores (for the online group) and individual scores for the face-to-face participants were not reaching clinical levels of distress on measures of wellbeing, burnout, and STS. This may explain why significant changes were not seen across this current study. Within Flaxman and Bond's (2010a) study they followed up participants three months post-intervention, whereas the current study assessed participants within one-week post-training. This may have also influenced the findings in

the current study. As noted in the journal, a longer follow-up may be beneficial for future research.

In a study investigating the use of ACT for frontline homelessness staff, Reeve et al (2021) found that a 3-session ACT-based intervention led to significant increases in PF post intervention. All but one participant also experienced significant improvements in both work-engagement and exhaustion on the Oldenburg Burnout Inventory (OLBI; Demerouti, Bakker, Vardakou, & Kantas, 2003). The current study contrasts somewhat with these findings, with no significant increase in PF found. At a group level there were significant increases on the VA subscale on the CompACT (Francis et al, 2016) and on general wellbeing on the SWEMWBS (Stewart-Brown et al, 2009; 2021) and a significant decrease on the Proqol-5 STS subscale (Stamm, 2010). There was a large effect sizes for the BO subscale on the PROQOL-5 (Stamm, 2010) in the direction we would expect to see (a decrease) but these did not meet statistical significance.

In the current study, many participants within the online group noted that because of the training they had reflected on their use of self-care and/or made behavioural changes to increase their self-care. This is consistent with prior research, for example Pakenham (2017) found that ACT training significantly increased self-care and 73.7% of participants reported one or more self-care changes in a sample of clinical psychology trainees. The focus of the training in the current project was the participant's personal wellbeing and whilst they were not specifically directed to increase self-care behaviours, it is not unexpected that in talking about and reflecting on their wellbeing led to changes in their self-care. It may have also been that by encouraging participants to reflection on their values may have also contributed to their change in self-care behaviours, engaging with hobbies or activities that were important to them. These changes in self-care behaviours may relate to the significant increase on the CompACT VA with participants using their values (e.g., caring, self-compassion) to guide their actions.

4.1.2 Change ratings

Participants were asked as part of the adapted Client Change Interviews (Elliott & Rodgers, 2008) to rate the changes their noticed and consider if they attributed these to the training itself or other factors. This can be important because it allows the consideration of how or why change occurs (Thompson & Harper, 2012). Whilst this current study was concerned with the feasibility and acceptability of the intervention and is not a piece of change process research, the change ratings were gathered and analysed as part of the qualitative analysis outlined previously. This allowed the authors to consider what changes participants identified and if they credited these to the training itself and not external factors. Generally, participants attributed their changes to their involvement and engagement with the current training. Future research could explore this in more detail using active control conditions to consider if it is the ACT training itself leading to changes or if there are other more general components (e.g., being part of a group) that account for any post-training change. It would also be interesting to evaluate participants change ratings over a longer period to assess if the training leads to longer-term behavioural change in the participants.

4.2 Clinical Implications

The current project demonstrates that ACT can be an acceptable theory to underpin staff wellbeing training for managers in homelessness services for their wellbeing. This has clear clinical implications for these services to support staff who are under immense pressure which is likely to rise given the cost-of-living pressures that the UK is facing. Workplace wellbeing is critical, with rising numbers of people taking time off for stress, anxiety, and depression (WHO, 2022a). Those working within homelessness services are also at a significantly increased risk for vicarious traumatisation, STS, and burnout (Baird & Kracen, 2006; Lakeman 2011; Lemieux-Cumberlege et al, 2023; Schiff & Lane, 2019; Wirth et al, 2019). Therefore, it is crucial that there are interventions offered which are feasible and acceptable for this group.

Despite the focus of this project being on individual wellbeing, it must be acknowledged that there are also important organisational and systemic shifts which must also take place. This was highlighted within the project, with the face-to-face participants unable to attend the final session due to workplace emergencies and many participants in the online condition also reporting a difficulty finding time within work to attend the sessions. Employees need support from their own management and the system around them to be able to engage with these sessions, it is not just enough to provide sessions and expect employees to be able to attend. Protected time and opportunities also should be offered for individuals to make use of the skills and training, so that they benefit from the training long term. This is especially important considering that skills require deliberate practice to develop (Campitelli & Gobert, 2011). The barriers to engaging in workplace wellbeing training is also important considering the responsibility that employers have to their employees. Farmer and Stevenson's (2020) report also highlighted how companies can use their enhanced mental health standards to improve employee mental health and wellbeing by providing tailored support. This study demonstrates that ACT could be used to provide such tailored support to managers of homelessness services.

4.3 Research implications

This study showed tentative but promising findings the use of ACT training as a wellbeing intervention for managers of homelessness services. Whilst there is a wide range of evidence demonstrating the effectiveness of ACT within various workplaces, this is the first study to assess the use of ACT for managers within homelessness services. This study therefore contributes to the evidence base by acceptability of the ACT intervention for this population and identifying adaptations that may be made to increase feasibility to be assessed in future research. The participant's feedback within the change interviews provides suggestions for adaptations for future ACT training with this population. There is scope to optimise the training for this population with a view to repeating the trial with a larger cohort.

4.4 Extended critique and critical reflection

This study was designed to be a feasibility and acceptability trial to see if the training would be appropriate for managers of homelessness services. Challenges that arose during this study can offer insight for future projects wishing to expand upon this study and assess this training within a larger cohort. This section considers some of the challenges that arose, how I tried to mitigate the impact of some of the challenges and the implications for future research.

4.4. 1 Limitations and considerations for future research

A challenge within this study was the added burden to participants of the research measures. Whilst we tried to limit the burden as much as we could by using short forms and providing them online so participants could complete them whenever they had time, there was still a limited number of participants who completed the measures. This meant that some participant's views and scores were overrepresented in the analysis and may have introduced bias. We did, however, try to assess this by statistically comparing those who completed measures relative to those who did not to see if they could be assessed as one group. There was no significant difference between them and so we did analyse them as one group. This measure completion also made it difficult when considering how feasible the training was because it may have been that for some the training itself was feasible, but the added research element was less so.

The time of training may also have had an impact on the outcomes and participants ability to engage in the training. The training was delivered within work time, in the afternoon. This time was chosen because the authors felt that a workplace intervention should be provided within work hours, so that people are not using their own personal time for an intervention that is work-based. Nonetheless, many participants reported that workplace demands meant they were unable to attend or engage fully with the training. Alternative times could be tested to see if this supports engagement, however it also highlights the difficulties for managers and the lack of protected time available for their own

development. Wider changes within organisations could provide employees with the protected time to make use of such training.

A further limitation of the study was out of the author's control. The university changed the software from Qualtrics to Question Pro mid-way through data collection which meant that measures had to be created again and participants had to be given updated details. This led to some difficulties for the first author to ensure that they had the measures uploaded to fit within the time frames for data collection. An error was made that meant that the anonymising codes were not included for time one for the online group and we could not include this data within the analysis. The first author had a colleague check their measures but had obviously missed this error as well as the author themselves missing it. This means that participants who may have provided data at time 1 only were not included in the analysis. This is unfortunate but provided an important learning opportunity to check every measure thoroughly.

Another possible limitation of the study is that this was the first time that the author had run this training which could potentially have impacted the way in which it was delivered and therefore, outcomes. However, the author does use ACT clinically on a regular basis, has completed further training on ACT and using ACT and was supervised by the second author who also uses ACT clinically.

A challenge with the online condition of the training was that it was more challenging to assess participants in between session work. Whilst there was space and time given at the start of session two and three to reflect on their experiences, not being in the same room meant I could not easily look at peoples completed handouts and diaries to see how much practice they had been able to complete and relied on their self-report. It would have potentially been beneficial to have some questions included within the measures about their in-between session work and how much they were able to engage with it.

4.4.2 Strengths of the project

Despite there being limitations and challenges to the current project which have been outlined here and within the journal paper, it is also important to consider what went well and reflect on strengths.

One strength of the project was the participant's engagement within sessions. In both groups participants embraced the exercises, took time to reflect on these and shared their personal and work experiences that were relevant to the training.

A further strength of the project was the support from the Practice Development Unit, Homeless Link and Framework Housing Association. Being able to link with these organisations for advertising the training and for practical support both in person and online was very valuable. Connecting with these services developed my understanding of third sector organisations and the challenges that they face with regards to staff wellbeing and support. This is something I will take forward in my research and clinical work to inform my practice. Furthermore, the second author works clinically in homelessness services and a wellbeing practitioner from Framework Housing Association (a charity delivering housing, health, employment, support and care services to people with a diverse range of needs across the East Midlands) were able to provide insights into the challenges faced by managers. This included the current support and training that is provided, and they also shared anecdotal evidence regarding the barriers to training for managers. This was extremely helpful when designing the project, encouraging us to consider possible barriers to engagement and how we could make the training as well as the research aspect feasible and accessible.

Throughout the development of this current study, it has been taken to research panels and presented. These panels consisted of members of course staff who are experienced in designing and implementing research and service users who work with the course and have a range of their own personal and professional experiences within mental and physical health services. These

panels provided a space for the study to be evaluated and feedback given which helped to navigate challenges and limitations.

A further strength of the current study is that it used a training package – The Mindful and Effective Employee (Flaxman et al, 2013) that has been specifically designed for use within the workplace for staff team's wellbeing. This training package uses a "2+1" schedule whereby participants attend session one and session two a week apart and the third and final session a month later as a "Booster session" (Flaxman et al, 2013). The "2+1" style of intervention has been adapted and trialled in a variety of settings (for example, Bond & Bunce, 2000; Brinkborg et al 2011; Flaxman & Bond, 2010a, 2010b; Flaxman et al, 2013; Lloyd et al 2013; Macías et al 2019; Prudenzi et al 2022). It was beneficial to use a previously tested and validated ACT intervention for staff wellbeing. This allowed the current study to be considered with regards to results and effect sizes relative to previous studies.

4.4. 3 Critical reflection

Prior to the Dclinpsy I had an interest in ACT as a theory and as a therapy, I had been introduced to the model by a previous supervisor and found that it fit well with my clinical work, my style of therapy, and I enjoyed using the model personally. Therefore, I was interested in completing a project using ACT and learning more about the model and its clinical applications. I was curious about using ACT for workplace wellbeing and how the model could be adapted and applied to a group of individuals who may experience a wide range of difficulties and may or may not reach clinical levels of distress.

Throughout the process of completing the project, I took time to reflect on my own experiences, holding in mind ACT processes and theory to guide my reflections. I feel that this allowed me to take a step back from the project and my work in a helpful way and to see the bigger picture, when at times I could find myself quite fused with challenges, the workload, and my own emotional experience. I found that also by using the theory to reflect on my own Hexaflex and using the strategies, this allowed me to engage with the sessions and

training in a way that I felt made my facilitation of the sessions more authentic and I was able to use self-disclosure appropriately during the sessions.

Dual role as researcher and facilitator

Once it was agreed that I would be facilitating the training sessions, I was acutely aware of my dual role within the project and the way that this may have impacted on participants. Initially, I was anxious and fused with my own worries about failure when it was decided that I would be facilitating the sessions. I have facilitated training before but usually for small groups, often peers and so this felt daunting. I was also fused with thoughts about the training not being helpful for participants and feelings of anxiety associated with these thoughts. However, I took time to reflect on this in supervision and utilising defusion, step back from these internal experiences and allow myself to take steps to prepare for the sessions despite what was showing up for me internally. Furthermore, I felt that by increasing my competence, using formal training, further reading and regular research supervision I would be able to deliver the training in a way that was ACT consistent and potentially beneficial for participants. Throughout the project I felt my enthusiasm for ACT and the way it can be used for homelessness staff grow.

Holding my dual role in mind, I wanted to provide the measures and interviews in a way that would minimise the pressure participants may have felt because of my dual role. Therefore, measures were uploaded to Question Pro and from the beginning I used participant created codes for the measures and interviews to anonymise the participants. Furthermore, my colleague from the course facilitated the face-to-face participants change interviews and anonymised the notes prior to sending them to me. I was also aware that my dual role as facilitator for the training and researcher along with my enthusiasm for the training and ACT as a model may have influenced my analysis. Therefore, throughout analysis and interpretation of my data I took time to reflect on this dual role and take steps to minimize bias where possible. During my content analysis, my codes, categories, and themes were shared with my supervisors and with colleagues on the course to encourage

discussion and reflection. This allowed me to see alternative perspectives and identify when I was potentially fused with my own rules about how I should analyse the data. Gaining feedback and making space for reflection throughout the process supported me in taking a step back from my position to evaluate the research. I also kept a reflective diary each day to encourage reflection throughout the process and further support me to take a step back from my role and consider the wider perspective.

Personal strengths and learning points.

As noted, facilitating the training led to fusion with feelings of anxiety and stress and judgements about my own abilities. Therefore, I consider the sessions and the way my skills in facilitation have developed as a clear strength that I have taken away from this process. Facilitating the sessions also encouraged my use of ACT personally which I felt developed my insight and further encouraged my passion for the model, theory, and strategies. This also provided insights into the experiences of the participants, noting my own barriers to practice and difficulties with some of the strategies (e.g., certain defusion strategies such as singing your thought). I think this made me aware of how challenging it can be, balancing learning or adopting new strategies whilst also dealing with the demands of life and work. Whilst I feel that I already had a reasonable understanding of this, hearing from the managers about the demands they faced and noticing my own barriers to practice really strengthened my awareness. I also was more acutely aware of how difficult it can be for managers in homelessness services, who are often dealing with emergencies including deaths in service to have the ability to engage with and to take on new strategies. Whilst I already try to adapt sessions for my clients, I think this experience has made me more aware of some of the challenges putting this into practice once people leave the session. This is something I aim to be more aware of for each client, to support them in the most appropriate way.

My skills and abilities in developing research have progressed significantly over the course of this project. There have been many processes, tasks, and

analyses that I have accomplished during this project that I have never completed before which has been both challenging but also interesting. Whilst there have been challenges, difficulties and some errors made over the course of the project, I feel that I have tried my best at each stage to learn, develop and reflect on my abilities. Moving forward I want to take my research skills into my clinical practice, both engaging in my own research but also evaluating and incorporating research into my clinical practice.

Something that has been especially important throughout this project is establishing and maintaining my personal and professional boundaries. I was very aware at the beginning of the project that it was going to be challenging managing my time and workload within study hours and that there could be the temptation to allow the project to take over personal time. Therefore, I tried my best to maintain these boundaries, using out of office notifications, making timelines and schedules to support this. This generally worked well for me, though I must acknowledge that there were times this was challenging. I did also use ACT to try and support this, by using cognitive defusion strategies when I noticed myself thinking of the project when I was at home (especially when trying to sleep). I also used the strategy of Dropping Anchor (Harris, 2009) when I felt myself becoming overwhelmed or stressed and needed to ground myself. This experience is something I can take forward to future research projects and my clinical practice. It can be so important to have strategies to support a good work-life balance and wellbeing as clinical psychologists, especially considering the way in which our work can impact on wellbeing (Craig & Sprang, 2010; McCormack et al, 2018).

Despite my research skills improving significantly over the course of this project, there are still areas that I am keen to develop. For example, I have enjoyed using qualitative analysis during this project and during my small-scale research project because it allows you to develop an in-depth view of the client's experiences and perceptions. I am motivated to continue to develop my skills using further qualitative methods post-qualification. I am very aware that with the time pressures and demands of post-qualified work it can be difficult to make space for research, but this is something I am passionate

about continuing. I aim to attempt to negotiate space for research within my qualified role/s to ensure that my research skills can continue to develop and aid the service/s I will be working in.

Extended Paper References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Archer, R. (2018). *The impact of a focused acceptance and commitment training workplace intervention: is less, less?* (Doctoral dissertation, Kingston University).

Axenova, K. (2022). *A Pilot Study of the Effectiveness and Feasibility of a Brief, Online, and Self-Guided Acceptance and Commitment Therapy Intervention for Intellectual and Developmental Disability Support Staff* (Doctoral dissertation, The University of Western Ontario (Canada)).

Bai, Z., Luo, S., Zhang, L., Wu, S., & Chi, I. (2020). Acceptance and commitment therapy (ACT) to reduce depression: A systematic review and meta-analysis. *Journal of Affective Disorders*, *260*, 728-737. https://doi.org/10.1016/j.jad.2019.09.040

Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, *19*(2), 181-188. https://doi.org/10.1080/09515070600811899

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *4*(6), 561-571.

Biglan, A., & Hayes, S. C. (1996). Should the behavioral sciences become more pragmatic? The case for functional contextualism in research on

human behavior. *Applied and Preventive Psychology*, *5*(1), 47-57. https://doi.org/10.1016/S0962-1849(96)80026-6

Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: care of the patient requires care of the provider. *The Annals of Family Medicine*, *12*(6), 573-576. https://doi.org/10.1370/afm.1713

Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5*(1), 156. https://doi.org/10.1037/1076-8998.5.1.156

Bond, F. W., Flaxman, P. E., van Veldhoven, M. J., & Biron, M. (2010). The impact of psychological flexibility and acceptance and commitment therapy (ACT) on health and productivity at work. *Contemporary Occupational Health Psychology: Global perspectives on research and practice*, *1*, 296-313. DOI:10.1002/9780470661550

Bond, F. W., & Hayes, S. C. (2002). ACT at work. *Handbook of Brief Cognitive Behaviour Therapy*, 117-140. DOI:10.1002/9780470713020

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

Bond, F. W., Lloyd, J., Flaxman, P. E., & Archer, R. (2015). Psychological flexibility and ACT at work. *The Wiley handbook of contextual behavioral science*, 459-482. https://doi.org/10.1002/9781118489857.ch22

Boone, M. S., Mundy, B., Morrissey Stahl, K., & Genrich, B. E. (2015). Acceptance and commitment therapy, functional contextualism, and clinical social work. *Journal of Human Behavior in the Social Environment*, *25*(6), 643-656. https://doi.org/10.1080/10911359.2015.1011255

Bramley, G., & Fitzpatrick, S. (2018). Homelessness in the UK: who is most at risk?. *Housing Studies*, *33*(1), 96-116. https://doi.org/10.1080/02673037.2017.1344957

Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011). Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour Research and Therapy, 49*(6-7), 389-398. https://doi.org/10.1016/j.brat.2011.03.009

Butler, P. (2023, January 30th). "Homeless people in English hostels at risk of return to streets as bills soar". The Guardian. https://www.theguardian.com/society/2023/jan/30/homeless-people-in-english-hostels-at-risk-of-return-to-streets-as-bills-soar

Calderwood, S. (2023). Investigating the effectiveness of an internet-delivered acceptance and commitment therapy intervention for staff working with individuals with intellectual disabilities in reducing psychological distress and burnout. http://dx.doi.org/10.7488/era/3759

Campitelli, G., & Gobet, F. (2011). Deliberate practice: Necessary but not sufficient. *Current Directions in Psychological Science*, *20*(5), 280-285. https://doi.org/10.1177/0963721411421922

Cascales-Pérez, M. L., Ferrer-Cascales, R., Fernández-Alcántara, M., & Cabañero-Martínez, M. J. (2021). Effects of a mindfulness-based programme on the health-and work-related quality of life of healthcare

professionals. *Scandinavian Journal of Caring Sciences*, *35*(3), 881-891. https://doi.org/10.1111/scs.12905

Chartered Institute for Personnel and Development (2023, September). Health and Wellbeing at Work. https://www.cipd.org/uk/knowledge/reports/health-well-being-work/

Chong, Y. Y., Frey, E., Chien, W. T., Cheng, H. Y., & Gloster, A. T. (2023). The role of psychological flexibility in the relationships between burnout, job satisfaction, and mental health among nurses in combatting COVID-19: A two-region survey. *Journal of Nursing Scholarship*. https://doi.org/10.1111/jnu.12874

Corbin J and Strauss A (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Los Angeles, CA: SAGE.

Coto-Lesmes, R., Fernández-Rodríguez, C., & González-Fernández, S. (2020). Acceptance and Commitment Therapy in group format for anxiety and depression. A systematic review. *Journal of Affective Disorders*, *263*, 107-120. https://doi.org/10.1016/j.jad.2019.11.154

Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, & Coping*, *23*(3), 319-339. https://doi.org/10.1080/10615800903085818

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 19(1), 12–23.

Department for Levelling up, Housing & Communities, (2023, July 25th) Statutory homelessness in England: January to March 2023. https://www.gov.uk/government/statistics/statutory-homelessness-in-england-january-to-march-2023/statutory-homelessness-in-england-january-to-march-2023

Devilly, G. J., Wright, R., & Varker, T. (2009). Vicarious trauma, secondary traumatic stress or simply burnout? Effect of trauma therapy on mental health professionals. *Australian & New Zealand Journal of Psychiatry*, *43*(4), 373-385. https://doi.org/10.1080/00048670902721079

Duncan, B. L., & Miller, S. D. (2007). The group session rating scale. *Jensen Beach, FL: Author*.

Elder-Vass, D. (2022). Pragmatism, critical realism, and the study of value. *Journal of Critical Realism*, *21*(3), 261-287. https://doi.org/10.1080/14767430.2022.2049088

Feliu-Soler, A., Montesinos, F., Gutiérrez-Martínez, O., Scott, W., McCracken, L. M., & Luciano, J. V. (2018). Current status of acceptance and commitment therapy for chronic pain: a narrative review. *Journal of Pain Research*, 2145-2159. https://doi.org/10.2147/JPR.S144631

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*, *4*(1), 6-16. https://doi.org/10.1177/1558689809349691

Ferreira, M. G., Mariano, L. I., de Rezende, J. V., Caramelli, P., & Kishita, N. (2022). Effects of group Acceptance and Commitment Therapy (ACT) on anxiety and depressive symptoms in adults: A meta-analysis. *Journal of Affective Disorders*, *309*, 297-308. https://doi.org/10.1016/j.jad.2022.04.134

Figley, C. R. (1995). Compassion fatigue: Toward a new understanding of the costs of caring.

Finucane, A. M., Hulbert-Williams, N. J., Swash, B., Spiller, J. A., Wright, B., Milton, L., & Gillanders, D. (2023). Feasibility of RESTORE: An online Acceptance and Commitment Therapy intervention to improve palliative care staff wellbeing. *Palliative Medicine*, *37*(2), 244-256. https://doi.org/10.1177/02692163221143817

Flaxman, P. E., & Bond, F. W. (2006). Acceptance and commitment therapy (ACT) in the workplace. *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications*, 377-402.

Flaxman, P. E. (2006). *Acceptance-based and traditional cognitive-behavioural stress management in the workplace: Investigating the mediators and moderators of change* (Doctoral dissertation, Goldsmiths, University of London). https://doi.org/10.25602/GOLD.00028914

Flaxman, P. E., & Bond, F. W. (2010a). Worksite stress management training: Moderated effects and clinical significance. *Journal of Occupational Health Psychology, 15*(4), 347–358. https://doi.org/10.1037/a0020522

Flaxman, P. E., & Bond, F. W. (2010b). A randomised worksite comparison of acceptance and commitment therapy and stress inoculation training. *Behaviour Research and Therapy*, *48*(8), 816-820. https://doi.org/10.1016/j.brat.2010.05.004

Flaxman, P. E., & Bond, F. W. (2010c). Acceptance and commitment training: Promoting psychological flexibility in the workplace. *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change*, 282-306.

Flaxman, P. E., Bond, F. W., & Livheim, F. (2013). *The mindful and effective employee: An acceptance and commitment therapy training manual for improving well-being and performance*. New Harbinger Publications.

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, *48*(1), 150.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 219-239.

Frögéli, E., Djordjevic, A., Rudman, A., Livheim, F., & Gustavsson, P. (2016). A randomized controlled pilot trial of acceptance and commitment training (ACT) for preventing stress-related ill health among future nurses. *Anxiety, Stress, & Coping*, *29*(2), 202-218. https://doi.org/10.1080/10615806.2015.1025765

Francis, A. W., Dawson, D. L., & Golijani-Moghaddam, N. (2016). The development and validation of the Comprehensive assessment of Acceptance and Commitment Therapy processes (CompACT). *Journal of Contextual Behavioral Science*, *5*(3), 134-145. https://doi.org/10.1016/j.jcbs.2016.05.003

Garner, E. V., & Golijani-Moghaddam, N. (2021). Relationship between psychological flexibility and work-related quality of life for healthcare professionals: A systematic review and meta-analysis. *Journal of*

Contextual Behavioral Science, *21*, 98-112. https://doi.org/10.1016/j.jcbs.2021.06.007

Goldberg, D., & Williams, P. (2000). General health questionnaire (GHQ). *Swindon, Wiltshire, UK: nferNelson*.

Grassian, T. (2022). Homeless Link 2022 Workforce Survey: Key findings. https://homeless.org.uk/knowledge-hub/homelessness-workforce-survey-2022/

Graham, C. D., Gouick, J., Krahé, C., & Gillanders, D. (2016). A systematic review of the use of Acceptance and Commitment Therapy (ACT) in chronic disease and long-term conditions. *Clinical Psychology Review*, *46*, 46-58. https://doi.org/10.1016/j.cpr.2016.04.009

Gribbons, D. S. (2023). *Using Psychological Flexibility to Predict Burnout and PTSD Symptom Severity Among Firefighters* (Doctoral dissertation, California Lutheran University).

Gloster, A. T., Walder, N., Levin, M. E., Twohig, M. P., & Karekla, M. (2020). The empirical status of acceptance and commitment therapy: A review of meta-analyses. *Journal of Contextual Behavioral Science*, *18*, 181-192. https://doi.org/10.1016/j.jcbs.2020.09.009

Hafkenscheid, A. (2005). Event countertransference and vicarious traumatization: Theoretically valid and clinically useful concepts?. *European Journal of Psychotherapy & Counselling*, *7*(3), 159-168. https://doi.org/10.1080/13642530500183804

Han, A., Yuen, H. K., Lee, H. Y., & Zhou, X. (2020). Effects of acceptance and commitment therapy on process measures of family caregivers: A

systematic review and meta-analysis. *Journal of Contextual Behavioral Science*, *18*, 201-213. https://doi.org/10.1016/j.jcbs.2020.10.004

Hayes, S. C. (2004a). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, *35*(4), 639-665. https://doi.org/10.1016/S0005-7894(04)80013-3

Hayes, S. C., Barnes-Holmes, D., & Roche, B. (Eds.). (2001). Relational frame theory: A post-Skinnerian account of human language and cognition.

Hayes, S. C., Bond, F. W., & Barnes-Holmes, D. (Eds.). (2006c). *Acceptance and mindfulness at work: Applying acceptance and commitment therapy and relational frame theory to organizational behavior management* (Vol. 26, No. 1-2). Psychology Press.

Hayes, S. C., Bunting, K., Herbst, S., Bond, F. W., & Barnes-Holmes, D. (2006a). Expanding the scope of organizational behavior management: Relational frame theory and the experimental analysis of complex human behavior. *Journal of Organizational Behavior Management, 26*(1-2), 1-23. https://doi.org/10.1300/J075v26n01_01

Hayes, S., Hayes, L. J., Reese, H. W., & Sarbin, T. R. (1993). Varieties of Scientific Contextualism.

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006b). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*(1), 1-25. https://doi.org/10.1016/j.brat.2005.06.006

Hayes, S. C., Masuda, A., Bissett, R., Luoma, J., & Guerrero, L. F. (2004b). DBT, FAP, and ACT: How empirically oriented are the new behavior

therapy technologies?. *Behavior Therapy*, *35*(1), 35-54. https://doi.org/10.1016/S0005-7894(04)80003-0

Hayes, S. C., Pistorello, J., & Levin, M. E. (2012). Acceptance and commitment therapy as a unified model of behavior change. *The Counseling Psychologist*, *40*(7), 976-1002. https://doi.org/10.1177/0011000012460836

Hayes, S. C.. Strosahl, K. D., Bunting, K., Twohig, M., & Wilson, K. (2004c). What is acceptance and commitment therapy? In S. C. Hayes & K. D. Strosahl (Eds.). A practical guide to acceptance and commitment therapy. New York: Springer.

Hayes, S. C., Strosahl, K. D., & Strosahl, K. (Eds.). (2004). *A practical guide to acceptance and commitment therapy*. Springer Science & Business Media.

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

Hayes, S. C., Wilson, K. W., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology, 64*(6), 1152-1168. https://psycnet.apa.org/doi/10.1037/0022-006X.64.6.1152

Health and Safety Executive (2022) *Health and safety statistics. Summary statistics for Great Britain 2022.* https://www.hse.gov.uk/statistics/?utm_source=press.hse.gov.uk&utm_medium=referral&utm_campaign=annual-stats-22

Homeless Link (2022, April 7th). What causes homelessness. https://homeless.org.uk/knowledge-hub/what-causes-homelessness/

Hughes, L. S., Clark, J., Colclough, J. A., Dale, E., & McMillan, D. (2017). Acceptance and commitment therapy (ACT) for chronic pain. *The Clinical Journal of Pain*, *33*(6), 552-568. https://doi.org/10.1097/AJP.0000000000000425

Keats, H., Maguire, N., Johnson, R., & Cockersall, P. (2012). Psychologically informed services for homeless people.

K Hopper, E., L Bassuk, E., & Olivet, J. (2010). Shelter from the storm: Trauma-informed care in homelessness services settings. *The Open Health Services and Policy Journal*, *3*(1). http://dx.doi.org/%2010.2174/1874924001003010080

Kelly, L. M., & Cordeiro, M. (2020). Three principles of pragmatism for research on organizational processes. *Methodological Innovations*, *13*(2), 2059799120937242. https://doi.org/10.1177/2059799120937242

Kivimäki, M., & Kawachi, I. (2015). Work stress as a risk factor for cardiovascular disease. *Current Cardiology Reports, 17*, 1-9. https://doi.org/10.1007/s11886-015-0630-8

Koushede, V., Lasgaard, M., Hinrichsen, C., Meilstrup, C., Nielsen, L., Rayce, S. B., Torres-Sahli, M., Gudmundsdottir, D.G., Stewart-Brown, S., & Santini, Z. I. (2019). Measuring mental well-being in Denmark: Validation of the original and short version of the Warwick-Edinburgh mental well-being scale (WEMWBS and SWEMWBS) and cross-cultural comparison across four European settings. *Psychiatry Research*, *271*, 502-509. https://doi.org/10.1016/j.psychres.2018.12.003

Lakeman, R. (2011). How homeless sector workers deal with the death of service users: A grounded theory study. *Death Studies*, *35*(10), 925-948. https://doi.org/10.1080/07481187.2011.553328

Lemieux-Cumberlege, A. H., Griffiths, H., Pathe, E., & Burley, A. (2023). Posttraumatic stress disorder, secondary traumatic stress, and burnout in frontline workers in homelessness services: risk and protective factors. *Journal of Social Distress and Homelessness*, 1-12. https://doi.org/10.1080/10530789.2023.2191405

Liu, M., Luong, L., Lachaud, J., Edalati, H., Reeves, A., & Hwang, S. W. (2021). Adverse childhood experiences and related outcomes among adults experiencing homelessness: a systematic review and meta-analysis. *The Lancet Public Health*, *6*(11), e836-e847. https://doi.org/10.1016/S2468-2667(21)00189-4

Lloyd, J., Bond, F. W., & Flaxman, P. E. (2013). The value of psychological flexibility: Examining psychological mechanisms underpinning a cognitive behavioural therapy intervention for burnout. *Work & Stress, 27*(2), 181-199. https://doi.org/10.1080/02678373.2013.782157

Macías, J., Valero-Aguayo, L., Bond, F. W., & Blanca, M. J. (2019). The efficacy of functional-analytic psychotherapy and acceptance and commitment therapy (FACT) for public employees. *Psicothema*, *31*(1), 24-29.

Maslach, C., & Leiter, M. P. (1976). Bumout. *Human Behavior*, *5*(9), 16-22.

Maslach, C., & Leiter, M. P. (2016). Burnout. In *Stress: Concepts, cognition, emotion, and behavior* (pp. 351-357). Academic Press. https://doi.org/10.1016/B978-0-12-800951-2.00044-3

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with

victims. *Journal of Traumatic Stress*, *3*, 131-149. https://doi.org/10.1007/BF00975140

McConachie, D. A. J., McKenzie, K., Morris, P. G., & Walley, R. M. (2014). Acceptance and mindfulness-based stress management for support staff caring for individuals with intellectual disabilities. *Research in Developmental Disabilities*, *35*(6), 1216-1227. https://doi.org/10.1016/j.ridd.2014.03.005

McCormack, H. M., MacIntyre, T. E., O'Shea, D., Herring, M. P., & Campbell, M. J. (2018). The prevalence and cause (s) of burnout among applied psychologists: A systematic review. *Frontiers in psychology*, *9*, 1897. https://doi.org/10.3389/fpsyg.2018.01897

McCracken, L. M., & Yang, S. Y. (2008). A contextual cognitive-behavioral analysis of rehabilitation workers' health and well-being: Influences of acceptance, mindfulness, and values-based action. *Rehabilitation Psychology*, *53*(4), 479. https://psycnet.apa.org/doi/10.1037/a0012854

Meichenbaum, D. (1985). Stress inoculation training. *New York*, *304*.

Mitmansgruber, H., Beck, T. N., & Schüßler, G. (2008). “Mindful helpers”: Experiential avoidance, meta-emotions, and emotion regulation in paramedics. *Journal of Research in Personality*, *42*(5), 1358-1363. https://doi.org/10.1016/j.jrp.2008.03.012

Murphy, L. R. (1996). Stress management in work settings: A critical review of the health effects. *American Journal of Health Promotion*, *11*(2), 112-135. https://doi.org/10.1016/j.jrp.2008.03.012

Montaner, X., Tárrega, S., Pulgarin, M., & Moix, J. (2022). Effectiveness of acceptance and commitment therapy (ACT) in professional dementia

caregivers burnout. *Clinical Gerontologist*, *45*(4), 915-926. https://doi.org/10.1080/07317115.2021.1920530

Morgan, D. L. (2013). *Integrating qualitative and quantitative methods: A pragmatic approach*. Sage publications.

Ng Fat, L., Scholes, S., Boniface, S., Mindell, J., & Stewart-Brown, S. (2017). Evaluating and establishing national norms for mental wellbeing using the short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS): findings from the Health Survey for England. *Quality of Life Research*, *26*, 1129-1144. https://doi.org/10.1007/s11136-016-1454-8

Orsillo, S. M., Roemer, L., Lerner, J. B., & Tull, M. T. (2004). Acceptance, Mindfulness, and Cognitive-Behavioral Therapy: Comparisons, Contrasts, and Application to Anxiety. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and Acceptance: Expanding the Cognitive-Behavioral Tradition* (pp. 66–95).

Paris, A., Grindle, C., Baker, P., Brown, F. J., Green, B., & Ferreira, N. (2021). Exposure to challenging behaviour and staff psychological well-being: The importance of psychological flexibility and organisational support in special education settings. *Research in Developmental Disabilities*, *116*, 104027. https://doi.org/10.1016/j.ridd.2021.104027

Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. WW Norton & Co.

Pepper, S. C. (1942). *World hypotheses: A study in evidence* (Vol. 31). Univ of California Press.

Peters, L., Hobson, C. W., & Samuel, V. (2022). A systematic review and meta-synthesis of qualitative studies that investigate the emotional experiences of staff working in homeless settings. *Health & Social Care in the Community*, *30*(1), 58-72. https://doi.org/10.1111/hsc.13502

PIE Link Net (n.d). *PIEs 2.0 – Five core themes. http://pielink.net/pies-2-0-the-basics/*

Prudenzi, A., Graham, C. D., Clancy, F., Hill, D., O'Driscoll, R., Day, F., & O'Connor, D. B. (2021). Group-based acceptance and commitment therapy interventions for improving general distress and work-related distress in healthcare professionals: A systematic review and meta-analysis. *Journal of Affective Disorders*, *295*, 192-202. https://doi.org/10.1016/j.jad.2021.07.084

Prudenzi, A., Graham, C. D., Flaxman, P. E., Wilding, S., Day, F., & O'Connor, D. B. (2022). A workplace Acceptance and Commitment Therapy (ACT) intervention for improving healthcare staff psychological distress: A randomised controlled trial. *PloS one*, *17*(4), e0266357. https://doi.org/10.1371/journal.pone.0266357

Puolakanaho, A., Tolvanen, A., Kinnunen, S. M., & Lappalainen, R. (2020). A psychological flexibility-based intervention for burnout: A randomized con-trolled trial. *Journal of Contextual Behavioral Science, 15*, 52-67. https://doi.org/10.1016/j.jcbs.2019.11.007

Quirk, K., Miller, S., Duncan, B., & Owen, J. (2013). Group Session Rating Scale: Preliminary psychometrics in substance abuse group interventions. *Counselling and Psychotherapy Research*, *13*(3), 194-200. https://doi.org/10.1080/14733145.2012.744425

Quick, J. C., Quick, J. D., Nelson, D. L., & Hurrell Jr, J. J. (1997). *Preventive stress management in organizations*. American Psychological Association. https://psycnet.apa.org/doi/10.1037/10238-000

Reeve, A., Moghaddam, N., Tickle, A., & Young, D. (2021). A brief acceptance and commitment intervention for work-related stress and burnout amongst frontline homelessness staff: A single case experimental design series. *Clinical Psychology & Psychotherapy, 28*(5), 1001-1019. https://doi.org/10.1002/cpp.2555

Reeve, A., Tickle, A., & Moghaddam, N. (2018). Are acceptance and commitment therapy-based interventions effective for reducing burnout in direct-care staff? A systematic review and meta-analysis. *Mental Health Review Journal*, *23*(3), 131-155. https://doi.org/10.1108/MHRJ-11-2017-0052

Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*, *88*(3), 533-562. https://doi.org/10.1111/joop.12120

Roche, B., Barnes-Holmes, Y., Barnes-Holmes, D., Stewart, I., & O'Hora, D. (2002). Relational frame theory: A new paradigm for the analysis of social behavior. *The Behavior Analyst*, *25*, 75-91. https://doi.org/10.1007/BF03392046

Rudaz, M., Twohig, M. P., Ong, C. W., & Levin, M. E. (2017). Mindfulness and acceptance-based trainings for fostering self-care and reducing stress in mental health professionals: A systematic review. *Journal of Contextual Behavioral Science*, *6*(4), 380-390. https://doi.org/10.1016/j.jcbs.2017.10.001

Saakvitne, K. W., & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization*. WW Norton & Co.

Sabin-Farrell, R., & Turpin, G. (2003). Vicarious traumatization: implications for the mental health of health workers?. *Clinical Psychology Review*, *23*(3), 449-480. https://doi.org/10.1016/S0272-7358(03)00030-8

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. d. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PloS One, 12*(10), e0185781. https://doi.org/10.1371/journal.pone.0185781

Sansó, N., Galiana, L., González, B., Sarmentero, J., Reynes, M., Oliver, A., & Garcia-Toro, M. (2019). Differential effects of two contemplative practice-based programs for health care professionals. *Psychosocial Intervention*, *28*(3), 131-138. https://doi.org/10.5093/pi2019a12

Schiff, J., & Lane, A. M. (2019). PTSD symptoms, vicarious traumatization, and burnout in front line workers in the homeless sector. *Community Mental Health Journal*, *55*, 454-462. https://doi.org/10.1007/s10597-018-00364-7

Shah, N., Cader, M., Andrews, B., McCabe, R., & Stewart-Brown, S. L. (2021). Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS): performance in a clinical sample in relation to PHQ-9 and GAD-7. *Health and Quality of Life Outcomes*, *19*(1), 1-9. https://doi.org/10.1186/s12955-021-01882-x

Smout, M. F., Hayes, L., Atkins, P. W., Klausen, J., & Duguid, J. E. (2012). The empirically supported status of acceptance and commitment therapy: An update. *Clinical Psychologist*, *16*(3), 97-109. https://doi.org/10.1111/j.1742-9552.2012.00051.x

Stamm, B. H. (2005a). Professional quality of life scale. *Psychological Trauma: Theory, Research, Practice, and Policy*.

Stamm, B. H. (2005b). The proQOL manual. *Retrieved July*, *16*, 2007.

Stamm, B. (2010). The concise manual for the professional quality of life scale.

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2009). *Short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS)*

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2021). Short Warwick–Edinburgh Mental Well-being Scale. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation*. https://doi.org/10.1186/s12955-021-01882-x

Teasdale, J. D. (1999). Metacognition, mindfulness, and the modification of mood disorders. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, *6*(2), 146-155. https://doi.org/10.1002/(SICI)1099-0879(199905)6:2%3C146::AID-CPP195%3E3.0.CO;2-E

Teddlie, C., Tashakkori, A., & Johnson, B. (2008). Emergent techniques in the gathering and analysis of mixed methods data. *Handbook of emergent methods*, *389*, 413.

Towey-Swift, K. D., Lauvrud, C., & Whittington, R. (2023). Acceptance and commitment therapy (ACT) for professional staff burnout: a systematic review and narrative synthesis of controlled trials. *Journal of Mental Health*, *32*(2), 452-464. https://doi.org/10.1080/09638237.2021.2022628

Vilardaga, R., Luoma, J. B., Hayes, S. C., Pistorello, J., Levin, M. E., Hildebrandt, M. J., Kohlenberg., B., Roget, N. A., & Bond, F. (2011). Burnout among the addiction counseling workforce: The differential roles of mindfulness and values-based processes and work-site factors. *Journal of Substance Abuse Treatment*, *40*(4), 323-335. https://doi.org/10.1016/j.jsat.2010.11.015

Watanabe, T., Kondo, M., Sakai, M., & Akechi, T. (2023). Acceptance and commitment training for reducing burnout in medical students during a clinical clerkship in psychiatry and palliative care: A pilot study. *Journal of Contextual Behavioral Science*, *30*, 20-30. https://doi.org/10.1016/j.jcbs.2023.08.009

Wardley, M. N., Flaxman, P. E., Willig, C., & Gillanders, D. (2016). 'Feel the Feeling': Psychological practitioners' experience of acceptance and commitment therapy well-being training in the workplace. *Journal of Health Psychology*, *21*(8), 1536-1547. https://doi.org/10.1177/1359105314557977

Waters, C. S., Frude, N., Flaxman, P. E., & Boyd, J. (2018). Acceptance and commitment therapy (ACT) for clinically distressed health care workers: Waitlist-controlled evaluation of an ACT workshop in a routine practice setting. *British Journal of Clinical Psychology, 57*(1), 82-98. Doi:https://doi.org/10.1111/bjc.12155

Weiner, B. J., Lewis, C. C., Stanick, C., Powell, B. J., Dorsey, C. N., Clary, A. S., Boynton, M. H., & Halko, H. (2017). Psychometric assessment of three newly developed implementation outcome measures. *Implementation Science*, *12*(1), 1-12. https://doi.org/10.1186/s13012-017-0635-3

West, M. A., & Farr, J. L. (1989). Innovation at work: Psychological perspectives. *Social Behaviour*.

Whitehead, M., Taylor-Robinson, D., & Barr, B. (2021). Poverty, health, and covid-19. *bmj*, *372*. https://doi.org/10.1136/bmj.n376

Wirth, T., Mette, J., Prill, J., Harth, V., & Nienhaus, A. (2019). Working conditions, mental health and coping of staff in social work with refugees and homeless individuals: A scoping review. *Health & Social care in the Community*, *27*(4), e257-e269. https://doi.org/10.1111/hsc.12730

Wolgast, M. (2014). What does the Acceptance and Action Questionnaire (AAQ-II) really measure?. *Behavior Therapy*, *45*(6), 831-839. https://doi.org/10.1016/j.beth.2014.07.002

World Health Organisation (2022a, 28 September). Mental Health at work. World Health Organisation.

World Health Organization. (2022b). *ICD-11: International classification of diseases* (11th revision). https://icd.who.int/

Yefimov, V. (2004). On pragmatist institutional economics.

Zelek, J. (2023). *The Impact of Acceptance and Commitment Therapy (ACT) Intervention on Novice and Experienced Special Educators of Students With Severe Disabilities and Behaviors* (Doctoral dissertation, University of St. Francis)

Extended paper appendices

Appendix A – Ethics approval letter and amendment

DPAP Committee

20/12/2022

Supervisor: Anna Tickle

Applicant : Olivia Young

Project: 2995Acceptance and Commitment Therapy training for staff in a homelessness service

The committee is pleased to confirm that the above study now has approval on the basis of your application and any subsequent clarifications. You must conduct your research as described in your application, adhere to all conditions under which the ethical approval is granted, and use only materials and documentation specified in your application.

If you need to make any changes (for example to extend your data collection timeframe, change the mode of data collection, or the measures being used), you must create and submit an Amendment Form. To do this, select the 'Create Sub Form' option from the Actions Menu on the left-hand side of the page in the online system and then select 'Amendment Form'.

With best wishes

Dr Jen Yates

Chair of the DPAP Ethics Subcommittee

DPAP Committee

10/07/2023

Supervisor:

Applicant : Olivia Young

Project: Project Id Acceptability and Feasibility of Acceptance and Commitment Therapy training for Managers of homelessness services.

The committee is pleased to confirm that the amendment relating to ref: DPAP - 2023 - 3015 - 1 has received approval. Please conduct your study following the amended procedures. If you need to make any further changes, please create a new amendement form.

yours sincerely

Dr Jen Yates

Chair of DoPAP Ethics Subcommittee

Appendix B – Participant information sheet

(Final Version 3.0 14/04/2023)

Participant information sheet and consent form for face-to-face or online sessions

Project Title: *Acceptability and Feasibility of Acceptance and Commitment Therapy training for managers of homelessness services.*

Student: *Olivia Young (Olivia.young@nottingham.ac.uk)*

Supervisor's: *Anna Tickle (Anna.tickle@nottingham.ac.uk) and Nima Moghaddam (NMoghaddam@lincoln.ac.uk)*

Ethics Reference Number: 3015

We would like to invite you to take part in a research study about Acceptance and Commitment Therapy training for managers of homelessness services. Before you begin, we would like you to understand why the research is being done and what it involves for you.

What is the purpose of the study?

This study is investigating how acceptable and feasible Acceptance and Commitment Therapy (ACT) training is for managers of homelessness services. Acceptance and Commitment Therapy has been used to support employees across a range of workplaces and for a range of difficulties people may face, including stress, 'burnout', anxiety and depression. It is also used to coach people without specific difficulties to become more effective in their working environment.

Why have I been invited?

You are being invited to take part because you are a manager (or assistant manager) of a homelessness service within the UK. By 'manager' (or assistant) we mean that you directly manage staff who are delivering a service-to-service users (whether street outreach, temporary accommodation / hostel, homelessness prevention service, day centres or similar). This study is not open to 'operations' managers, who only manage other service managers. Service managers from across the homelessness sector are being invited to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to sign a consent form. If you decide to take part, you are

still free to withdraw at any time and without giving a reason. This would not affect your legal rights.

What will happen to me if I take part?

The study will involve 3 group-based ACT training sessions. Each session will last up to 3 hours, with time for a break halfway through the session. These sessions are experiential, inviting you to get involved with the activities and discussions. The facilitator will invite you to take part in group discussions (reflecting on what is important to us, how we cope when things are difficult and may ask for work or personal based examples), activities (e.g., mindfulness practice, imagery) and complete worksheets (to record your values and goals). None of the activities are physically demanding and will be completed whilst seated. There will also be some tasks to complete in-between the sessions. The in-between session tasks will be small behavioural goals you have set yourself or may involve practicing the activities (e.g., mindfulness) we have completed in the session. Practice between sessions is how you will be able to make the most out of the training. Sessions will be video recorded. This is so an individual within the research team can check that the facilitator is delivering ACT as it should be delivered, and recordings will be destroyed as soon as this is completed.

The sessions will be completed during work hours; therefore, it is important that you request permission where necessary from your manager to attend.

Prior to beginning the sessions, we will ask you to fill out some questionnaires via an online survey site called Qualtrics. Therefore, we will require you to share your email address with us.

Once the sessions have been completed, we will ask you to complete some more questionnaires and an interview online. The questionnaires and interview will ask about your wellbeing, how acceptable you found the sessions and format and for any comments or feedback you may have about the sessions.

The sessions will be run face-to-face in Nottingham and via a webinar. If you are based in or able to travel to Nottingham, you can opt for either. If you are unable to travel to Nottingham for sessions, attendance will be via a webinar. Further information about both options is below. Please indicate your preference on the consent form. Whether face-to-face or online.

The study is specifically focused on service managers due to recognition of specific demands of management roles, the challenges for managers of attending sessions aimed at staff across all levels, and the potential for mutual support and learning between people in similar roles. As we cannot know who will opt into the research, it is important to hold in mind that there may be other

managers participating who you know, either through your work or personal life. Given confidentiality, you will not be able to know who is attending until the first session. All participants will be asked to treat other people's participation as confidential and never disclose outside sessions anything said by anybody else within them.

Both face-to-face and webinar sessions will be delivered by Olivia Young.

Face to face sessions

The face-to-face sessions will be run in Nottingham city at Cleeves Hall, NG1 7AS and will run for three hours between 12:30 and 3:30pm. Sessions 1 and 2 will have a break of 1 week in between and session 3 will be a month later. This is to allow consolidation of learning in between. You can think of session 3 as a "booster" session. Sessions will run on the 29th of June, the 6th of July and the 3rd of August. You are expected to commit to **all three sessions** if you agree to participate, but of course have the right to withdraw should you choose. If you are unable attend, unless indicated we will contact you for the follow up measures. We will require your email address as we will need to share your email address with the Nottingham Practice Development Unit, who will be facilitating the training. They will treat your email address in line with General Data Protection Regulations (GDPR) and will only use it for the purposes of this research.

A maximum of 12 people will be able to participate in face-to-face sessions.

Nima Moghaddam will join some sessions to assess the facilitators skills and ensure fidelity to the model (ACT). This will be done in a way that is as unintrusive as possible.

Webinar sessions

These sessions will be run in the day, between 12.30pm and 3.30pm. Sessions 1 and 2 will have a break of 1 week in between and session 3 will be a month later. This is to allow consolidation of learning in between. You can think of session 3 as a "booster" session. Sessions will run on the 13th and 20th of July and the 10th of August. You are expected to commit to **all three sessions** if you agree to participate, but of course have the right to withdraw should you choose. If you are unable attend, unless indicated we will contact you for the follow up measures.

If you sign up to the webinar sessions you will need access to a computer, webcam, and an internet connection for the duration of the sessions. We will

require you to share your email address with us. We will need to share your email address with Homeless Link, who will be administering the webinar sessions. They will treat your email address in line with General Data Protection Regulations (GDPR) and will only use it for the purposes of this research. There are handouts that will be used during the sessions, these will be provided by email for you. You will be asked to keep your camera on during sessions, if possible, to support engagement for all participants.

There will be no limit to the number of participants for the webinar sessions. Previous research has shown that ACT webinars involving large groups to be effective in promoting wellbeing.

Nima Moghaddam will join some sessions to assess the facilitators skills and ensure fidelity to the model (ACT). This will be done in a way that is as unintrusive as possible.

What are the possible disadvantages and risks of taking part?

Firstly, completing the sessions, questionnaires and interview will involve you giving up some of your time. Secondly, we will be asking you to reflect on your experiences which may include experiences during work, your own wellbeing (e.g., ways of coping) and your values (what is important to you). You or other participants within the group may share personal experiences that could be upsetting or triggering for some individuals. If at any point during the training or after you become upset, then we will provide you with contact details to access further support, details of this support is provided at the end of this document.

What are the possible benefits of taking part?

Whilst we cannot promise the study will help you, ACT training has been shown to have positive impacts on individuals' wellbeing. Furthermore, by providing us with feedback on the acceptability and feasibility of the sessions, this will allow us to adapt sessions for future research or training for managers within homelessness services, for the benefit of others.

What if there is a problem?

It is unlikely that the training will cause you harm. However, if you do have any problems at any point or any further questions, please contact Olivia Young (Olivia.nottingham.ac.uk).

If you remain unhappy and wish to complain formally, you can do this by contacting the Division of Psychiatry and Applied Ethics Research committee at MS-DRAPEthics@exmail.nottingham.ac.uk.

A range of support resources are offered at the end of this document.

Will my taking part in the study be kept confidential?

As stated above, Homeless Link, the Practice Development Unit, and all session participants will be asked to treat each other's participation in the strictest confidence. The research team will follow ethical and legal practice and all information about you will be handled in confidence.

If you join the study, we will use information collected from you during the course of the research. This information will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database at the University of Nottingham. Under UK Data Protection laws, the University is the Data Controller (legally responsible for the data security), and the Chief Investigator of this study (named above) is the Data Custodian (manages access to the data). This means we are responsible for looking after your information and using it properly. Your rights to access, change or move your information are limited as we need to manage your information in specific ways to comply with certain laws and for the research to be reliable and accurate. To safeguard your rights, we will use the minimum personally – identifiable information possible.

You can find out more about how we use your information and to read our privacy notice at:

https://www.nottingham.ac.uk/utilities/privacy.aspx.

The data collected for the study will be looked at and stored by authorised persons from the University of Nottingham who are organising the research. They may also be looked at by authorised people from regulatory organisations to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and we will do our best to meet this duty.

Session recordings will be destroyed as soon as the session has been checked by a supervisor, which will be within a month of the session taking place. Your personal contact details (email address) will be destroyed within three months of the end of the study. All other research data will be anonymised and kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality, only members of the research team given permission by the data custodian will have access to your personal data.

In accordance with the University of Nottingham's, the Government's, and our funders' policies we may share our research data with researchers in other Universities and organisations, including those in other countries, for research

in health and social care. Sharing research data is important to allow peer scrutiny, re-use (and therefore avoiding duplication of research) and to understand the bigger picture in particular areas of research. Data sharing in this way is usually anonymised (so that you could not be identified) but if we need to share identifiable information, we will seek your consent for this and ensure it is secure. You will be made aware then if the data is to be shared with countries whose data protection laws differ to those of the UK and how we will protect your confidentiality.

Although what you say to us is confidential, should you disclose anything to us which we feel puts you or anyone else at any risk, we may feel it necessary to report this to the appropriate persons. We would always aim to discuss this with you before any action is taken.

What will happen if I don't want to carry on with the study?

Your participation is voluntary, and you are free to withdraw at any time, without giving any reason, and without your legal rights being affected. If you withdraw, we will no longer collect any information about you or from you, but we will keep the information about you that we have already obtained as we are not allowed to tamper with study records and this information may have already been used in some analyses and may still be used in the final study analyses. To safeguard your rights, we will use the minimum personally identifiable information possible.

What will happen to the results of the research study?

This research fulfils part of the Trainee's requirements to gain their Doctorate in Clinical Psychology. The research will be fed back to participating organisations, submitted for publication in a journal and presented at webinars and conferences. You will not be identified in any publication or presentation of the research. The research findings can be made available to you by contacting [trainee name].

Further information and contact details

Olivia Young (Olivia.young@nottingham.ac.uk)
Supervised by:

Anna Tickle (Anna.Tickle1@nottingham.ac.uk) and Nima Moghaddam (NMoghaddam@lincoln.ac.uk)

Helplines and mental health support:

- Please consider accessing your organisation's Employee Assistance Programme (EAP) and / or wellbeing practitioner if your organisation has one

- https://www.mentalhealthatwork.org.uk/toolkit/ourfrontline-keywork/ has a range of resources focused on wellbeing at work.
- Call 116 123 to talk to Samaritans, or email: jo@samaritans.org for a reply within 24 hours
- Text "SHOUT" to 85258 to contact the Shout Crisis Text Line
- **SANEline.** If you're experiencing a mental health problem or supporting someone else, you can call SANEline on 0300 304 7000 (4.30pm–10.30pm every day).
- You can self-refer to Increasing Access to Psychological Therapies (IAPT) services. You can find your local service via this website: https://www.nhs.uk/service-search/mental-health/find-a-psychological-therapies-service/
- Wellness in Mind is a Nottingham-City mental health signposting service https://www.wellnessinmind.org/
- NHS urgent mental health support helpline https://www.nhs.uk/service-search/mental-health/find-an-urgent-mental-health-helpline

Appendix C – Consent form

Participant Consent

Paper form for face-to-face consent

STUDENT RESEARCH PROJECT ETHICS REVIEW

Division of Psychiatry & Applied Psychology

Project Title:	**Acceptability and Feasibility of Acceptance and Commitment Therapy Training for managers of homelessness services**
Researcher:	**Olivia Young (Olivia.young@nottingham.ac.uk)**
Supervisor:	**Anna Tickle (Anna.tickle@nottingham.ac.uk) and Nima Moghaddam (NMoghaddam@lincoln.ac.uk)**
Ethics Ref:	*3015*

Have you read and understood the Participant Information?	☐Yes ☐No
Do you agree to take part this research about Acceptance and Commitment Therapy for managers of homelessness services. Taking part will include completing questionnaires online, taking part in three training sessions, and completing an interview following the training sessions.	☐Yes ☐No
Do you know how to contact the researcher if you have questions about this study?	☐Yes ☐No
Do you understand that you are free to withdraw from the study without giving a reason?	☐Yes ☐No
Do you understand that once you have taken part it may not be technically possible to withdraw your data?	☐Yes ☐No
Do you give permission for your data from this study to be shared with other researchers in the future provided that your anonymity is protected?	☐Yes ☐No
Do you understand that non-identifiable data from this study including quotations might be used in academic research reports or publications?	☐Yes ☐No
I confirm that I have permission from my manager to attend.	☐Yes ☐No

Participant signature: Date:

Participant name:

Researcher Signature Date:

This consent form will be stored separately from any data to ensure data confidentiality

Appendix D – Face-to-face participant change ratings.

Change/s ratings sheet:

(Complete one sheet per identified change)

What was the change?

Having a framework for acceptance

a. Please rate how much you expected it vs. were surprised by it:

1	2	3	4	5
Very much expected it	Somewhat expected it	Neither expected nor surprised by it	Somewhat surprised by it	Very much surprised by it

b. Please rate how likely you think it would have been if you had not had training?

1	2	3	4	5
Very unlikely without training (clearly would not have happened)	Somewhat unlikely without training (probably would not have happened).	Neither likely nor unlikely (no way of telling)	Somewhat likely without training (probably would have happened)	Very likely without training (would have happened anyway)

3c. How important or significant to you personally do you consider this change to be?

1	2	3	4	5
Not at all important	Slightly important	Moderately important	Very important	Extremely important

Change/s ratings sheet:

(Complete one sheet per identified change)

What was the change?

Being more mindful and importance of making time for this

c. Please rate how much you expected it vs. were surprised by it:

1	2	3	4	5
Very much expected it	Somewhat expected it	Neither expected nor surprised by it	Somewhat surprised by it	Very much surprised by it

d. Please rate how likely you think it would have been if you had not had training?

1	2	3	4	5
Very unlikely without training (clearly would not have happened)	Somewhat unlikely without training (probably would not have happened).	Neither likely nor unlikely (no way of telling)	Somewhat likely without training (probably would have happened)	Very likely without training (would have happened anyway)

3c. How important or significant to you personally do you consider this change to be?

1	2	3	4	5
Not at all important	Slightly important	Moderately important	Very important	Extremely important

Change/s ratings sheet:

(Complete one sheet per identified change)

What was the change?

Feeling better equipped to manage stress

e. Please rate how much you expected it vs. were surprised by it:

1	2	3	4	5
Very much expected it	Somewhat expected it	Neither expected nor surprised by it	Somewhat surprised by it	Very much surprised by it

f. Please rate how likely you think it would have been if you had not had training?

1	2	3	4	5
Very unlikely without training (clearly would not have happened)	Somewhat unlikely without training (probably would not have happened).	Neither likely nor unlikely (no way of telling)	Somewhat likely without training (probably would have happened)	Very likely without training (would have happened anyway)

3c. How important or significant to you personally do you consider this change to be?

1	2	3	4	5
Not at all important	Slightly important	Moderately important	Very important	Extremely important

Change/s ratings sheet:

(Complete one sheet per identified change)

What was the change?

Feeling more confident in managing challenges

g. Please rate how much you expected it vs. were surprised by it:

1	2	3	4	5
Very much expected it	Somewhat expected it	Neither expected nor surprised by it	Somewhat surprised by it	Very much surprised by it

h. Please rate how likely you think it would have been if you had not had training?

1	2	3	4	5
Very unlikely without training (clearly would not have happened)	Somewhat unlikely without training (probably would not have happened).	Neither likely nor unlikely (no way of telling)	Somewhat likely without training (probably would have happened)	Very likely without training (would have happened anyway)

3c. How important or significant to you personally do you consider this change to be?

1	2	3	4	5
Not at all important	Slightly important	Moderately important	Very important	Extremely important

Poster

The Acceptability and Feasibility of Acceptance and Commitment Therapy training to support work -related wellbeing for the managers of homelessness services.

Olivia Young, Anna Tickle, Nima Moghaddam & Jo Turner
Trent doctorate of Clinical Psychology, University of Nottingham & University of Lincoln

Introduction

Managers of homelessness services face challenging work conditions and barriers to support.

ACT training promotes Psychological flexibility (PF) which can positively impact wellbeing (1).

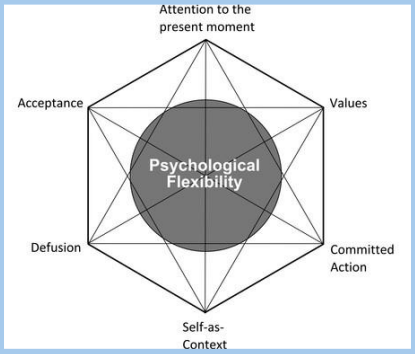


Figure 1.
Hexaflex Hayes et al 2006 (2)

Study aims

To assess the feasibility and acceptability of the ACT training for wellbeing. Secondary aims included assessing signal efficacy, retention and measure completion.

Methods

Participants attended 3 face to face or online ACT training sessions (51 online, 3 face to face). The training was based on "The mindful and effective employee" (3)

Measures were completed at baseline then following each session

Participants attended 3 ACT sessions (online or face to face)

Change interviews and final measures were completed

Data analysed and written up

Figure 2. Research Procedure

Fidelity was assessed via the 3rd author using the ACT-FM(4)

Results

Qualitative

Themes identified were Engagement with training, Implementing skills, and Beyond training and Training led to behavioural change or intention to change. See some examples below:

"Noticing emotions and not trying to change them but accept that they are there and giving myself time to understand it"

"tried to take moment to reflect, tried to not doom scroll when I get home and be more present"

"having to realise my values and that I do not necessarily live by them which is upsetting"

Quantitative

Attrition was high (52% online, 100% face to face). There were significant increase in general wellbeing and valued action. There as a marginal decrease in secondary traumatic stress

Discussion

Overall, the initial results were promising, but adaptations need to be made to make the training more feasible for this population.

The lack of significant change on PF contrasts with prior literature(5). However, the increase in general wellbeing and valued action fits with prior research in this area.

Limitations

Limited data for face-to-face participants limited analysis and possibility for comparison.
Time of delivery (session 3 during school holidays) also impacted engagement. There was no a priori feasibility criteria set.

Future research

It would be beneficial for the training to be adapted and re-run to further assess acceptability and feasibility for this population. It would also be beneficial to develop a priori feasibility criteria to assess against.

References

1
2 Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour research and therapy*, *44*(1), 1-25.
3 Flaxman, P. E., Bond, F. W., & Livheim, F. (2013). *The mindful and effective employee: An acceptance and commitment therapy training manual for improving well-being and performance*. New Harbinger Publications
4 O'Neill, L., Latchford, G., McCracken, L. M., & Graham, C. D. (2019). The development of the Acceptance and Commitment Therapy Fidelity Measure (ACT-FM): A delphi study and field test. *Journal of Contextual Behavioral Science*, *14*, 111-118.
5. Prudenzi, A., Graham, C. D., Flaxman, P. E., Wilding, S., Day, F., & O'Connor, D. B. (2022). A workplace Acceptance and Commitment Therapy (ACT) intervention for improving healthcare staff psychological distress: A randomised controlled trial. *PloS one*, *17*(4), e0266357.

Small Scale Research Project

Evaluation of Acceptance and Commitment therapy (ACT) training for staff within substance use and mental health signposting services.

ACT for staff training

Olivia Young, Anna Tickle, Nima Moghaddam[3]

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Data availability statement

Data is available upon request. Please contact the corresponding author: Trainee

Abstract:

Objectives: To evaluate ACT training for substance use staff. This included assessing changes on measures of psychological flexibility (PF), ACT knowledge and gaining feedback. **Method**: The study utilised a mixed method design. Participants were sampled via opportunity sampling. There were 59 participants (three cohorts) with 2 completing change interviews. Training was conducted over four days covering ACT theory, experiential exercises, and case examples. **Results**: There were no significant differences in PF. ACT knowledge increased significantly from pre- to post-training. Framework analysis led to the main themes of the Impact of training, Challenges of putting ACT into practice, reflections on training structure and content, Exercises, and Participants experience of the facilitators. **Conclusions**: The increase ACT knowledge is consistent with prior research. However, the lack of significant change in PF and lack of correlation between Pre-training PF and ACT knowledge are not. Possible explanations for this could be due to a lack of participant practice, given that ACT processes are often cumulative. The participant feedback can inform training for future cohorts.

Keywords

Harmful substance use, mental health, Acceptance and Commitment Therapy, staff training, wellbeing.

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Introduction

Approximately 2% of the world's population are experiencing harmful levels of substance use (Castaldelli-Maia, & Bhugra, 2022). The harmful use of substances such as illegal drugs, alcohol, prescription and over the counter medications presents as a challenge for services across the UK. In 2020 there were 7,027 hospital admissions for drug-related mental and behavioural disorders and 16,994 admissions for poisoning by drug use (NHS Digital, 2021). The number of adults in contact with drug and alcohol services in 2021-2022 rose compared to the previous year by over 13,000 (Office for health Improvement & Disparities, 2023). A two-part report by Dame Carol Black (2020; 2021) outlined the challenges that drug use services are facing, finding that drug deaths have reached an all-time high, and the market has become more violent. In 2018 drug deaths were the highest on record, since 2012 this represents a five-fold increase and this high incidence is likely to be contributing to the slowdown in life expectancy in the UK (Black, 2020; 2021). In response to this report, the Government announced funding of £148 million to reduce the harm caused by drugs and alcohol, the largest increase in funding in 15 years (Department of Health and Social Care, 2021). The response also indicates that the Department of Health and Social Care will work with Health Education England to develop training standards for staff and devise a comprehensive strategy for the future of the workforce (Department of Health and Social Care, 2021).

There are many challenges for staff working in substance use services, such as high risk of vicarious traumatisation and secondary traumatic stress (Bride et al, 2009; Bride & Kintzle, 2011; Cosden et al, 2016), burnout (Oyesfeso et al, 2008; Young 2015; Jones & Branco, 2020) and services experience high staff turnover (Garner et al, 2012). Most individuals who present to services also require support with their mental health and need social support with regards to housing as well as substance use treatment (Office for health Improvement & Disparities, 2023). Up to 55% of individuals with substance use disorders experience clinically significant levels of depression (Johnson et al., 2006). Meta-analyses have also found high rates of comorbidity between harmful substance use and bipolar (Hunt, 2016) Schizophrenia (Hunt, 2018) and depression (Lai, 2015). There is also a significant link between the experience of trauma and harmful substance use (Giordano et al. 2016; Jones & Branco, 2020). Adverse childhood experiences (ACEs) are potentially traumatic events, including child maltreatment (sexual, physical, emotional abuse) and household dysfunction (parental mental illness, substance use and parental incarceration) (Felitti et al., 1998). These have negative long-term impacts on health and wellbeing (Boullier, & Blair, 2018) and have been found to be one of the most robust predictors of later harmful substance use (Felitti et al., 1998; Hughes et al, 2017; 2019)

Many services are working towards delivering "trauma-informed" services which aim to support service users in a way that is sensitive to their past experiences of trauma, recognise the neurological, biological, and social impact that trauma has and prevent re-traumatisation (Office for Health Improvement & Disparities, 2022). Nonetheless, staff within these services vary in how comfortable, competent, and confident they feel exploring clients' experiences of trauma, citing a lack of training, concern about making clients worse and not having enough time to give to the client's difficulties and trauma once raised (Kunins et al, 2007). Staff also report feeling as though they have not had enough training regarding trauma and are unsure how to integrate addiction support with trauma related work (Bride et al, 2009; Back et al,

2009), particularly given the latter is often outside the commissioned service remit. Staff members reported lack of confidence in mental health support is important considering that clients are more likely to access support for their mental health support when it is integrated with addiction treatment (Delgadillo et al, 2015).

One psychological model that has been used for both client-focused work- and work-related wellbeing is Acceptance and Commitment Therapy (ACT). ACT is a third-wave cognitive-behavioural approach and is derived from Relational Frame Theory (Hayes, 1991) and Functional Contextualism (Gifford & Hayes, 1999). Core to ACT is the concept of psychological flexibility (PF) which is "the ability to contact the present moment more fully as a conscious human being, and to change or persist in behaviour when doing so serves valued ends"(Hayes et al., 2006b, p. 7). PF is established through six key processes; (see table 28 for processes and definitions).

Table 28.

Definitions for ACT processes (Hayes et al, 2006b)

ACT process	**Definition**
Acceptance	Acceptance involves the active and aware embrace of those private events occasioned by one's history without unnecessary attempts to change their frequency or form, especially when doing so would cause psychological harm.
Being present	ACT promotes ongoing non-judgmental contact with psychological and environmental events as they occur.
Values	Values are chosen qualities of purposive action that can never be obtained as an object but can be instantiated moment by moment.
Committed action	Values are chosen qualities of purposive action that can never be obtained as an object but can be instantiated moment by moment.
Defusion	Cognitive defusion techniques attempt to alter the undesirable functions of thoughts and other private events, rather than trying to alter their form, frequency, or situational sensitivity.
Self-as-context	One can be aware of one's own flow of experiences without attachment to them or an investment in which particular experiences occur

ACT has been found to be an effective intervention for reducing harmful substance use (Gloster et al, 2020; Osaji et al, 2020), reducing the shame (Luoma et al 2012; Gul & Aqeel, 2021) and self-stigma (Luoma et al, 2008; Gul & Aqeel, 2021) associated with substance use and for supporting a client with co-occurring substance use and post-traumatic stress (Batten & Hayes, 2005). ACT has the potential to not only support staff in substance use services and underpin their work with clients but can be utilised for their own wellbeing both within and outside of work. ACT training has shown, across different work environments, to be effective in reducing: stress and more specifically work related stress (Bond, & Bunce, 2000; Hayes et al, 2006a; Brinkborg et al, 2011; Ly et al, 2014 Prudenzi et al, 2021), burnout (Flaxman & Bond, 2010; Lloyd et al, 2013**;** Puolakanaho et al, 2020; Reeve et al, 2021), psychological distress (Waters et al, 2018) and to improve engagement in work (Reeve et al, 2021). ACT Training for clinicians has previosuly been assessed in cohorts of therapists, psychologists and non-specialist professionals (Luoma & Plumb; Richards et al, 2011; Stewart et al, 2016). Post-training, the participants experienced increases in both PF and ACT knowledge (Luoma & Plumb; Richards et al, 2011; Stewart et al, 2016). This is unsurprising considering that experiential training focused on "real play" might be expected to lead to development and practice of ACT skills and therefore an increase in PF as well as ACT knowledge (Luoma et al, 2007).

Given the challenges that drug use services and staff are facing, it would be prudent to develop strategies and training that can underpin their work with service users. Furthermore, considering the high levels of burnout (Oyesfeso et al, 2008; Young 2015; Jones & Branco, 2020), risk of vicarious traumatisation and secondary traumatic stress (Bride et al, 2009; Bride & Kintzle, 2011; Cosden et al, 2016) it would be beneficial if any psychological framework that underpins the training can be applied personally, within their own lives as well as in their work with service users.

Aims

This study aimed to evaluate ACT training for staff members within a network of co-located services providing treatment in relation to substance use and mental health signposting by:

- Investigating if the training led to changes on measures of ACT knowledge and Psychological Flexibility.
- To explore what intentions participants had to utilise ACT skills clinically following the training.
- To explore any intentions participants had to utilise ACT skills personally following training.
- To seek feedback on the participants, experience of training.

Method

Design

The study utilises mixed methodology implementing a pre-test and post-test design including outcome measures, qualitative feedback, and adapted Client Change Interviews (Elliot & Rodgers, 2008).

Epistemological position

Pragmatism is the epistemological position adopted for this study. Pragmatism suggests that the methodological and philosophical approaches employed by the researcher must be the ones that best fit the research question (Tashakkori & Teddlie, 1998). Pragmatism is most often associated with mixed methods research (Crewell & Clark, 2011).

Participants

Participants were sampled using opportunistic sampling from a network of co-located services providing treatment in relation to substance use and mental health signposting in the East Midlands, UK. The network include teams specialising in: initial assessment and brief interventions for those who were not alcohol dependent or using opioids; alcohol treatment; drug treatment for those using opioids and / or opioid substitution therapy; treatment for those involved in the criminal justice system; treatment for individuals who are rough sleeping; employment support; mental health signposting; psychosocial interventions for anybody accessing the other teams; an educational academy supporting people through a pathway from service use, through volunteering and into employment. "Substance use" covers the continued use of alcohol, illegal drugs, or the misuse of prescription or over the counter medications with negative consequences (Medline Plus, n.d). Participants were contacted by their manager who advertised the training. Participants were then able to volunteer for the training if they wished. There were more participants than places on the training and therefore managers chose who to put forward for the training.

The training was offered and run for three cohorts. The first cohort consisted of 23 participants, the second 25 participants and the third 11 participants. Two participants completed the adapted Client Change Interviews (Elliot & Rodgers, 2008).

Specific staff demographics were not collected to protect the anonymity of the services and participants, given they were known to each other and external services.

Training and materials

The training was facilitated by the second author and colleagues. They used Microsoft PowerPoint to deliver slides and provided the participants with items for experiential learning (e.g., Chinese finger trap). The training was delivered over four days (See table 29 for overview of training).

Measures

The first pre- and post-outcome measures was the Knowledge Questionnaire (Luoma, & Plumb, 2013) which is a 16-item measure for use in the training and evaluation of individuals learning ACT. The ACT knowledge questionnaire has low internal consistency estimate (α) of .54, indicating that the items were not highly intercorrelated which authors report is to be

expected as it is not designed to be a unitary scale but a broad knowledge measure (Luoma & Plumb, 2013). The second measure was the CompACT (Francis et al, 2016) which is a measure of PF. The CompACT has good internal reliability with a Cronbach's alpha score of .91. The CompACT also has good convergent validity with an established ACT measure (AAQ-II) (Francis, Dawson, & Golijani-Moghaddam, 2016).

Routine feedback was also collected via a feedback sheet at the end of the training session (see appendix B for questions). An adapted version of the Client Change Interview (Elliot & Rodgers, 2008) was used (see appendix A) to explore if the participants recognised any changes following the training, to reflect on these changes and provide feedback on the training. Where participants noted a behavioural change on the Change interview (Elliot & Rodgers, 2008) they then completed a change rating to indicate how much they expected this change, how likely it would been to occur without training and how significant it was to them. Only one participant who completed the change interview noted a behavioural change and therefore completed a change rating form.

Procedure

Routine

The second author contacted managers with the network of co-located services to offer the training. Anonymised measures and training feedback were voluntarily completed by participants at the start of the first day of training and end of the fourth day of training as a routine evaluation of training impact. The data from these were then inputted into an Excel spreadsheet. Ethical approval was then sought (and then granted) via the University of Nottingham for the further, follow-up interview as it would require participants to give addition time and effort that was not part of the routine training.

Interview

Following the training, participants were emailed by the training facilitator (second author) and invited to email the first author (to conceal their identity from the trainer) if they wished to participate in an interview. This interview aimed to allow participants to provide further feedback on the training and explore any changes, they experienced following the training. The first author then sent the participant the participant information sheet to read through and if they then consented to the research, they were sent a consent form to fill out which was then signed by the first author and stored according to their data management plan. The first author took notes throughout the Change Interview (Elliot & Rodgers, 2008) and these were typed up and stored according to the data management plan.

Table 29.

Overview of the training session

Training day	**Content**
Day 1	History of ACT including Relational Frame Theory and Functional Contextualism. Workability
Day 2	Experiential practice of the core concepts; acceptance, present moment awareness, self-as-context and defusion
Day 3	Further present moment awareness exercises Values and committed action
Day 4	The matrix Case conceptualisation When not to use ACT Structuring ACT sessions Flexibility of ACT Working with Trauma Evaluating ACT

Analysis

Quantitative Analysis

Quantitative analysis for each domain on the CompACT (openness to experience [OE], behavioural awareness [BA] and valued action [VA], [Francis et al, 2016]) was conducted using IBM SPSS (Version 28) where data met parametric assumptions it was subsequently analysed using a paired-samples t-test. Where data did not meet parametric assumptions, Wilcoxon tests were used. The overall score on the ACT knowledge questionnaire (Luoma & Plumb, 2013) and CompACT (Francis et al, 2016) were analysed using Meta-Essentials version 1.4 (Suurmond et al, 2017). Means (M), Standard deviations (SD) and correlations for each cohort were inputted into the spreadsheet to calculate if there was a significant difference from pre- to post-training and the effect size (using Hege's g).

Correlational analysis was used to investigate if a participants pre-training psychological flexibility impacted on their knowledge gained from the training. Partial correlations were completed by controlling for ACT knowledge at the start of training and assessing if there was a correlation between pre-training PF and post-training ACT knowledge.

Analysis was conducted on the overall score for the CompACT (Francis et al, 2016) as well as each dimension (OE, BA & VA) to see if reliable change (Jacobson & Truax, 1991) had occurred. Cut off scores to indicate if reliable change had occurred were taken from Shepherd et al (2021). The scores from the ACT knowledge questionnaire were also assessed to see if there had been a reliable change. The cut off scores to determine if reliable change had occurred were calculated for each cohort using the standard deviation from time 1 and the internal consistency of the measure.

Participants who completed the feedback sheets also were asked to rate the training overall with a score out of 10 (with 10 being extremely positive), which was then averaged.

Qualitative Analysis

The Framework method was used to analyse data provided via written feedback post-training and change interviews conducted online post-training. Framework analysis refers to a rigorous and iterative method of analysing qualitative data which can be used across different research questions (Gale et al, 2013; Ritchie & Spencer, 1994) and has been used widely in healthcare research (Ritchie et al, 2013). Framework analysis follows a five-step process 1) familiarisation, 2) Identifying a thematic framework, 3) indexing, 4) charting, and 5) mapping and interpretation (Ritchie & Spencer, 1994). The main themes were identified using mostly a deductive approach with an inductive approach utilised if additional themes were identified. Within the Mapping and Interpretation stage (Ritchie & Spencer, 1994) of the Framework analysis, the author considered the data and research question and thus followed the analytic guidelines for "developing strategies" (Ritchie & Spencer, 1994). This is because the nature of the data and themes reflected potential changes that could be made to the training for future cohorts and strengths of the current training. Twelve participants from cohort one and 10 from cohort two filled in feedback forms.

Results

Quantitative

Missing Data

There was missing post-training data for one participant in cohort 2 on the CompACT (Francis et al, 2016). Missing data was managed with "Intention to treat" with the scores from the previous questionnaire carried forward as if there had been no change over time. On the ACT Knowledge questionnaire, missing data, or answers where the participant had selected more than one option was considered as an incorrect answer and scored accordingly.

Overall score from feedback sheets

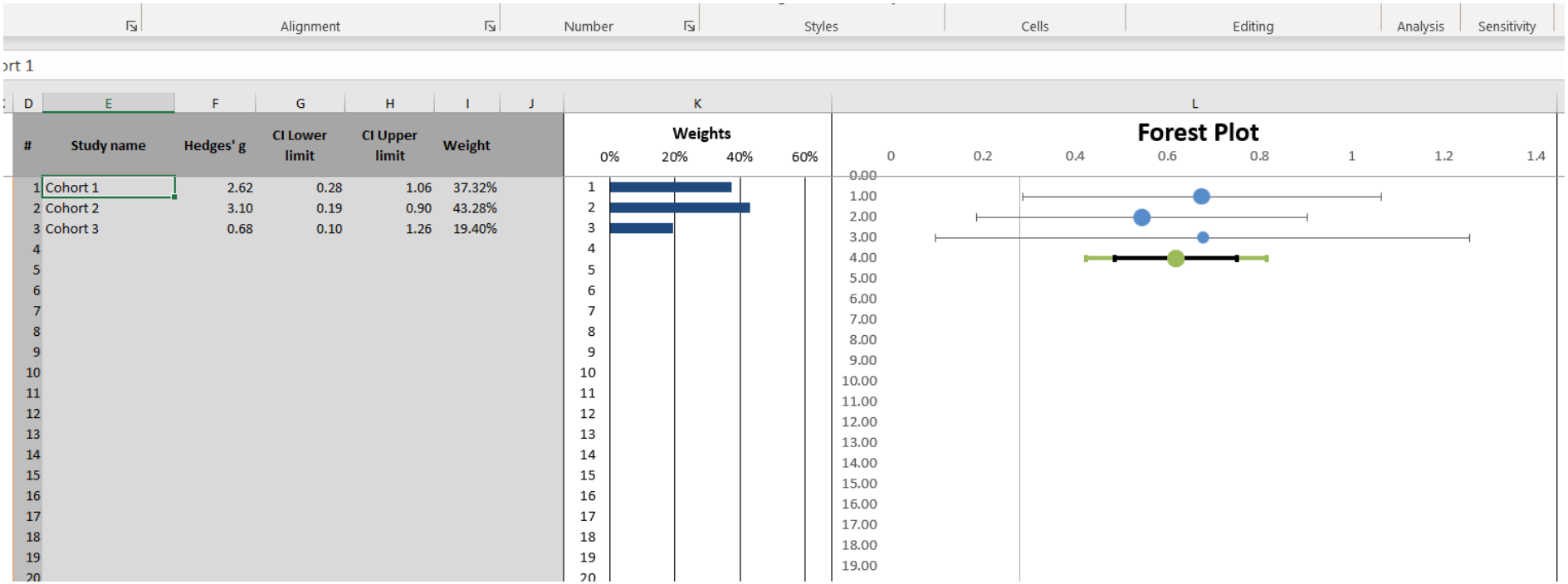
Cohort one gave an average overall score of 9.3 (out of a possible 10, with 10 being extremely positive) for the training, cohort two gave the training a score of 9.5 and cohort three 8.45.

ACT Knowledge questionnaire.

The data from all three cohorts was input into the Meta-Essentials (Suurmond, et al., 2017) this demonstrated that there was a significant difference between pre- and post-training scores on the ACT knowledge questionnaire (Luoma & Plumb, 2013) with a medium effect size ($g = 0.62$, 95% CI [$0.49 – 0.75$, $z = 13.59$, $p < 0.001$). See figure 11 for forest plot.

Figure 11.

Forest plot for ACT Knowledge questionnaire (Luoma & Plumb, 2013) scores for the three cohorts



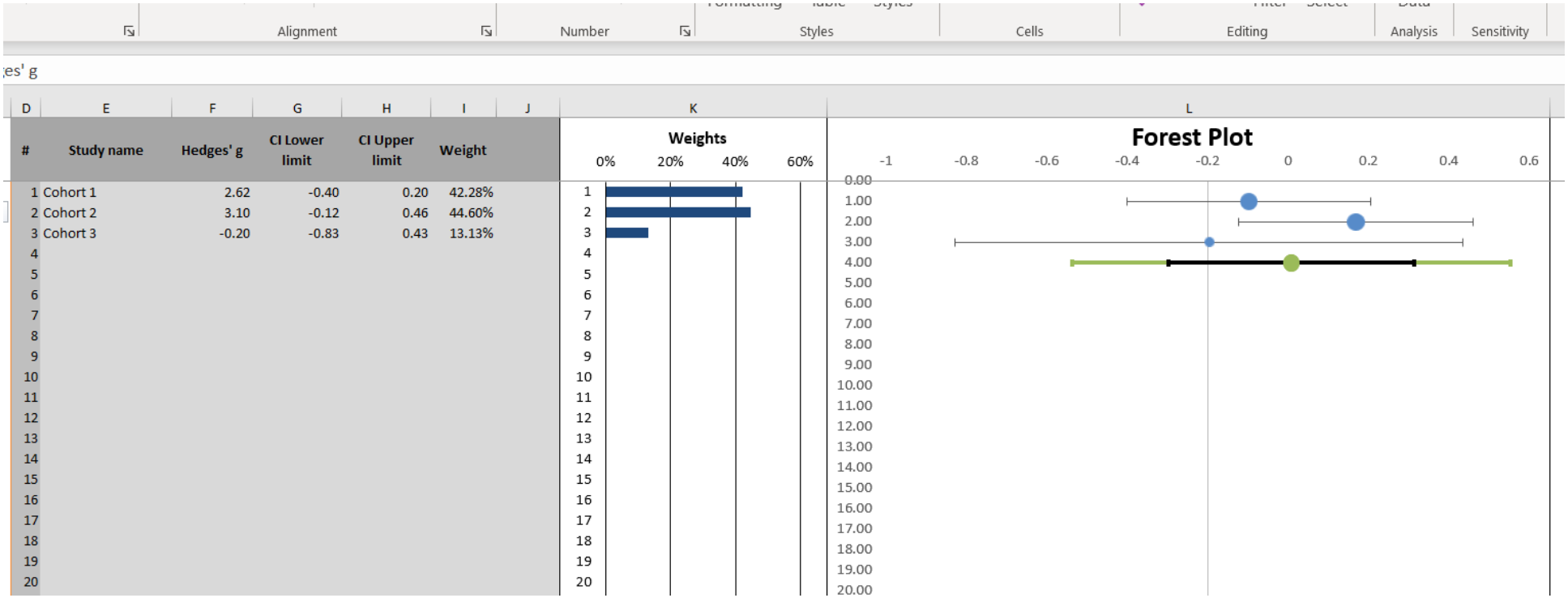
CompACT

The subscales within the CompACT were analysed using paired samples t-tests to investigate any significant differences between pre- and post-training scores. There were no significant differences found across the subscales for any cohort. *p* values ranged from .162 to .877 and effect sizes ranged from -3.10 to .194.

The data from all three cohorts was then input into the Meta-Essentials (Suurmond, et al., 2017) this demonstrated no significant effect (g = 0.01, 95% CI [-0.30 – 0.31, z = 0.08, *p* = 0.470). See figure 12 for forest plot.

Figure 12.

Forest plot for the overall CompACT score (Francis et al, 2016) for the three cohorts



Correlational analysis

There was no significant correlation between pre-training PF and post-training ACT knowledge in any cohort (*p* values ranged from .250 to 3.72).

Reliable change analysis

See figure 13 for the reliable change analysis (Jacobson & Truax, 1991) for each measure and if this constituted a reliable increase or decrease.

Figure 13.

Reliable change analysis (Jacobson & Truax, 1991) for each cohort.

Cohort	Measure	Participants demonstrating reliable change	Reliable increase or decrease
1	CompACT overall	6	Increase
	CompACT OE	10	Increase
	CompACT BA	2	Increase
	CompACT VA	7	Increase
	ACT Knowledge	5	Increase
2	CompACT overall	4	Increase
	CompACT OE	6	Increase
	CompACT BA	5	Increase
	CompACT VA	2	Increase
	ACT Knowledge	3	Increase
	ACT Knowledge	1	Decrease
3	CompACT overall	2	Increase
	CompACT OE	6	Increase
	CompACT BA	2	Increase
	CompACT VA	1	Increase
	ACT Knowledge	1	Increase

Change rating

The participant who noted a behavioural change during the Change interview (Elliot & Rodgers, 2008). They noted they had been using cognitive defusion. They rated this as somewhat expected, that it would have been very unlikely without training and that it was extremely important to them.

Framework Analysis

The participant feedback and adapted Change Interviews (Elliot & Rodgers, 2008) were merged for the Framework analysis. This was due to the similarity within the data sets (participant feedback on the training, reflections etc.) and the limited data within each. The themes identified are outlined in table 2 with examples for each theme (see appendix C for full data set with examples). The main themes identified were the Impact of training, Challenges of putting ACT into practice, reflections on training structure and content, Exercises, and Participants experience of the facilitators.

From this an overall strategy was developed to consider the feedback and how the training could be adapted for future cohorts. This involved reviewing the data and themes and considering what had been beneficial about the training to continue in future cohorts and what was missing or needed adaption to ensure participants felt able to utilise the training within their clinical practice as the training had intended. Many participants reported that the training felt it was not pitched appropriately, that it had been pitched as if being taught to participants with more psychological background and knowledge. Participants also shared that they wanted further practice whether this was with their cohort or clients, to increase their confidence using the skills they learned in the training. However, participants did share that they found the experiential exercises and role-plays beneficial, even if they were somewhat uncomfortable.

Overall, the key aspects of training that were beneficial and should be taken forward are

- Experiential exercises including role-plays and smaller exercises such as the Chinese finger trap.
- The facilitators style and approach e.g., being open to challenge.

Aspects of the training that need to be adapted are:

- The pitching of training – pitching this to participants without any psychological background or experience. Explaining concepts and terms in a way that is accessible.
- Including more visual information such as videos
- Including further practice whether this is with the cohort or with clients to build confidence and understanding.
- Altering the spread of sessions/duration of sessions – many participants suggested splitting sessions up to allow time between to digest the information.

Table 30.

Themes developed from the change interviews and participant feedback.

Theme	Subtheme	Key points	Examples
Impact of training	Personal changes following training.	Considering one's own values.	I particularly found the work around values interesting. It helped me to identify my own values and gave me something to work towards. It has allowed me from a personal level to realise even when prior to the training I thought I was working towards my values this was not necessarily as true as I believed.
		Utilising cognitive defusion	Learning to sit with uncomfortable feelings and thoughts. The more I practice this, the easier it will be to share with my clients. Learning that having certain feelings/ emotions are normal and meant to be sat with Sit more with uncomfortable feelings. I don't have to act on my first thought or feelings

		Using ACT for themselves	I've learned a lot about myself! Sure I will use principles in my home life. Also use on myself personally. I found it to be helpful to myself It also gives me some techniques for dealing with personal issues / situations.
		Utilising present moment awareness	I would use the present moment awareness exercises myself. More mindful. Do exercises
	Professional changes following training.	Intention to use with clients.	One client is stuck as a victim and this will be helpful moving forward. I've used it (content vs context) to say its what the perpetrator did, its not his responsibility. I like being able to use for clients with chronic health issues and older clients to help with their mental health. Probably the goals v values bit and methods to allow clients to identify values whether I agree or not

		Gaining theoretical knowledges	They [questionnaires] were good the more you learn the more you develop, didn't understand some of the terms at the beginning but I felt like I did at the end. Training was helpful because it gave me more knowledge Also liked how we looked at the theory behind.
Challenges to putting ACT into practice.	Personal barriers	Misunderstanding ACT	Rucksack analogy – I stuck my head above the parapet and disagreed with anna, I know my clients feel pain when they hang on but its easier to say hold it and it will be painful but get better ……e.g., may have a conversation with someone and make them happier at the end or give them hope…..
		Fused with the idea that service users may not be able to engage.	thinking of the target audience, some s/u and services are chaotic and strategies may be applicable but harder to measure

		Not feeling confident enough to use ACT post-training	I'm not using ACT personally because it scared me – not understanding the concepts I've not tried with clients, not feeling confident enough Hate to be left behind, seeing others understand and getting on with it Wont use with clients if I don't understand it – I wont be able to explain things I think with more reading and confidence building I will use some of the exercises in my practice at work.
		Intentions to change but no demonstrable change	I haven't used any strategies or pulled the sheets out. My role was hard and not in the right place at the right time I think the changes have been subconscious – like a toolkit in my mind but I'm not aware that I'm actually using them

			Colleagues have been talking about using it with clients
	Service-related barriers	ACT not being valued within workplace.	"Culture of work – how you get your gains …….you may not have asked measurable things e.g., have they seen the doctor, what's their drinking/smoking level, have they got housing etc. I felt a lot of pressure to work between training due to staffing so had no breaks.
Reflections on training structure and content	Supervision and deliberate practice as a part of training.	Being able to practice skills with service users	A cohort of S/U to practice on would be helpful over a more sustained period.
		Further practice sessions with training cohort	More time/days and the opportunity to practice directly. You bounce off each other in training I would have liked more practical / practice at the end of training to work through methods, learned methods it would be good to have a follow up session planned in 3-6 months
	Proposed changes to structure	Needing more visual information	Russ harris videos – one was used but more could have been effective

			Needed more videos More diagrams/ visual aids on presentation I am a visual learning and can find listening difficult to conceptualise
		Less theory on day one	Less theory during first session and recap first session during last / later sessions. Was quite overwhelmed with all the info in the first session so would be beneficial to recap. Very heavy first day, could have been broken up with some practical
		Changing the spread or duration of sessions to support engagement	Ideally for me it would have been better spead over 4 weeks (a session per week). It was difficult taking so much time away from client work, which sometimes distracted from the training. Split day 1 - due to intensity Possibly small groups. Possibly longer case with more time.

			Possible spread out longer so could process information more before sessions I found the first two days hard to grasp but when we looked at values everything suddenly clicked. I think it might have been easier if the values session came earlier it was a lot to take in in one go I think it would be better in smaller chunks. All day training on top of travel was hard. Intense. Maybe for me it could have been over a longer period of time to complete a better understanding of how to use ACT.
		Pitching the training appropriately	Fascinating but difficult it might be because I am quite a slow learner. The theory and concepts weren't explained in laymans terms. It felt like it was being put to psychology students who would know the technical terms. Not thoroughly explained. Would

			expected in year 1 or 2 of a psychology degree. With others in the room it was hard to share that you didn't understand. Pitching of it wasn't low enough Cant think of anything disappointing apart from feeling lost with technical terms. For me I would like a simplified - less wordy explanation - ACT for (dummies) if you like (like the series of books). I get lost in the long descriptive words
		Practical changes to environment	Better seating - tub chairs are far more comfortable to promoting less jiffling and more listening.
	Training as appropriately designed	Participants happy with current offering	Nothing N/A Nothing Very happy I would change nothing all,
Exercises	Experiential exercises as uncomfortable but important	Increased empathy for clients through discomfort	Taking part in pair work and experiential exercises. It really

			helped me to get a feel for what clients experience. The practical elements, being able to 'role play' different exercises, which could be uncomfortable with unfamiliar people (but learning to sit with it and do it anyway!) but helped me to really understand the thoughts behind them. Completing the experiential exercises - although found this challenging - I was pleased I put myself in those situations
		Confronting current work practices	Anything that forces you to look at your work and what you're doing it difficult but ultimately helpful Ability to analyse some issues I struggled with at work.
		Difficult dynamics with colleagues	Team members – get sharp looks if I say I don't get it. I question if others have the same understanding so it may not be helpful to discuss, it would be more helpful to be able to talk to the trainer

			Some people found activities hard – staring into the eyes of someone else, depended who you were paired with.
		Exercises facilitating learning and reflection	Handouts have been helpful to take away and reflect on and read over. Chinese fingers trap – helps me recall training, I'm a visual person Activities - also, I found labelling thoughts very useful. Brief intervention exercises - milk, Chinese finger trap, worksheets etc. The role play, as it helped to understand the concepts. Whole thing was interesting, examples of real play quite useful. Roleplay and hearing others' experiences.
		Developing relationships with colleagues	You get to see colleagues on a different level

			2 teams got together and got to know each other and bond even thought they normally sit close to one another
Participants experience of the facilitators	Facilitators as open and reflective	Facilitators were open to challenge and discussion	facilitator was open to challenge and new interpretations and that was great. Enjoyed openness towards conversation and challenge from tutor.
		Facilitators as supportive and understanding	If we had been forced to move around it wouldn't have been helpful but anna didn't I felt really comfortable with the trainer - under what were uncomfortable experiences. Anna put me at ease. I have a more in depth knowledge of ACT Really good training, knowledgeable trainers. I really like not being 'forced' to talk in front of the group like in some training as this can cause anxiety which stops me from taking in the knowledge. Very enjoyable :-)

Discussion

The purpose of this evaluation was to assess if ACT training would lead to changes in PF and ACT knowledge in participants in a co-located network of services providing treatment in relation to substance use and mental health signposting. The study also aimed to explore participants' perceptions of training and intention to use ACT skills clinically and/or personally. Quantitative analysis indicated that there were no significant changes in PF from pre-training to post-training. However, reliable increase as seen in a small set of participants. There was also a significant difference between the ACT knowledge questionnaire scores. Framework analysis of participant feedback identified main themes of the Impact of training, Challenges of putting ACT into practice, reflections on training structure and content, Exercises, and Participants experience of the facilitators. Strategies for future cohorts were then devised from the data which identified that the experiential exercises were especially beneficial even where they were challenging, aspects that needed to be adapted were the pitching of training, spread/duration of sessions, including further practice and more visual information.

Individuals' pre-training PF did not correlate with learning as demonstrated by the ACT knowledge questionnaires at time 2, which contrasts with prior research offering ACT training for clinicians (Richards et al, 2011). The lack of a significant difference in PF between pre- and post-training also does not fit with prior research on ACT training for staff (Richards et al, 2011; Luoma & Vilardaga, 2013; Stewart et al, 2016) with these studies finding a significant increase post training. Though, it is important to note that some previous studies into mindfulness-based therapies show little change immediately post-intervention with significant changes only being seen longer term (Hayes et al 2004a; Haye et al 2004b). This is due to how ACT processes tend to show cumulative effects over time (Hayes et al, 2011). One possible explanation for seeing reliable change in some participants CompACT (Francis et al, 2016) but not a significant change overall is that some participants may have engaged in more practice in between training sessions, which would contribute to this dose-response effect. Furthermore, in other studies of ACT training the staff were offered phone consultation post-training (Luoma & Vilardaga, 2013) or supervision post-training (Stewart et al, 2016) to aid their development of skills and provide further guidance. Therefore, it may be that if further support or supervision post-training had been offered this may have led to significant changes on the CompACT (Francis et al, 2016).

Research has identified deliberate practice as a potentially promising way to develop psychological practice and that therapists' skills can be developed by utilising practice and feedback from supervisors or peers (Miller, Hubble, & Duncan, 2008; Rousmaniere et al, 2017; Tracey et al, 2014; Hill et al, 2020). Importantly, some research has shown that effectiveness is poorer for skills training without further opportunities to practice (Miller et al, 2005; Fixsen et al, 2005). This is reflected in the qualitative data, which indicates that many participants had intentions to utilise ACT skills both personally and professionally, but there was little indication that this had gone beyond intention to changes in clinical practice. This suggests that the training has fallen short of supporting the participants to utilise the training clinically as intended. Participants identified that they wanted further practice and support whether this was with their cohort or with clients and many reported a lack of confidence in their skills post training which prevented them from putting the skills into practice. Therefore, this should be considered for future cohorts to ensure that they are able to make behavioural changes post-training.

Despite no significant changes overall on the CompACT (Francis et al, 2016) both cohorts showed significant changes from pre- to post-training on the ACT Knowledge Questionnaire. The significant change is consistent with previous research into ACT training and knowledge (Richards et al, 2011; Luoma & Vilardaga, 2013) and demonstrates that declarative learning occurred across the training. This is interesting and together with the lack of a significant change in PF in participants raises the question regarding whether clinicians need to be good at personally practicing the skills that they are teaching to clients? Personal practice refers to a type of learning underpinned by experiential learning theory whereby learning occurs via direct experience and reflecting on this experience (Kolb, 1984). In clinical training this experiential learning can occur via roleplays, observation, supervision, and problem-based learning (Binder, 1993). For Mindfulness-based courses, personal practice is an integral part of the training and an ongoing commitment (British Association of Mindfulness Based approaches (n.d). The ACT training delivered in this project did involve experiential learning such as role-plays and exercises that encouraged participants to personally practice ACT skills, though it is unclear to what extent participants continued this practice despite many reporting the intention to. The lack of change on the CompACT (Francis et al, 2016) suggests that many may not have engaged in personal practice. It may therefore be interesting for future cohorts to explore the relationship between self-practice and their use clinically of the skills learned in training.

The feedback and client change interviews reflected themes surrounding the Impact of training, Challenges of putting ACT into practice, reflections on training structure and content Exercises, and Participants experience of the facilitators. Whilst the focus of the training in this project was to facilitate learning about ACT theory and skills for use with clients, many participants also reported the intention to utilise the skills such as Cognitive Defusion and Present moment awareness within their own life. ACT has been found to also be helpful for staff groups to use personally for burnout and wellbeing (Flaxman & Bond, 2010; Lloyd et al, 2013**;** Puolakanaho et al, 2020; Prudenzi et al, 2021; Reeve et al, 2021). If we had the chance to follow-up longer term it may have been useful to assess to what extent the participants were personally benefitting from the ACT skills training and if this led to changes on wellbeing measures. It may also have been interesting to see to what extent changes and personal practice impacted on their clinical work.

Limitations

One potential limitation of the study is that the facilitator of the training currently works within the services where the training was offered. This may have had an impact on participants' engagement with both the training and the evaluation which was not directly assessed. The feedback about the facilitators style was positive, though this is to be expected considering their continued contact with the facilitator at work. Participants may have felt less able to share negative aspects of training.

A further limitation of the study is that the outcome measures were only collected at two-time points, it would have been interesting to have further follow-up measures completed to track long term changes to assess if, having had more time to utilise techniques both personally and professionally we would see significant changes in PF or ACT knowledge.

Also, there were only two participants who agreed to attend Change interviews (Elliot & Rodgers). This unfortunately meant that there was limited data available to explore the

changes that were seen post training, clinically and personally in a greater level of detail. The notes for these were also written by the first author as they conducted the interviews which meant that some detail may have been missed. Whilst the first author tried to note what the participants said in their own words, it may have been helpful to record and then transcribe the notes to ensure that no details were missed.

Additionally, we have not taken behavioural measures of implementation of ACT in practice which could be considered as ACT inconsistent, given that ACT is a behavioural theory, and we would expect to see behavioural change following training. This was due to service pressures and demands on the participants but is something that should be addressed in future. It is also important to note that the much of the qualitative data reflected that the training was not pitched appropriately, and some participants did not feel confident to utilise the skills post-training. As explained above this is something that can be addressed for future cohorts.

Future directions and clinical implications

ACT has been shown in many previous studies to be beneficial for both clinical work and personal wellbeing when offered to different staff groups (Flaxman & Bond, 2010; Lloyd et al, 2013**;** Puolakanaho et al, 2020; Prudenzi et al, 2021; Reeve et al, 2021). Whilst there was no change in PF following this ACT training, there was a significant increase in ACT knowledge as would be expected following training. The results overall indicate that knowledge is necessary but has limited impact if it does not lead to personal or professional implementation of the skills learned.

Conflict of Interest

Author 1 None to declare.

Author 2 None to declare.

Author 3 None to declare.

References

Back, S. E., Waldrop, A. E., & Brady, K. T. (2009). Treatment challenges associated with comorbid substance use and posttraumatic stress disorder: Clinicians' perspectives. *American Journal on Addictions*, *18*(1), 15-20. doi:10.1080/10550490802545141.

Batten, S. V., & Hayes, S. C. (2005). Acceptance and commitment therapy in the treatment of comorbid substance abuse and post-traumatic stress disorder: A case study. *Clinical Case Studies*, *4*(3), 246-262. https://doi.org/10.1177/1534650103259689

Black, C. (2021). Review of drugs part two: Prevention, treatment, and recovery. Department of Health and Social Care. https://www.gov.uk/government/publications/review-of-drugs-phase-two-report/review-of-drugs-part-two-prevention-treatment-and-recovery

Binder, J. L. (1993). Is it time to improve psychotherapy training?. *Clinical Psychology Review*, *13*(4), 301-318.

Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology*, *5*(1), 156. https://doi.org/10.1037/1076-8998.5.1.156

Bride, B. E., Smith Hatcher, S., & Humble, M. N. (2009). Trauma training, trauma practices, and secondary traumatic stress among substance abuse counselors. *Traumatology*, *15*(2), 96-105. https://doi.org/10.1177/1534765609336362

Bride, B. E., & Kintzle, S. (2011). Secondary traumatic stress, job satisfaction, and occupational commitment in substance abuse counselors. *Traumatology*, *17*(1), 22-28. https://doi.org/10.1177/1534765610395617

Brinkborg, H., Michanek, J., Hesser, H., & Berglund, G. (2011). Acceptance and commitment therapy for the treatment of stress among social workers: A randomized controlled trial. *Behaviour Research and Therapy*, *49*(6-7), 389-398. https://doi.org/10.1016/j.brat.2011.03.009

Castaldelli-Maia, J. M., & Bhugra, D. (2022). Analysis of global prevalence of mental and substance use disorders within countries: focus on sociodemographic characteristics and income levels. *International Review of Psychiatry*, *34*(1), 6-15. https://doi.org/10.1080/09540261.2022.2040450

Cosden, M., Sanford, A., Koch, L. M., & Lepore, C. E. (2016). Vicarious trauma and vicarious posttraumatic growth among substance abuse treatment providers. *Substance Abuse*, *37*(4), 619-624. https://doi.org/10.1080/08897077.2016.1181695

Delgadillo, J., Gore, S., Ali, S., Ekers, D., Gilbody, S., Gilchrist, G., ... & Hughes, E. (2015). Feasibility randomized controlled trial of cognitive and behavioral interventions for depression symptoms in patients accessing drug and alcohol treatment. *Journal of Substance Abuse Treatment*, *55*, 6-14. https://doi.org/10.1016/j.jsat.2015.02.008

Department of Health and Social Care (2021, July 27). Government response to the independent review of drugs by Dame Carol Black. https://www.gov.uk/government/publications/independent-review-of-drugs-by-dame-carol-black-government-response/government-response-to-the-independent-review-of-drugs-by-dame-carol-black

Elliot, R., & Rodgers, B. (2008). Client change interview schedule: Follow-up version (v5). *Retrieved June*, *10*, 2019.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14*(4), 245-258. https://doi.org/10.1016/S0749-3797(98)00017-8

Flaxman, P.E., Bond, F.W., (2010). A randomised worksite comparison of acceptance and commitment therapy and stress inoculation training. *Behaviour Research & Therapy. 48*(8), 816–820. https://doi.org/10.1016/j.brat.2010.05.004

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. Tampa, FL: University of South Florida. *The National Implementation Research Network*.

Garner, B. R., Hunter, B. D., Modisette, K. C., Ihnes, P. C., & Godley, S. H. (2012). Treatment staff turnover in organizations implementing evidence-based practices: Turnover rates and their association with client outcomes. *Journal of Substance Abuse Treatment*, *42*(2), 134-142. https://doi.org/10.1016/j.jsat.2011.10.015

Gifford, E. V., & Hayes, S. C. (1999). Functional contextualism: A pragmatic philosophy for behavioral science. In *Handbook of Behaviorism* (pp. 285-327). Academic Press. https://doi.org/10.1016/B978-012524190-8/50012-7

Gloster, A. T., Walder, N., Levin, M. E., Twohig, M. P., & Karekla, M. (2020). The empirical status of acceptance and commitment therapy: A review of meta-analyses. *Journal of Contextual Behavioral Science*, *18*, 181-192. https://doi.org/10.1016/j.jcbs.2020.09.009

Hayes, S. C., Bissett, R., Roget, N., Padilla, M., Kohlenberg, B. S., Fisher, G., ... & Niccolls, R. (2004a). The impact of acceptance and commitment training and multicultural training on the stigmatizing attitudes and professional burnout of substance abuse counselors. *Behavior Therapy*, *35*(4), 821-835. https://doi.org/10.1016/S0005-7894(04)80022-4

Hayes, S. C., Wilson, K. G., Gifford, E. V., Bissett, R., Piasecki, M., Batten, S. V., ... & Gregg, J. (2004b). A preliminary trial of twelve-step facilitation and acceptance and commitment therapy with polysubstance-abusing methadone-maintained opiate addicts. *Behavior Therapy*, *35*(4), 667-688. https://doi.org/10.1016/S0005-7894(04)80014-5

Hayes, S. C., Bunting, K., Herbst, S., Bond, F. W., & Barnes-Holmes, D. (2006a). Expanding the scope of organizational behavior management: Relational frame theory and the experimental analysis of complex human behavior. *Journal of Organizational Behavior Management*, *26*(1-2), 1-23. https://doi.org/10.1300/J075v26n01_01

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006b). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*(1), 1-25. https://doi.org/10.1016/j.brat.2005.06.006

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford press.

Hill, C. E., Kivlighan III, D. M., Rousmaniere, T., Kivlighan Jr, D. M., Gerstenblith, J. A., & Hillman, J. W. (2020). Deliberate practice for the skill of immediacy: A multiple case study of doctoral student therapists and clients. *Psychotherapy*, *57*(4), 587. https://doi.org/10.1037/pst0000247

Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*, *2*(8), e356-e366. https://doi.org/10.1016/S2468-2667(17)30118-4

Hughes, K., Bellis, M. A., Sethi, D., Andrew, R., Yon, Y., Wood, S., Ford, K., Baban, A., Boderscova, L., Kachaeva, M., Marauk, K., Markovic, M., Povilaitis, R., Raleva, M., Terzic, N., Veleminsky, M., Włodarczyk, J., & Zakhozha, V. (2019). Adverse childhood experiences, childhood relationships and associated substance use and mental health in young Europeans. *EuropeanJjournal of Public Health*, *29*(4), 741-747. https://doi.org/10.1093/eurpub/ckz037

Hunt, G. E., Malhi, G. S., Cleary, M., Lai, H. M. X., & Sitharthan, T. (2016). Prevalence of comorbid bipolar and substance use disorders in clinical settings, 1990–2015: systematic review and meta-analysis. *Journal of Affective Disorders*, *206*, 331-349. https://doi.org/10.1016/j.jad.2016.07.011

Hunt, G. E., Large, M. M., Cleary, M., Lai, H. M. X., & Saunders, J. B. (2018). Prevalence of comorbid substance use in schizophrenia spectrum disorders in community and clinical settings, 1990–2017: Systematic review and meta-analysis. *Drug and Alcohol Dependence*, *191*, 234-258. https://doi.org/10.1016/j.drugalcdep.2018.07.011

IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp

Kunins, H., Gilbert, L., Whyte-Etere, A., Meissner, P., & Zachary, M. (2007). Substance abuse treatment staff perceptions of intimate partner victimization among female clients. *Journal of Psychoactive Drugs*, *39*(3), 251-257. https://doi.org/10.1080/02791072.2007.10400611

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12–19

Johnson, M. E., Neal, D. B., Brems, C., & Fisher, D. G. (2006). Depression as measured by the Beck Depression Inventory-II among injecting drug users. *Assessment*, *13*(2), 168-177. https://doi.org/10.1177/1073191106286951

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall

Lai, H. M. X., Cleary, M., Sitharthan, T., & Hunt, G. E. (2015). Prevalence of comorbid substance use, anxiety and mood disorders in epidemiological surveys, 1990–2014: A systematic review and meta-analysis. *Drug and Alcohol Dependence*, *154*, 1-13. https://doi.org/10.1016/j.drugalcdep.2015.05.031

Luoma, J. B., Hayes, S. C., & Walser, R. D. (2007). *Learning ACT: An acceptance & commitment therapy skills-training manual for therapists*. New Harbinger Publications.

Luoma, J. B. & Plumb, J. (2013). Improving Therapist Psychological Flexibility While Training Acceptance and Commitment Therapy: A Pilot Study. *Cognitive Behaviour Therapy 42*(1), 1-8. https://doi.org/10.1016/j.invent.2014.06.003

Lloyd, J., Bond, F. W., & Flaxman, P. E. (2013). The value of psychological flexibility: Examining psychological mechanisms underpinning a cognitive behavioural therapy intervention for burnout. *Work & Stress*, *27*(2), 181-199. https://doi.org/10.1080/02678373.2013.782157

Ly, K. H., Asplund, K., & Andersson, G. (2014). Stress management for middle managers via an acceptance and commitment-based smartphone application: A randomized controlled trial. *Internet Interventions*, *1*(3), 95-101. https://doi.org/10.1016/j.invent.2014.06.003

Medline Plus (n.d) Medical Encyclopaedia – Substance use. https://medlineplus.gov/ency/article/001945.htm

Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, *72*(6), 1050.

Miller, S. D., Hubble, M., & Duncan, B. (2008). Supershrinks: What is the secret of their success. *Psychotherapy in Australia*, *14*(4), 14-22.

NHS digital (2021). Statistics on Drug Misuse England 2020. https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-drug-misuse/2020

Office for Health Improvements & Disparities (2022). Working definition of trauma-informed practice https://www.gov.uk/government/publications/working-definition-of-trauma-informed-practice/working-definition-of-trauma-informed-practice#working-definition-of-trauma-informed-practice Retrieved June 2023

Osaji, J., Ojimba, C., & Ahmed, S. (2020). The use of acceptance and commitment therapy in substance use disorders: a review of literature. *Journal of Clinical Medicine Research*, *12*(10), 629. doi: 10.14740/jocmr4311

Oyefeso, A., Clancy, C., & Farmer, R. (2008). Prevalence and associated factors in burnout and psychological morbidity among substance misuse professionals. *BMC Health Services Research*, *8*, 1-9. doi:10.1186/1472-6963-8-39

Prudenzi, A., Graham, C. D., Clancy, F., Hill, D., O'Driscoll, R., Day, F., & O'Connor, D. B. (2021). Group-based acceptance and commitment therapy interventions for improving general distress and work-related distress in healthcare professionals: A systematic review and meta-analysis. *Journal of Affective Disorders*, *295*, 192-202. https://doi.org/10.1016/j.jad.2021.07.084

Puolakanaho, A., Tolvanen, A., Kinnunen, S. M., & Lappalainen, R. (2020). A psychological flexibility-based intervention for Burnout: A randomized controlled trial. *Journal of Contextual Behavioral Science*, *15*, 52-67. https://doi.org/10.1016/j.jcbs.2019.11.007

Rousmaniere, T., Goodyear, R. K., Miller, S. D., & Wampold, B. E. (Eds.). (2017). *The cycle of excellence: Using deliberate practice to improve supervision and training*. John Wiley & Sons.

Reeve, A., Moghaddam, N., Tickle, A., & Young, D. (2021). A brief acceptance and commitment intervention for work-related stress and burnout amongst frontline homelessness staff: A single case experimental design series. *Clinical Psychology & Psychotherapy*, *28*(5), 1001-1019. https://doi.org/10.1002/cpp.2555

Shepherd, K., Pritty, B., Tickle, A., & Moghaddam, N. (2021). "I don't want to take buprenorphine for the rest of my life": Acceptance and Commitment Therapy for a Client Struggling to Reduce Low-Dose Buprenorphine (a Hermeneutic Single-Case Efficacy Design). *International Journal of Mental Health and Addiction*, 1-24. https://doi.org/10.1007/s11469-021-00729-2

Stewart, C., White, R. G., Ebert, B., Mays, I., Nardozzi, J., & Bockarie, H. (2016). A preliminary evaluation of Acceptance and Commitment Therapy (ACT) training in Sierra Leone. *Journal of Contextual Behavioral Science*, *5*(1), 16-22. https://doi.org/10.1016/j.jcbs.2016.01.001

Suurmond, R., van Rhee, H., & Hak, T. (2017). Introduction, comparison, and validation of Meta-Essentials: a free and simple tool for meta-analysis. *Research Synthesis Methods*, *8*(4), 537-553. https://doi.org/10.1002/jrsm.1260.

Tracey, T. J., Wampold, B. E., Lichtenberg, J. W., & Goodyear, R. K. (2014). Expertise in psychotherapy: An elusive goal?. *American Psychologist*, *69*(3), 218. https://doi.org/10.1037/a0035099

British association of Mindfulness Based approaches (n.d). Good practice guidelines Retrieved 11 July 2023 from Good Practice Guidelines | BAMBA

Waters, C. S., Frude, N., Flaxman, P. E., & Boyd, J. (2018). Acceptance and commitment therapy (ACT) for clinically distressed health care workers: Waitlist-controlled

evaluation of an ACT workshop in a routine practice setting. *British Journal of Clinical Psychology*, *57*(1), 82-98. https://doi.org/10.1111/bjc.12155

Young, S. (2015). Understanding substance abuse counselor turnover due to burnout: A theoretical perspective. *Journal of Human Behavior in the Social Environment, 25,* 675–686. https://doi.org/10.1080/10911359.2015.1013658

Appendix A – adapted Change Interview (Elliot & Rodgers, 2008)

Change interview schedule.

8. Brief introduction

Introductions and brief outline of the interview; brief recap of the six processes and training.

1a. How did you find the ACT training overall?

9. Changes (10 mins)

2a. What changes, if any, have you noticed in yourself since the training?

(Interviewer: reflect back change to the participant and write down brief versions of the changes one per change sheet. Follow-up questions / prompts:

- "Are you doing, feeling or thinking differently from the way did before the training?"
- "Have you made any changes in how you work with clients since the training?"
- "Have you made any changes in your personal life?"
- "Have you noticed any changes in the team generally, given so many of you took part in the training?"

2b. Has anything changed for the worse since the training?

2c. Is there anything that you wanted to change that hasn't since the training?

10. Change ratings (10 mins). [see separate change sheet with rating scales a, b and c).

3a. For each change, please rate how much you expected it vs. were surprised by it?

3b. For each change, please rate how likely you think it would have been if you hadn't had the training?

3c. How important or significant do you consider this change to be?

11. Helpful aspects (10 minutes).

Can you sum up what has been helpful about the training? Please give examples (e.g. general aspects, specific events).

12. Attributions (5 minutes):

In general, what do you think has caused the various changes you described? What do you think might have brought them about, including things both outside of training and in the training?

13. Resources (5 minutes):

6a. What personal strengths do you think have helped you make use of the training since it finished? (prompts e.g. what you're good at?)

6b What things in the team or service have helped you to make use of the training since it finished?

14. Problematic aspects (5 minutes)

7a. What kinds of things about the training were hindering, unhelpful, negative, or disappointing for you? (general aspects of specific events).

7b. Were there things in the training which were difficult or painful but still OK or perhaps helpful? What were they?

7c. Has anything been missing from the training? (What would have made it more effective or helpful?

8 Limitations (5 minutes)

8a. Are there things about you that you think have made it harder for you to use what you learned in practice?

8b. Are there things in your team or service that have made it harder for you to use what you learned in practice?

13. Suggestions (5 minutes)

Do you have any suggestions for us regarding the training?

Do you have anything else that you want to tell me?

14. Reflecting on changes shown on the pre- and post-measures:

We have put together the scores from the questionnaires you filled in at the start and end of training. I would like to show them to you and get your view on the results, for example whether you think they are in line with your expectations or not.

ACT Knowledge questionnaire: this is the multiple choice questionnaire you did about ACT. A higher score indicates greater knowledge of ACT.

CompACT: This is the 8-question measure of what we call psychological flexibility. A higher score indicates greater psychological flexibility. These are your scores from the beginning and end of training.

The CompACT breaks down into three sections (other side of sheet): behavioural awareness, openness to experience, and valued action, i.e. what you do that is in line with how you want to live. These graphs show your scores from the start to the end of training on the three scales. Higher scores indicate greater psychological flexibility.

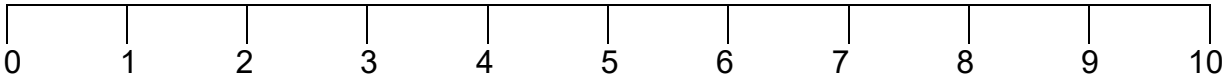
Appendix B – Post-training feedback sheet

Feedback on ACT training

July 2023

Thank you for taking part in this training. Please take a few moments to complete this feedback sheet:

How did you find the training overall? Please circle:



Not good Excellent

What was your highlight of the training, and why?

What would you have changed about the training, and why?

What, if anything, will you do differently as a result of the training (whether with clients, in your work more generally, or outside work)?

Any other feedback for us?

Appendix C– Framework analysis full data set

Theme	Subtheme	Key points	Examples
Impact of training	Personal changes following training.	Considering one's own values.	I particularly found the work around values interesting. It helped me to identify my own values and gave me something to work towards. It has allowed me from a personal level to realise even when prior to the training I thought I was working towards my values this was not necessarily as true as I believed. Also more in touch with my own values as a result I will definitely take away the importance of values as linked to our actions
		Utilising cognitive defusion	Learning to sit with uncomfortable feelings and

			thoughts. The more I practice this, the easier it will be to share with my clients. Learning that having certain feelings/ emotions are normal and meant to be sat with Sit more with uncomfortable feelings. I don't have to act on my first thought or feelings Look at my own feelings / thoughts / behaviours differently, Separate myself from thoughts. That I am not my thoughts Work on my own internal thougths and defusion
		Using ACT for themselves	I've learned a lot about myself! Sure I will use principles in my home life. Also use on myself personally. I found it to be helpful to myself

			It also gives me some techniques for dealing with personal issues / situations. Reflection/using ACT when looking at self Revisit own personal stuff in an ACT way to develop ACT practice or… Think of ways to be more ACT consistent in my own life. Me before vs after training – I feel confidence to push myself forward to doing the ACT group. I'm not explaining it well… I'm quite reserved to push myself without training I would have taken a backseat and not push myself, it feels right now a natural thing. ACT helped me take personal responsibility with my own difficulties I think I am more likely to apply these principles in my own life.

			Support family / friends. Be more creative with tasks.
		Utilising present moment awareness	I would use the present moment awareness exercises myself. More mindful. Do exercises
	Professional changes following training.	Intention to use with clients.	One client is stuck as a victim and this will be helpful moving forward. I've used it (content vs context) to say its what the perpetrator did, its not his responsibility. I like being able to use for clients with chronic health issues and older clients to help with their mental health. Probably the goals v values bit and methods to allow clients to identify values whether I agree or not I think with more reading and confidence building I will use some of the exercises in my practice at work.

			Try to incorporate techniques into my work. Think of ways to be more ACT consistent in my own life. Use values more in my work where appropriate More present moment activities to be incorporated in the work I do with clients and pay more attention to my own values. I will change my practice at work where appropriate. Act in 1-2-1's Consider the hexaflex and whether clients require work in any of the domains. Values work with clients - hadn't realised the importance of this. Values rather than goals. Mindfulness - present moment awareness

			Present moment awareness exercises I will use. Will utilise matrix and hexaflex. Work with values more Include more defusion in my one to one work. Practice more mindful awareness incorporating what is important to me. Revise the ACT group programme. I will aim to incorporate ACT within client work and think it will be a useful addition Using the tools provided this can be implemented to some of my clients who struggling with CBT = policy. Utilise the ACT model Put the training into practice in 1:1 sessions with clients. Hoping to have the opportunity to use the manual in practice with clients. If not then have gained some really useful ways of framing support for clients in a

			way in which brings in discussion around what's workable and what concrete action they can take. I will use the matrix for the creative hopelessness scenario I can see this being a useful tool. Listen more suggest less I want to learn more about ACT in practice (I may order a work book for myself). I will use the exercises face to face with clients. …not try to fix clients Specific clients I will do ACT focused work with but also in generally it will inform my daily work. Going to try everything with my clients some bits of practice in work with clients.

			Try to incorporate techniques into my work. Definitely being in different ACT work. Start working through values. Talking and looking at internal solutions I will use some of the exercises in my practice at work. Present moment awareness exercises I will use. Will utilise matrix and hexaflex. Colleagues have been talking about using it with clients It will help me to take a wider view on what might be happening for someone and also have a bigger toolkit when responding. The principles of ACT support the ethos of anxiety and substance misuse; will apply to daily interactions.

			To ask more questions when approaching clients who are in need of support and avoid statements / my own opinions. I will certainly attempt to convey the principles of ACT into my work Take new approach with clients to help reframe uncomfortable feelings….be more creative with tasks Use values. Talk to clients about 'noticing' thoughts / feelings. Reflect to clients. Will attempt to incorporate ACT into work with clients. Will remember some of ACT training. It has taken me a few lessons to understand just how this can be used for client scenarios and a guided way of understanding their experiences and feelings in a new way.

			I will use the techniques I have learned and feel more confident with (have done already).
		Gaining theoretical knowledges	They [questionnaires] were good the more you learn the more you develop, didn't understand some of the terms at the beginning but I felt like I did at the end. Training was helpful because it gave me more knowledge Also liked how we looked at the theory behind. Learning the theory because I'm a nerd Great to learn something new. I like knowledge, helps me to help clients and progress in my education, maybe not education but career and helps clients [training] helps my identity and meaning, I am a learner

			Some bits are starting to make sense e.g., content vs context. I enjoyed it I've done ACT training before but this seemed deeper, it was intellectual and challenging I found the metaphors useful, and clear definitions of each ACT phase. When taken part with the tools provided to have and understanding the difference with CBT / ACT both two different strategies.
Challenges to putting ACT into practice.	Personal barriers	Misunderstanding ACT	Rucksack analogy – I stuck my head above the parapet and disagreed with anna, I know my clients feel pain when they hang on but its easier to say hold it and it will be painful but get better ……e.g., may have a conversation with someone and

			make them happier at the end or give them hope…..
		Fused with the idea that service users may not be able to engage.	thinking of the target audience, some s/u and services are chaotic and strategies may be applicable but harder to measure
		Not feeling confident enough to use ACT post-training	I'm not using ACT personally because it scared me – not understanding the concepts I've not tried with clients, not feeling confident enough Hate to be left behind, seeing others understand and getting on with it Wont use with clients if I don't understand it – I wont be able to explain things I think with more reading and confidence building I will use some of the exercises in my practice at work

			Research more into ACT. I need to continue understanding before I deliver this. I will try to educate myself more around ACT. It was a lot to take in, in a short space of time so would be good to develop more knowledge around the ACT concept and how to use it I don't recite practice very well and don't understand the theory behind it necessarily I will keep plugging at it to understand it
		Intentions to change but no specific change	I haven't used any strategies or pulled the sheets out. My role was hard and not in the right place at the right time I think the changes have been subconscious – like a toolkit in my mind but I'm not aware that I'm actually using them Defusion and values

	Service-related barriers	ACT not being valued within workplace.	"Culture of work – how you get your gains …….you may not have asked measurable things e.g., have they seen the doctor, what's their drinking/smoking level, have they got housing etc. I felt a lot of pressure to work between training due to staffing so had no breaks. Not thought about it but not sat down and had a debrief about training [at work], that would be helpful going to be using in group work to think about what we can take for our sessions.
Reflections on training structure and content	Supervision and deliberate practice as a part of training.	Being able to practice skills with service users	A cohort of S/U to practice on would be helpful over a more sustained period.
		Further practice sessions with training cohort and trainer	More time/days and the opportunity to practice directly. You bounce off each other in training 4 days didn't seem long enough

			I would have liked more practical / practice at the end of training to work through methods, learned methods it would be good to have a follow up session planned in 3-6 months I would have found it helpful to watch a mini-ACT session to see how it is set up in practice and see how the different matrixes can be included. To have seen trainers acting out several sessions so that we could have a grasp on how to deliver To have seen trainers acting out several sessions so that we could have a grasp on how to deliver ACT. more interaction with course teachers during activities
	Proposed changes to structure	Needing more visual information	Russ harris videos – one was used but more could have been effective

			Needed more videos More diagrams/ visual aids on presentation I am a visual learning and can find listening difficult to conceptualise less word based presentation. Bigger print outs - the windows on the workbooks too small to read. Exercises were good but we needed more videos. More links to resources
		Less theory on day one	Less theory during first session and recap first session during last / later sessions. Was quite overwhelmed with all the info in the first session so would be beneficial to recap. Very heavy first day, could have been broken up with some practical

		Changing the spread or duration of sessions to support engagement	Ideally for me it would have been better spead over 4 weeks (a session per week). It was difficult taking so much time away from client work, which sometimes distracted from the training. Split day 1 - due to intensity Possibly small groups. Possibly longer case with more time. Possible spread out longer so could process information more before sessions I found the first two days hard to grasp but when we looked at values everything suddenly clicked. I think it might have been easier if the values session came earlier Days were very draining quite a lot of new stuff to take in in a short period of time. It was hard to concentrate for the length of the lessons.

			Having all four days together Longer I would have preferred 6x 4 hour sessions going through each hexaflex points then one day to bring together. Long series instead of 4 maybe 8/6 Maybe split up days 2 and 3 so more time for integration. More sessions, less time training each day to address areas separately. it was a lot to take in in one go I think it would be better in smaller chunks. All day training on top of travel was hard. Intense. Maybe for me it could have been over a longer period of time to complete a better understanding of how to use ACT.

		Pitching the training appropriately	Fascinating but difficult it might be because I am quite a slow learner. The theory and concepts weren't explained in laymans terms. It felt like it was being put to psychology students who would know the technical terms. Not thoroughly explained. Would expected in year 1 or 2 of a psychology degree. With others in the room it was hard to share that you didn't understand. Pitching of it wasn't low enough Cant think of anything disappointing apart from feeling lost with technical terms. The theory I would delve into at home it was hard to understand but we don't need that for clients e.g, values, pause, you are not your thoughts. Explanations should be simple. Maybe 2 levels of training? Client focused and then another more theory based

			Found the questions hard and took a while to do them. Others admitted they just ticked the first one they thought was the right answer. Matched training in that it felt like doing a psychology exam. some language very psycho. The values day would have been better if explained more on day 1. My idea of values were different to that explained. Bit too “wordy” on occasion, Very in depth, to streamline it. A lot of unfamiliar terminology which I still don't entirely understand. Could have been explained in simpler terms. I have been wanting to include more ACT in sessions, so smaller interventions and ideas for these would be helpful More information on theories regarding ACT

			I would have found it useful to know at the beginning that there was no particular order for how ACT was used as I spent a lot of time feeling I had missed something. Also it would have been good to have an idea of what a session might look like early on. Less mindfulness, because I really do not like it for me (but can see the value for others). It has taken me the whole four days to grasp the concept. The highlight was when things began to make sense to me and I saw the benefit of ACT. Everything got a bit muddled for me. For me I would like a simplified - less wordy explanation - ACT for (dummies) if you like (like the series of books). I get lost in the long descriptive words

		Practical changes to environment	Better seating - tub chairs are far more comfortable to promoting less jiffling and more listening.
	Training as appropriately designed	Participants happy with current offering	Nothing N/A Nothing Very happy I would change nothing all, Nothing Nothing really Nothing all good None It was excellent, thank you! It was brilliant, made sense, and I can't wait to use it! Nada! I thoroughly enjoyed the training - thank you.

			Nothing I can think of Would like to come and do it again I enjoyed it Liked it was varied, felt we had a lot of theory. Most enjoyable day was when we were moving around. Nothing changed for the worse I really enjoyed the combination of theory and practical application. Nothing I can think of Nothing
Exercises	Experiential exercises as uncomfortable but important	Increased empathy for clients through discomfort	Taking part in pair work and experiential exercises. It really helped me to get a feel for what clients experience.

			The practical elements, being able to 'role play' different exercises, which could be uncomfortable with unfamiliar people (but learning to sit with it and do it anyway!) but helped me to really understand the thoughts behind them. Completing the experiential exercises - although found this challenging - I was pleased I put myself in those situations Being able to experience some of the ACT exercises myslef - I found the activities where we would have to sit and close our eyes to do exercises helpful to get an understanding of how our clients would feel in that position being able to sit with discomfort - also the looking into partner's eyes exercise. Taking part in pair work and experiential exercises. It really helped me to get a feel for what clients experience

			At the beginning I did not like the training due to feeling uncomfortable, this changed by the end. Would not change anything. Being put out of comfort zone. Active participation. Talking about difficult stuff can be hard but I don't feel the need to hide stuff, it festers
		Confronting current work practices	Anything that forces you to look at your work and what you're doing it difficult but ultimately helpful Ability to analyse some issues I struggled with at work.
		Difficult dynamics with colleagues	Team members – get sharp looks if I say I don't get it. I question if others have the same understanding so it may not be helpful to discuss, it would be more helpful to be able to talk to the trainer

			Some people found activities hard – staring into the eyes of someone else, depended who you were paired with. Talking about difficult stuff depended on who you spoke to, it was helpful with those I didn't mind opening up to that was beneficial Staring into my colleague's eyes. This really made me feel uncomfortable but nothing towards the training itself. The exercises with other staff set up some difficult social dynamics that may be detrimental in the future, professionally. Participants were engaged and open even if you cringe a bit about others
		Exercises facilitating learning and reflection	Handouts have been helpful to take away and reflect on and read over. Chinese fingers trap – helps

			me recall training, I’m a visual person Activities - also, I found labelling thoughts very useful. Brief intervention exercises - milk, Chinese finger trap, worksheets etc. The role play, as it helped to understand the concepts. Whole thing was interesting, examples of real play quite useful. Roleplay and hearing others' experiences. All really useful and new methods to me Looking at lots of different concepts / techniques / exercises, as different things wuill work with different clients. I particularly enjoyed the values work.

			Case conceptualisation helped to make it 'real' Having the opportunity to take part in activities. Exercises Exercises and case studies Analogies / practical exercises - I learn easier this way I really enjoyed the experiential exercises and learning new ways to demonstrate theories / work with clients Learning and defusion exercises The mindfulness Enjoyed experience avoidance - understanding how? Enjoyed getting values focused (quite grounding) Practical activities that bring ACT to life.

			I benefited from both watching the scenarios modelled by the providers and practiced being a therapist with a partner. Completing real play to help have a better understanding of ACT. To get an understanding of ACT - out of the days I got the most from ACT siting with my group to understand the conceptualisation form - my preferred way of learning. The role play demonstration was useful
			You get to see colleagues on a different level 2 teams got together and got to know each other and bond even thought they normally sit close to one another
Participants experience of the facilitators	Facilitators as open and reflective	Facilitators were open to challenge and discussion	Anna was open to challenge and new interpretations and that was great.

			Enjoyed openness towards conversation and challenge from tutor.
		Facilitators as supportive and understanding	If we had been forced to move around it wouldn't have been helpful but anna didn't I felt really comfortable with the trainer - under what were uncomfortable experiences. Anna put me at ease. I have a more in depth knowledge of ACT Really useful, well presented and taught. Really good training, knowledgeable trainers. I really like not being 'forced' to talk in front of the group like in some training as this can cause anxiety which stops me from taking in the knowledge. Very enjoyable :-) Very good tutors, I have learned a lot :-)

			The provision of directions for each venue was extremely helpful! I would change nothing all, Training delivered brilliant. The theory and explanations and the teachers did a great job. All of the training was great. I enjoyed not being pressued to feedback which actually allows me to find the confidence to participate with sharing thoughts and feelings. facilitator was really relaxed and approachable. Her honesty about her own experiences of ACT was really refreshing. Thanks very much, really good delivery of training. When I needed extra help it was given. Amazing facilitators.

			The course was delivered really well, ensured we understood each section. Good pacing and content delivered at the right level - was clear to follow even having no experience and doing anything similar. Given enough time to process info, test it and apply elements. Use of metaphores / practical activities during KW (key work) sessions I would change nothing all, Training delivered brilliant Informative, in-depth and taught with passion.