

Research Project Portfolio

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**Acceptance and Commitment Therapy for the management of postpartum
psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series**

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Submitted in part fulfillment of the requirements for the
Doctorate in Clinical Psychology

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Table of Contents

Portfolio Abstract	1
Statement of Contribution	3
Journal Paper	5
Introduction	10
Aims	14
Method	15
Results	33
Discussion	67
Journal Paper references	72
Extended Paper	87
Extended Introduction	88
Extended Methods	108
Extended Results	144
Extended Discussion	248
Critical reflection	275
Extended Paper references	285
Appendix A: Judicial questions	351
Appendix B: Ethical approval letter	354
Appendix C: Participant Demographic Sheet	357
Appendix D: Client Change Interview Protocol	359
Appendix E: Helpful Aspects of Therapy form	364
Appendix F: ACT-FM	366
Appendix G: Mother-Infant Relationship Scale	369
Appendix H: CompACT	370
Appendix I: CORE-10	371
Appendix J: WEMWBS	372

Appendix K: Personal Questionnaire	373
Appendix L: Session Rating Scale	375
Appendix M: DASS-21	376
Appendix N: City Birth Trauma Scale	377
Appendix O: Obsessive-Compulsive Inventory	379
Appendix P: Invitation to participate in research study.....	381
Appendix Q: Consent to contact form.....	383
Appendix R: Participant Information Sheet.....	385
Appendix S: Consent form.....	392
Appendix T: Molly's full Change Interview record	394
Appendix U: Author guidelines	412
Thesis Poster	413

Portfolio Abstract

Introduction: Perinatal mental health difficulties (PMHDs) affect 10-20% of women in the United Kingdom (Bauer et al., 2014). PMHDs are the leading cause of maternal morbidity and mortality among women of reproductive age (Oates, 2003; Russell et al., 2017) and can contribute to poorer maternal physical and mental health, quality of life and functioning, and poorer caregiver-infant bond, all of which can consequently negatively impact infant development (Gentile, 2017; Hoffmann et al., 2017; Junge et al., 2017; Stein et al., 2014). Various psychological approaches have been utilised to support the perinatal population (NICE, 2020), but the evidence base is limited. Some have suggested that higher psychological flexibility (PF) can promote parental self-regulation (Fonseca et al., 2020) and is associated with reduced depression, anxiety, and trauma symptomatology in the perinatal population, as well as better parental adjustment, attachment, and responsiveness (Ashton, 2024; Byrne et al., 2021; Evans et al., 2012; Monteiro et al., 2019). Due to its explicit focus on enhancing PF, Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) has been proposed as a viable alternative to support perinatal women. Studies have shown that ACT is effective in various parallel populations (e.g., physical health difficulties and weight and body image-related challenges). However, to date, its effectiveness and change mechanisms have not been evaluated in perinatal samples. The current study aims to fill this gap.

Methods: A hermeneutic single case efficacy design (HSCED) series was conducted to investigate whether and how changes occurred for participants over a 10-week remote ACT intervention. Three clients with self-reported psychological distress were recruited from a community perinatal mental health team in the Midlands. Clients participated in 10 weeks of ACT and completed various quantitative and qualitative measures pre- and post-intervention, as well as throughout therapy. Data were compiled into rich case records for each participant, which were subject to critical analysis by three independent adjudicators, who were

asked to determine outcomes and identify putative change mechanisms for each client.

Results: Two clients improved, whilst one remained unchanged, based on reliable changes on qualitative measures as well as quantitative data. Where changes occurred, judges mainly attributed these to ACT-specific processes, namely experiential acceptance, cognitive defusion, and mindfulness. The therapeutic relationship and some extra-therapeutic influences (e.g., medication, life events, social support, time) also contributed to changes, albeit to a lesser extent.

Discussion/Conclusion: ACT appeared to be an effective intervention for two of the three clients studied in this case series. However, due to the intertwined nature of specific and common factors, it is possible that the therapeutic relationship created a setting in which the intervention could be effective. Future research should further clarify the role of the behavioural components of ACT on therapeutic outcomes (namely, values and committed action), further examine ACT's applicability and necessary adaptations for neurodivergent clients, and continue building practice-based evidence through further replications.

Statement of Contribution

Project design: Kinga Mercedesz Simko, supervised by Dr Danielle De Boos and Dr Michael Baliousis

Ethical approval: Kinga Mercedesz Simko, supervised by Dr Danielle De Boos and Dr Michael Baliousis and with support from Dr Fiammetta Rocca

Literature review: Kinga Mercedesz Simko, supervised by Dr Danielle De Boos and Dr Michael Baliousis

Recruitment: participants identified and initial contact made by Dr Fiammetta Rocca and other members of the perinatal team, then contacted by Kinga Mercedesz Simko

Data collection: Kinga Mercedesz Simko selected psychometric measures with guidance from Dr Danielle De Boos, Dr Michael Baliousis, and Dr Fiammetta Rocca. Kinga Mercedesz Simko delivered the research intervention and collected data, with weekly email contact and monthly field supervision with Dr Fiammetta Rocca. Victoria Harper conducted post-intervention Change Interviews with participants.

ACT protocol: Kinga Mercedesz Simko delivered the ACT protocol developed by Cardiff University. Dr David L Dawson assessed intervention fidelity.

Data entry and scoring: Kinga Mercedesz Simko

Transcription: University of Nottingham Automated Transcription Service, checked by Kinga Mercedesz Simko

Data analysis and write-up: Kinga Mercedesz Simko developed the rich case records and affirmative and sceptic briefs, which were reviewed by Dr Danielle De Boos and Dr Fiammetta Rocca. Dr Harriet Ball, Dr Christopher Meek, and Dr Rohan Naidoo acted as independent psychotherapy judges who analysed rich case records and provided their opinion on effectiveness and change mechanisms. Dr Danielle De Boos and Dr Michael Baliouis reviewed the draft portfolio prior to submission.

Journal Paper

Acceptance and Commitment Therapy for the management of postpartum psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series¹

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Highlights

- ACT proved effective for two out of three participants in this single-case series.
- Participants experienced meaningful changes, mainly due to ACT-specific factors.

¹ This journal paper has been prepared for submission to the Journal of Contextual Behavioral Science; Appendix U shows Author Guidelines.

- Common and extra-therapeutic factors also played a role in therapeutic outcomes.
- The therapeutic relationship was an important change mechanism.

Data sharing statement

Data is available upon reasonable request.

Funding information

This research was supported by NHS Health Education England (HEE) as part of the first author's DClinPsy training.

Conflict of interest

The authors disclose no conflict of interest.

Abstract

Approximately 10-20% of women experience perinatal mental health difficulties (PMHDs). Acceptance and Commitment Therapy (ACT) is a potentially feasible approach for the management of PMHDs, due to its explicit focus on increasing psychological flexibility – a concept associated with improved health and wellbeing both in the general population and in perinatal clients.

This study utilised an adjudicated hermeneutic single-case efficacy design (HSCED) to investigate the effectiveness and potential change mechanisms of ACT in women with self-reported PMHDs. The aim was to explore whether ACT leads to meaningful changes for participants, and what factors observed changes are attributable to.

Three participants were recruited from a community perinatal service. Participants engaged in a 10-week remote ACT intervention and completed various quantitative and qualitative measures pre- and post-therapy, as well as throughout the intervention. Rich case records were developed for each client-participant, drawing on quantitative and qualitative data, which then underwent critical analysis by three independent psychotherapy experts, to determine outcomes and identify potential change mechanisms.

Adjudication results demonstrated that two clients changed substantially, whilst one client remained unchanged. Changes were largely attributable to ACT processes; specifically, mindfulness, acceptance, and cognitive defusion. However, extra-therapeutic and common factors also played a role in observed outcomes, albeit to a lesser extent, with a particular importance placed on the therapeutic alliance.

These preliminary findings support the effectiveness of ACT in the perinatal period. Future research should explore the unique contribution of values and committed action to therapeutic outcomes; further examine ACT's applicability and necessary

adaptations for neurodivergent clients; and continue building practice-based evidence through further replications.

Keywords: Acceptance and Commitment Therapy, perinatal, mental health, Hermeneutic Single-Case Efficacy Design, case series

Introduction

Perinatal Mental Health Difficulties

Perinatal mental health difficulties (PMHDs)² are mental health conditions that emerge or worsen during pregnancy or the first postpartum year (O'Hara & Wisner, 2014). Although reported prevalence rates vary considerably, on average, these disorders affect 10-20% of perinatal women in the United Kingdom (UK) (Bauer et al., 2014).

PMHDs pose a significant public health concern due to their detrimental effects on new mothers, their infants, and families (Beck, 1998). PMHDs are the leading cause of maternal morbidity and mortality among women of reproductive age (Oates, 2003; Russell et al., 2017) and can contribute to poorer maternal physical and mental health, quality of life and functioning, and poorer caregiver-infant bond, all of which can consequently negatively impact infant development (Gentile, 2017; Hoffmann et al., 2017; Junge et al., 2017; Stein et al., 2014). This is particularly significant given that the time from conception to age two is a critical window for a child's long-term physical, social, emotional, and cognitive development (Marmot, 2020). Additionally, PMHDs can strain intimate relationships and contribute to relationship breakdown (Bower et al., 2013; Hinton et al., 2015; Nicholls & Ayers, 2007; Rosan & Grimas, 2016). Lastly, the societal costs of untreated PMHDs are significant – estimated at \$14.2 billion in the United States (Luca et al., 2019) and £8.1 billion annually in the UK (Bauer et al., 2014). Consequently, early detection and intervention are crucial in preventing adverse maternal and child outcomes and enhancing parental wellbeing (Howard et al., 2014).

Psychological Interventions in Perinatal Mental Health³

² Extended Paper section 1.1: further information on PMHDs

³ Extended Paper section 1.1.3: further information on evidence-based interventions in perinatal mental health

In the perinatal period, Cognitive Behavioural Therapy (CBT) and Interpersonal Psychotherapy (IPT) are the most commonly recommended treatment modalities (Bright et al., 2020; National Institute for Health and Care Excellence [NICE], 2014; O'Connor et al., 2016). However, the evidence-base has various limitations.

First, research has mainly focused on interventions for perinatal depression (Dennis & Hodnett, 2007; O'Connor et al., 2016), leaving other disorders understudied (Howard & Khalifeh, 2020; Lavender et al., 2016). Moreover, studies are often limited by small, non-representative samples (McGregor et al., 2014; Zlotnick et al., 2001), the use of self-report measures, and inconsistent data reporting (Dennis & Hodnett, 2007; Werner et al. 2015). Lastly, treatment non-responders and those with comorbid diagnoses are often excluded from studies (O'Hara & McCabe, 2013; Spinelli & Endicott, 2003; Werner et al., 2015), thus failing to represent the real-life clinical picture often seen in perinatal settings. These limitations highlight the need for transdiagnostic approaches that can address a broader range of difficulties within more diverse and clinically representative populations.

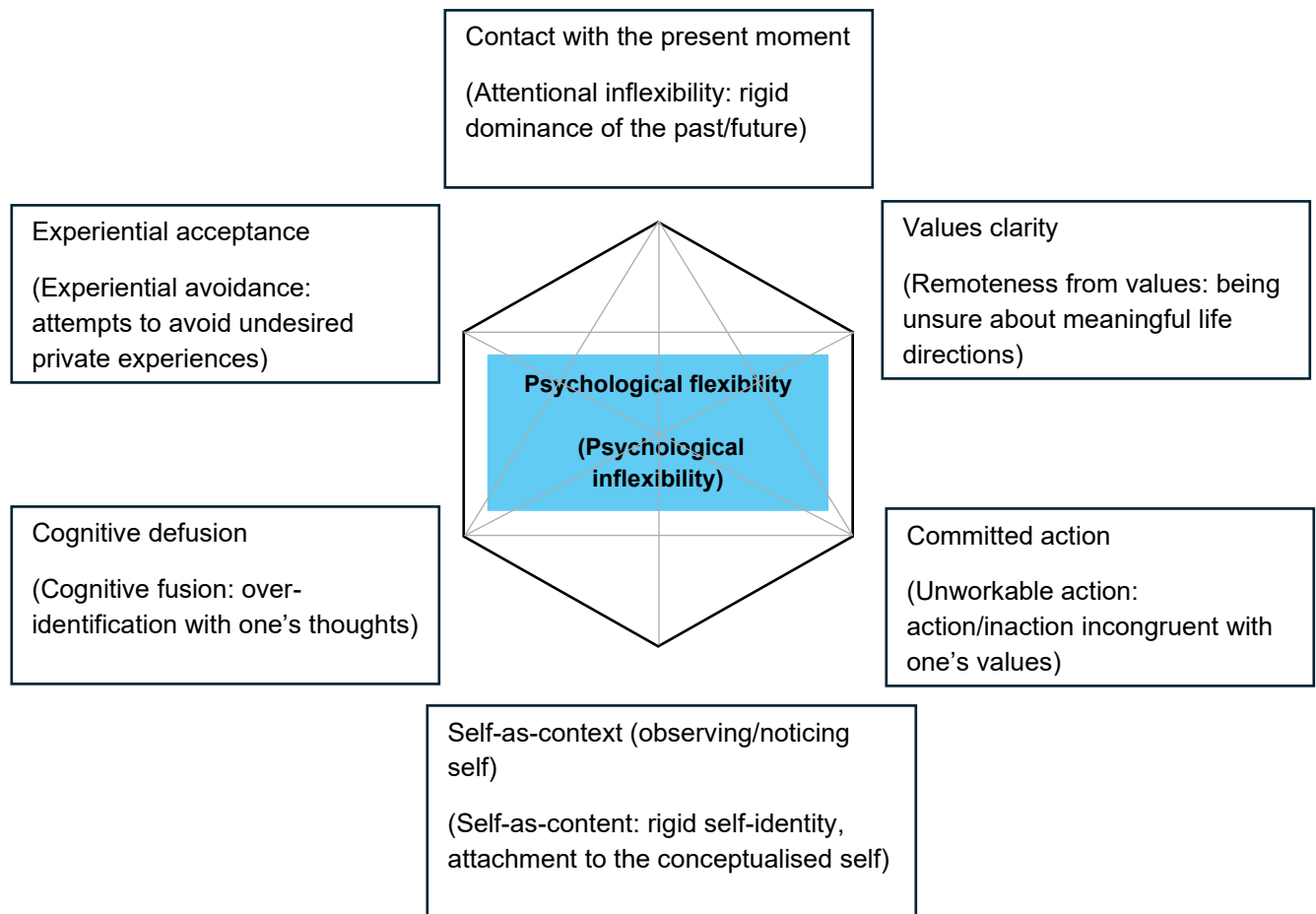
Some suggested that mindfulness-based approaches could support perinatal clients effectively (Hall et al., 2016; Lavender et al., 2016). Others utilised behavioural activation to help clients align their actions with specific goals (O'Mahen et al, 2014). Therefore, Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), which combines elements of mindfulness and behavioural strategies, has been identified as a potentially viable alternative for this population. Being a transdiagnostic approach, ACT can tackle the full range of PMHDs "at all levels of symptom severity", an objective outlined by Bonacquisti et al. (2017, p. 646). This is especially important given the high levels of comorbidity in perinatal settings (Gong et al., 2023; O'Hara & Wisner, 2014).

Acceptance and Commitment Therapy (ACT; Hayes et al., 1999)⁴. ACT is a transdiagnostic, third-wave cognitive behavioural approach, proposing that uncomfortable private experiences (e.g., thoughts, emotions, memories, urges) are natural and inevitable, rather than the fundamental cause of distress (Harris, 2006, 2019). Psychological suffering is caused by psychological inflexibility (PI): the dominance of rigid, maladaptive responses to undesirable private experiences over behaviour, as opposed to values or direct contingencies (Harris, 2006; Kashdan & Rottenberg, 2010). Instead of attempting to control suffering, ACT aims to improve psychological flexibility (PF; i.e., one's ability to respond to internal/external phenomena in a values-congruent way; Hayes et al., 2006; Hayes et al., 2012) through targeting six core processes (Figure 1).

⁴ Extended Paper section 1.2: further information on ACT, including its underlying theory and core processes

Figure 1

The ACT Hexaflex Outlining the Six Core Processes of PF



Note. Opposite PI processes are noted in brackets. Each PF component can be addressed individually, although in clinical practice, ACT usually focuses on multiple core processes simultaneously.

ACT inThe Perinatal Period⁵. Higher PF has been found to aid self-regulation in parent-child interactions, thus promoting positive parenting practices (Fonseca et al., 2020), which are indirectly linked to better child mental health

⁵ Extended Paper section 1.2.2 further explains the relevance of each PF process in the perinatal period

(Brassell et al., 2016). Moreover, PF is linked to reduced depression, anxiety, and trauma symptomatology in the perinatal population, as well as better parental adjustment, attachment, and responsiveness (Ashton, 2024; Byrne et al., 2021; Evans et al., 2012; Monteiro et al., 2019). Therefore, ACT's explicit focus on PF makes it a viable approach for managing PMHDs (Bonacquisti et al., 2017; Fonseca et al., 2018). Yet, research on the therapeutic use of ACT in this population is limited.

Some studies have reported promising outcomes from ACT-based interventions in perinatal samples, including improved symptomatology and PF (Hosseini et al., 2020; Hosseinian et al., 2021; Howard et al., 2023; Grunberg et al., 2022; Kazemeyni et al., 2018; Tunnell et al., 2019; Vakilian et al., 2019; Waters et al., 2020). However, interventions were either delivered in group settings (Vakilian et al., 2019; Waters et al., 2020) or failed to produce long-term benefits in certain domains (Vakilian et al., 2019). Consequently, it remains unclear how effective ACT is in the perinatal context, particularly when delivered in an individual setting, and which processes account for observed changes (Öst, 2014; Ruiz, 2012). Further research is warranted to evaluate both the effectiveness and potential change mechanisms of ACT in this population. This is especially important as both therapy-specific (e.g., PF processes) and common factors (e.g., the therapeutic alliance) may contribute to change in psychotherapy (Wampold, 2015), highlighting the need to differentiate their respective roles.

Aims

This study aimed to investigate the effectiveness and putative change mechanisms of ACT in postpartum individuals, through answering the following research questions:

1. Does an ACT intervention lead to reliable changes in participants' PF, wellbeing, and bonding with their babies?
2. Do personally meaningful changes occur for participants over the course of the intervention?
3. What factors are these changes attributable to?

Method

Design

The present study adopted an adjudicated Hermeneutic Single Case Efficacy Design⁶ (HSCED; Elliott et al., 2009), underpinned by a pragmatic constructivist epistemological position. Quantitative and qualitative data were synthesised into rich case records for each participant, and affirmative and sceptic briefs were developed. These were submitted to a panel of three independent⁷ expert judges (qualified Clinical Psychologists with different theoretical orientations besides extensive clinical and research experience), who reflected on observed changes and putative change mechanisms for each client, guided by specific adjudication questions⁸. Finally, adjudicators' responses were synthesised, and final conclusions were drawn regarding whether and how change has happened for each participant.

Ethics⁹

Ethical approval was obtained from the NHS Health Research Authority and locally from the Research and Evidence Department of an NHS Trust in England.¹⁰

Participants and recruitment¹¹

Four participants were recruited from the psychology waiting list of a specialist perinatal service in the Midlands, based on the following inclusion criteria:

- speaks English fluent enough to enable completion of therapy and measures;

⁶ Extended Paper section 2.2: detailed description of the HSCED design, development, and procedure

⁷ Not acting as research supervisors for the current project

⁸ Appendix A: preliminary and adjudication questions

⁹ Extended Paper section 2.8: further information on ethical considerations

¹⁰ Appendix B: confirmation of ethical approval

¹¹ Extended Paper section 2.7: further information on participants and recruitment

- ≤12 months postpartum;
- aged ≥18;
- has full capacity to provide informed consent;
- experiencing self-reported psychological distress;
- has access to a device with Internet and a webcam.

Participants were excluded if they had a diagnosed intellectual disability that would prevent engagement with the intervention or if they were currently receiving another psychological therapy.

Initially, five individuals agreed to be contacted, four of whom provided informed consent and commenced the intervention phase. One participant withdrew from the study after three intervention sessions due to other commitments that made continued attendance difficult. Consequently, the findings presented below are based on data from the remaining three participants, “Molly”, “Rachel”, and “Sally” (pseudonyms).

Materials

A Participant Demographic Sheet¹² was utilised to obtain demographic information from participants at the start of the study, in order to characterise the sample. None of the questions on the form were mandatory.

Quantitative Measures¹³

Various general and participant-specific measures were administered to evaluate changes in variables of interest.

General outcome measures included self-report measures of postpartum bonding, distress, wellbeing, and a measure of participants’ main problems/goals, while PF and therapeutic alliance were measured as general process variables.

Participant-specific outcome measures were selected depending on participants’ definition of their main concerns, corresponding with the heterogeneity

¹² Appendix C: Participant Demographic Sheet

¹³ Extended Paper section 2.6: detailed information on measures and the rationale behind their use

of clients' presenting difficulties and the study's transdiagnostic focus. Participant-specific measures were appropriate, psychometrically validated, available to use (some routinely used by the service), and perinatal-specific wherever possible. In this study, participant-specific measures targeted depression, anxiety, stress, trauma, and OCD symptoms. This strategy allowed for meaningful, individualised monitoring of change, which is particularly appropriate in single-case research.

General and participant-specific quantitative measures are characterised in Tables 1 and 2.

Qualitative Measures¹⁴

The Client Change Interview Schedule (CI; Elliott et al., 2001)¹⁵. A semi-structured CI was administered to obtain qualitative information about changes experienced by clients during the intervention, besides their attributions of those changes, and facilitative and hindering aspects of therapy. Interviews were conducted by an independent researcher, another Trainee Clinical Psychologist, approximately two weeks post-intervention.

Helpful Aspects of Therapy form (HAT; Llewelyn et al., 1988)¹⁶. The 7-item HAT was administered at the end of each intervention session, to explore significant helpful and hindering events throughout therapy.

Fidelity Measure

The Acceptance and Commitment Therapy Fidelity Measure¹⁷ (ACT-FM; O'Neill et al., 2019) was used to evaluate therapist adherence to the ACT model. The authors report moderate to excellent inter-rater reliability for this instrument ($ICC\ 2, 1 = .73$, 95% CI, .60–.93) and recommend that it is used by experienced clinicians to judge ACT fidelity. Therefore, the ACT-FM was completed by an ACT-

¹⁴ Extended Paper section 2.6.3: detailed information on qualitative measures

¹⁵ Appendix D: Change Interview schedule

¹⁶ Appendix E: HAT form

¹⁷ Appendix F: ACT-FM

trained supervisor, who reviewed a selected sample¹⁸ of six session recordings retrospectively.

¹⁸ This sample was selected to represent at least one recording from each participant, and sessions from the early, middle, and late stages of therapy.

Table 1*General Measures*

Measure and focus	Items (scoring, directionality)	Psychometric properties	Frequency of administration	Data for calculating reliable change
Mother-Infant Relationship Scale (MIRS; Newman-Morris et al., 2020a) ¹⁹ – measure of distorted maternal representations of the child	19 items; 4-point Likert-scale (0 = never, 3 = always). Higher scores represent increased risk of disturbance in the mother-infant interaction, with scores ≥ 30 indicating potential relational concerns (Newman-Morris et al., 2020a).	Newman-Morris et. al. (2020): - excellent test-retest reliability ($ICC = .81$) and internal consistency in clinical sample (Cronbach's $\alpha = .91$) - confirmed three-factor structure - moderate to strong concurrent validity with the Parent Development Interview (Aber et al., 1985) and Emotional Availability Scales (Biringen, 2008)	Pre- and post-intervention	Newman-Morris et al. (2020b) clinical sample: $N = 27$ $M = 36.2$ $SD = 10.5$
Comprehensive assessment of Acceptance and	23 items; 7-point Likert-scale (0 = strongly disagree, 6 = strongly agree).	Francis et al. (2016), Trindade et al. (2021): - good to excellent internal consistency (Cronbach's $\alpha =$	Pre- and post-intervention	Clinical cut-offs not available; not validated in specific clinical populations

¹⁹ Appendix G: MIRS

Commitment Therapy Processes (CompACT; Francis et al., 2016) ²⁰ – psychological flexibility process measure	Higher scores indicate higher PF.	.84-91), inter-item correlation: $r = .34$ - excellent convergent validity with the Acceptance and Action Questionnaire (Bond et al., 2011) and the Cognitive Fusion Questionnaire (Gillanders et al., 2014) - good concurrent validity with the Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) whilst retaining construct specificity - discriminant validity between DASS-21 and CompACT Valued Action subscale	(Giovannetti et al., 2024). Reliable change calculated using descriptive data from Trindade et al. (2021) British community sample: $N = 665$ $M = 86$ $SD = 20.79$	
Clinical Outcomes in Routine Evaluation – 10	10 items; 5-point Likert- scale (0 = not at all, 4 = most or all of the time).	Barkham et al. (2013) - excellent internal consistency (Cronbach’s $\alpha = .90$)	Start of every intervention session	Barkham et al. (2013) total sample descriptive data: $N = 77$

²⁰ Appendix H: CompACT

(CORE-10; Barkham et al., 2013) ²¹ – measure of psychological distress	Higher scores represent elevated distress. Connell & Barkham (2007) determined the following cut-offs: 0-5 (healthy), 6-10 (low-level distress), 11-14 (mild psychological distress), 15-19 (moderate psychological distress), 20-24 (moderate to severe psychological distress), 25-40 (severe psychological distress)	- high correlation with the Clinical Outcomes in Routine Evaluation – Outcome Measure (Barkham et al., 2006): $r = .94$ (clinical sample), $r = .92$ (non-clinical sample)		$M = 17.1$ $SD = 8.6$
The Warwick-Edinburgh Mental Well-being Scale (WEMWBS;	14 items; 5-point Likert-scale (1 = none of the time, 4 = all of the time).	Tennant et al. (2007): - excellent internal consistency (Cronbach's $\alpha = .91$ in population sample)	Start of every intervention session	Tennant et al. (2007) UK general population data: $N = 1749$ $M = 51$

²¹ Appendix I: CORE-10

Tennant et al., 2007) ²² – measure of wellbeing	Higher scores indicate greater wellbeing, with the clinical cut-off set at 42 points (Tennant et al., 2007).	<ul style="list-style-type: none"> - good content validity: high response rate, balanced use of response categories - significant positive correlations with wellbeing and life satisfaction instruments such as the Positive and Negative Affect Scale (PANAS; Watson et al., 1988) – positive affect subscale $r = .71$; and the Satisfaction with Life Scale (Diener et al., 1985) $r = .73$ - moderate negative correlation with the PANAS – negative affect subscale ($r = -.54$) 	$SD = 7$	
Personal Questionnaire (PQ; Elliott et al., 1999) ²³ –	≤10 client-generated problem descriptions, rated on a 7-point Likert-scale (1 = not at	Elliott et al. (2016): <ul style="list-style-type: none"> - good internal consistency (Cronbach's $\alpha = .80$); test-retest reliability of .57 	Start of every intervention session	Reliable change calculated using data from a Scottish outpatient sample

²² Appendix J: WEMWBS

²³ Appendix K: PQ

measure of idiographic client problems	all, 7 = maximum possible). Higher scores indicate higher problem-related distress. Elliott et al. (2016) determined a reliable change interval of 1.67 pre- to post-intervention and a clinical cut-off of 3.25.	- validity supported by strong correlations with standardised psychotherapy outcome measures such as the CORE-OM (Barkham et al., 2006) and the Symptom Checklist-90 (Elliott et al., 2006)	(Elliott et al., 2016) and using the test-retest reliability value, as recommended by Elliott et al. (2016): <i>N</i> = 188 <i>M</i> = 5.07 <i>SD</i> = 0.84
Session Rating Scale (SRS; Duncan et al., 2003) ²⁴ – therapeutic alliance measure	Visual analogue scale comprising 4 items. Scored by adding up the marks made by the client on each subscale (relationship, goals and topics, approach or method, overall).	Campbell & Hemsley (2009): Cronbach's α = .93 Murphy et al. (2020): - average internal consistency ranging from .70 to .97 - test-retest reliability ranging from .54 to .84	Following every intervention session N/A

²⁴ Appendix L: SRS

Higher scores reflect higher alliance.	- suboptimal concurrent validity with other working alliance measures
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Note. ICC denotes Intraclass Correlation Coefficient. Pre-intervention refers to up to two weeks before the intervention, post-intervention refers to up to two weeks after the intervention.

Table 2*Participant-Specific Measures*

Measure and focus	Items (scoring, directionality)	Psychometric properties	Frequency of administration	Data for calculating reliable change
Depression Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) ²⁵ – measure of depression, anxiety, and stress	21 items; 4-point Likert-scale (0 = never, 3 = almost always). Higher scores represent higher depression, anxiety, and stress symptoms.	Good to excellent internal consistency: - Moya et al. (2022): $\alpha = .74$ - Henry & Crawford (2005): $\alpha = .93$ Moya et al. (2022): good convergent validity with the Edinburgh Postpartum Depression Scale (Cox et al., 1987)	Pre- and post-intervention	Davies et al. (2015) large psychiatric outpatient sample: $N = 2542$ $M = 59.74$ $SD = 34.43$
City Birth Trauma Scale (City BiTS; Ayers et al.,	29 items; various response options (yes/no questions, 3- and 4-point Likert scale)	Excellent internal consistency ($\alpha = .92$; Ayers et al., 2018) High convergent validity with other PTSD measures and	Pre- and post-intervention	Ayers et al. (2018): $N = 950$ $M = 11.70$ $SD = 11.06$

²⁵ Appendix M: DASS-21

2018) ²⁶ – measure of birth-related PTSD	Higher scores represent higher PTSD symptomatology, with the clinical cut- off determined at >28 (Osório et al., 2021).	divergent validity with measures of other conditions (Di Gesto et al., 2024; Sandoz et al., 2022; Škodová et al., 2025).		
Obsessive Compulsive Inventory (OCI; Foa et al., 1998) ²⁷ – measure of OCD symptoms	42 items; 5-point Likert-scale (0 = not at all, 3 = extremely). Higher scores represent higher OCD symptomatology, with the clinical cut-	Sica et al. (2009): - very good internal consistency ($\alpha = .85$), excellent one-month test- retest reliability ($r = .93$) - good concurrent validity with other OCD measures - positive correlations with anxiety/depression measures	Pre- and post- intervention	Foa et al. (1998) OCD sample: $N = 99$ $M = 66.33$ $SD = 31.9$

²⁶ Appendix N: City BiTS

²⁷ Appendix O: OCI

off set at 40 points

(Foa et al., 1998)

Note. Pre-intervention refers to up to two weeks before the intervention, post-intervention refers to up to two weeks after the intervention.

Procedure

Participants were approached by their care team and provided with an invitation to participate in the study²⁸. Those interested completed a consent to contact form²⁹, allowing the researcher to contact potential participants via their preferred channel. The researcher then shared an electronic Participant Information Sheet (PIS)³⁰ and e-consent form³¹. Participants were asked to study the PIS and complete the consent form within seven calendar days if they wished to participate.

After providing informed consent, participants completed an initial questionnaire pack comprising general and participant-specific outcome measures. This was distributed via email using the JISC Online Surveys platform. Participants then engaged in ten one-to-one remote ACT sessions, delivered by the first author via Microsoft Teams. Each session was scheduled for two hours but typically lasted 75-90 minutes. At the start of each session, the CORE-10, WEMWBS, and PQ were administered. Intervention slides were presented using the screen-sharing feature to support the delivery of the intervention protocol. At the end of each session, participants completed the SRS and the HAT. The link to weekly measures was shared with participants using the chat function in Microsoft Teams.

Following the final session, the initial questionnaire pack was readministered using the same survey platform. Approximately two weeks later, participants took part in a post-therapy CI over Microsoft Teams, conducted by a Trainee Clinical Psychologist external to the research team. To acknowledge their contribution, each participant received a £10 Amazon voucher.³²

ACT Intervention³³

At the time of this study, no established ACT protocol existed for the perinatal population. While some group-based interventions had been developed (Bonacquisti et al., 2017; Grunberg et al., 2022), these either

²⁸ Appendix P: Invitation to participate

²⁹ Appendix Q: Consent to contact form

³⁰ Appendix R: Participant Information Sheet

³¹ Appendix S: Consent form

³² Provided that they participated in some intervention sessions. The participant who withdrew from the study after three sessions also received the voucher to acknowledge her participation.

³³ Extended Paper section 2.3: detailed description of the ACT intervention

incorporated integrative approaches rather than being purely ACT-based or had not been tested for efficacy.

Waters et al. (2020) developed an 8-week, group-based ACT intervention aimed at individuals with moderate-to-severe perinatal mood and anxiety disorders. To obtain permission for the use of this intervention, the first author contacted the corresponding author, who advised that the intervention had been expanded to 10 weeks. Permission was granted to use this updated 10-week protocol, which the first author subsequently adapted for individual delivery and the postnatal period by removing pregnancy-specific or group-related references.³⁴

The first author attended training on the intervention package led by its developers and participated in five ACT supervision sessions with a member of the Cardiff University research team, who developed the protocol. Participants were emailed a client handbook adapted for individual use, containing session summaries, experiential ACT exercises, and mindfulness scripts, to support home practice.

HSCED Analysis

Phase 1: Compiling Rich Case Records

Comprehensive rich case records (Elliott, 2002) were compiled for each participant, including:

- 1) Basic information: contextual information on client and therapist, client's diagnoses/presenting difficulties, characteristics of the intervention (including adaptations to the protocol)
- 2) Quantitative outcome data: self-report measures of PF, postpartum bonding, and participant-specific measures.
- 3) Transcript of the post-therapy CI
- 4) Weekly outcome measures of wellbeing, distress, and client problems
- 5) Weekly measures of the quality of the therapeutic relationship
- 6) Records of therapy sessions: therapist process notes

³⁴ Extended Paper section 2.3.2: description of the pre-adaptation process

For quantitative data analysis, pre- and post-intervention scores (or, for sessional measures, scores from the first and last intervention session) were compared using the Reliable Change Index (RCI; Jacobson & Truax, 1991) and established clinical cut-offs (where available) to determine whether reliable and/or clinically significant changes occurred for participants. Reference data for these calculations is provided in Tables 1 and 2.

Rich case records were synthesised into an affirmative and a sceptic brief for each client. Affirmative briefs argue for clear associations between outcomes and the therapeutic intervention, suggesting that the client had changed substantially during therapy, and changes are attributable to the ACT intervention. The sceptic briefs stipulate that change either has not happened or is attributable to alternative explanations, such as common factors or extra-therapeutic influences (Elliott et al., 2001).

Phase 2: Adjudication

The judges were emailed rich case records with the accompanying affirmative and sceptic briefs and asked to determine whether change had happened for each participant, and if so, how likely they thought that changes were attributable to the ACT intervention. They were also asked to justify their decision-making process by highlighting which pieces of evidence they used to draw certain conclusions. Table 3 summarises judges' theoretical orientation and experience with ACT and within perinatal settings.

Table 3*Contextual Information on Judges*

	Judge 1	Judge 2	Judge 3
Preference for using ACT in clinical practice	Moderate preference for other (non-ACT) approaches	Moderate preference for ACT	Strong preference for other (non-ACT) approaches
Preferred therapeutic approaches used in clinical practice	EMDR	ACT, CBT, CFT	ISTDP, Psychodynamic Psychotherapy, Analytical Psychology, EMDR
Clinical experience using ACT	Used ACT during doctoral training, and in qualified role as part of a wider integrative approach (e.g., defusion and mindfulness-based strategies as part of a stabilisation phase preceding trauma work). Used ACT for postnatal anxiety, low mood, and shame and self-criticism in parenting, as well as in private practice, addressing	Primary model used during and after doctoral training. Approximately 50% of clinical work incorporates ACT to some extent.	Used ACT regularly during doctoral training and occasionally post-qualification when CBT-type interventions are strongly indicated. Completed doctoral thesis on ACT.

	social anxiety, exam stress/anxiety and relationship difficulties in young people.		
Clinical experience working with perinatal populations	Pre-training experience of working with perinatal clients using low-intensity CBT. Specialist placement in a perinatal service. Over 3 years of experience as a qualified Perinatal Clinical Psychologist.	No experience	No experience in working in a perinatal service; however, has worked with approximately 6-9 clients who started therapy pregnant or have become pregnant/gave birth during the therapy.

Note. EMDR stands for Eye Movement Desensitisation and Reprocessing. CFT stands for Compassion Focused Therapy. ISTDP stands for Intensive Short-Term Dynamic Psychotherapy.

Results

Treatment Fidelity

ACT-FM scores demonstrate moderate ACT-consistency (mean ACT consistency score = 22.29/36) and rare occasions of ACT-inconsistent behaviours (mean ACT inconsistency score = 1.33/36).³⁵

Abridged Results for Molly³⁶

Context and Focal Problems

Molly is an employed, married woman in her early 30s, originally from South Africa.

Molly experienced obsessive-compulsive symptoms throughout her life, including intrusive thoughts of harm coming to her family/children, leading to compulsions such as obsessive counting/blinking rituals and handwashing. Her anxiety symptoms started around age 7. Historically, she also struggled with panic attacks.

Molly's fear of germs and contamination worsened during the COVID-19 pandemic, and she maintained safety behaviours even when lockdown restrictions eased. Her OCD symptoms also exacerbated with each pregnancy. After the birth of her second child, she did not allow anyone except her husband near the baby for five months due to fears of contamination. She also remained highly concerned about her family's health, washing her hands approximately 50 times a day following a specific ritual and insisting that family members change their clothes immediately upon entering the house. She also used latex disposable gloves at home whenever possible.

Historically, Molly has accessed CBT for health anxiety and exposure therapy for OCD symptoms. These brought temporary relief, although Molly's handwashing and cleaning rituals continued. She reached her self-reported "lowest point" when she got pregnant with her third child, which triggered the

³⁵ Extended Paper section 2.3.3 provides more information on treatment fidelity

³⁶ Extended Paper section 3.1 provides Molly's full rich case record, including quotes from qualitative measures

referral to perinatal service. Molly is currently taking Sertraline for her OCD symptoms.

Quantitative Results

Table 4 summarises Molly's scores on quantitative measures.

Table 4*Molly's Scores on Quantitative Psychometric Measures*

Measure	Timepoint											RCI	
	Pre- intervention	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Post- intervention	
Outcome measures													
CORE-10		14	12	13	12	7	15	15	6	14	4		2.597 ⁺
WEMWBS		47	52	47	49	54	51	41	56	49	56		−3.03 ⁺
DASS-21	22											0	1.71 ⁼
OCI	87											52	2.02 ⁺
MIRS	5											3	0.45 ⁼
PQ: Fear of future – something bad happening		6	5	5	6	4	5	4	3	4	3 ⁺		
PQ: Fear of going out and getting sick		5	6	5	4	3	3	3	3	3	3 ⁺		
PQ: Rituals becoming a part of me permanently		7	7	7	7	5	6	6	6	5	4 ⁺		
PQ: Thoughts: will I be everything that my children need with their						6	5	6	5	3	2 ⁺		

(e.g., educational)
upbringing?

Process measures											
CompACT	58									98	−4.54 ⁺
SRS		37	38.7	39.2	39.6	38.8	39.6	39.8	39.7	39.8	

Note. RCI stands for Reliable Change Index; reliable change is achieved if RCI exceeds ± 1.96 (or a 1.67-point change on the PQ). + denotes reliable improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration. Blank cells indicate that the corresponding measure was not administered at that specific time point. Values highlighted in bold fall within the clinical range (where applicable).

Abridged Affirmative and Sceptic Briefs

The affirmative brief argued that throughout the intervention, Molly achieved statistically reliable improvements in OCD symptomatology, PF, distress, wellbeing, and her idiographic therapeutic goals. Some of these difficulties were pervasive and chronic which persisted despite previous treatment, suggesting that ACT played a causal role in these improvements. Moreover, Molly's increased PF is further demonstrated by her increased ability to engage in meaningful activities (such as family trips) despite experiencing anxiety, showing a clear increase in committed action. She also became able to defuse from her worries, explaining *"I don't forget about what I was worrying about, but all of a sudden what I was worrying about doesn't seem so bad anymore."* This illustrates that Molly's attempts to eliminate her worries was replaced by a more adaptive, accepting stance towards her anxious thoughts.

The sceptic brief rejects the case that Molly changed significantly during therapy and proposes that changes were attributable to alternative explanations. First, as no baseline data were collected, it is unclear whether Molly's symptoms might have improved naturally without intervention. Relying solely on pre-therapy scores makes it difficult to establish a definitive causal link between therapy and change. Moreover, the lack of change or trivial changes on some measures warrants caution when drawing causal conclusions regarding the effectiveness of therapy. Notably, some of Molly's post-therapy responses on the CompACT still indicated psychological inflexibility, which may be attributable to measurement error. Moreover, relational artefacts (i.e., the consistently high therapeutic alliance), external events (i.e., medication) and Molly's self-correction efforts (e.g., researching ACT resources between sessions) may have contributed to observed changes.

Adjudication Results

Table 5 summarises Molly's judicial results.

Table 5*Judicial Results for Molly*

Judge 1		Judge 2		Judge 3
<u>Client change</u>				
How would you rate the outcome for this participant?	Improved	Recovered (note: achieved clinically significant change but not fully recovered)	Recovered	
How certain are you of this decision?	90%	95%	90%	
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none">• Molly describes finding more joy in her life and living more in line with her values, despite ongoing compulsions.• Decreased desire to get rid of compulsions• More self-reflective, her relationships have improved, and she experiences her thoughts,	<ul style="list-style-type: none">• CI transcript demonstrates ability to manage thoughts differently• Implementing practices has become easier• Improving relationships• Improvement on some quantitative measures (distress, OCD, PF)	<ul style="list-style-type: none">• Reliable and/or clinically significant changes on quantitative measures (OCI, WEMWBS, CORE-10, CompACT, and PQ problem ratings)• CI suggesting clinically significant improvement on a subjective level (e.g., feeling “free”)	

	feelings, behaviours as less intense		<ul style="list-style-type: none"> Correspondence between quantitative and qualitative data suggesting significant change
How much do you think the client has changed over the course of the intervention?	Substantial change (80%)	Considerable change (60%)	Substantial change (80%)
How certain are you of this decision?	80%	80%	90%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> Molly speaks about being more self-reflective and having developed a different way of thinking and experiencing the world She experiences her compulsions and anxious thoughts differently (i.e., she can move on from them and 	<ul style="list-style-type: none"> Reduction in DASS scores (although to be treated with caution due to the total score of 0 post-intervention) Reduction in OCI scores Increase in CompACT scores Congruence between quantitative and qualitative data 	<ul style="list-style-type: none"> Large changes on quantitative measures (OCI, WEMWBS, CORE-10, CompACT, and PQ problem ratings) Large change on DASS (even though not statistically reliable) CI data is congruent with quantitative findings and

continue living a meaningful life)

suggests that Molly has a phenomenological sense of the changes reported in the measures

Change mechanisms

ACT intervention

To what extent do you think that the change is attributable to the intervention?	Substantially (80%)	Substantially (80%)	Substantially (80%)
How certain are you of this decision?	100%	95%	90%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> Molly talks specifically about the ACT intervention as having changed the way she experiences herself and the world, giving specific examples such a defusion or mindfulness 	<ul style="list-style-type: none"> Explicit client attribution in the CI (i.e., the unlikely nature of changes without the intervention) 	<ul style="list-style-type: none"> The HAT forms suggest that Molly was retaining at least one component of the intervention per session Use of ACT-consistent language in the CI
How strong is your belief that factors	100%	95%	100%

specific to ACT
contributed to change
for the client?

What factors specific
to ACT do you think
contributed to
change?

- Thinking about thoughts, feelings and behaviours in an ACT-congruent way (e.g. thoughts are just thoughts that come and go)
- Use of defusion techniques.
- Use of mindfulness to become more self-aware and use this awareness to enable her thoughts to pass by
- Good evidence of implementing ACT-consistent skills from sessions
- Increase in PF on the CompACT, and increased acceptance in the CI transcript
- Molly describes ACT as a “massive blessing” and a sense of freedom that went along with it
- She mentions specific ACT-based techniques as a positive aspect of the approach (e.g., mindfulness, noticing judgements, understanding emotions, self-soothing, values)
- The HAT forms suggest that Molly was retaining at least one component of the intervention per session
- Use of ACT-consistent language in the CI

			<ul style="list-style-type: none"> Molly reports that 90% of change explained by what she learnt in therapy Doing homework between sessions suggests “buy in” to the model
		<u>Generic/non-specific factors</u>	
How strong is your belief that generic/non-specific factors contributed change for the client? (0-100%)	90%	70%	100%
What generic/non-specific processes do you think contributed to change?	<ul style="list-style-type: none"> The therapeutic relationship (Molly speaks fondly of the therapist and emphasises gratitude and feelings of safety in the relationship) 	<ul style="list-style-type: none"> Openness of the patient Ability of the therapist to allow the patient to feel safe when sharing vulnerability 	<ul style="list-style-type: none"> Good therapeutic alliance and therapeutic relationship, a sense of safety and trust in the therapeutic situation

Extra-therapeutic factors

How strong is your belief that extra-therapeutic factors contributed to change for the client?	60%	20%	50%
What extra-therapeutic factors do you think contributed to change?	<ul style="list-style-type: none"> • Motivation and readiness for change (Molly mentions that she was in a vulnerable position and needed help, so she was open when the intervention was offered to her.) 	<ul style="list-style-type: none"> • Medication change • Family relationships 	<ul style="list-style-type: none"> • Medication change • Good match between the client and the therapeutic approach
Overall attribution of change to therapy (ACT-specific factors/non-specific factors/extra-therapeutic factors)	60/30/10%	70/25/5%	85/10/5%

Abridged Results for Rachel³⁷

Context and Focal Problems

Rachel is a White British mother of one in her early 40s; she is employed in HR.

Rachel has experienced anxiety from a young age. She also reported having had a difficult relationship with her parents and being a victim of sexual assault as a teenager.

Rachel's difficulties intensified following a traumatic birth experience that contradicted her plans and expectations. Rachel described a highly medicalised experience, which left her feeling trapped and out of control. Two days postpartum, Rachel developed unexplained symptoms that prompted a visit to A&E, preceding a week-long hospital admission. Rachel found the uncertainty related to her condition, coupled with poor communication from healthcare staff, very anxiety-provoking. She described being left on her own, feeling uninformed and vulnerable. She was also worried that she was going to have a stroke or a heart attack and die.

After discharge, these symptoms persisted, accompanied by flashbacks, hypervigilance, nightmares, panic attacks, and a pervasive sense of terror. This led to a referral to the perinatal service.

Previously, Rachel had accessed counselling and CBT from the local IAPT service.

Quantitative Results

Table 6 summarises Rachel's scores on quantitative measures.

³⁷ Extended Paper section 3.2 provides Rachel's full rich case record, including quotes from qualitative measures

Table 6*Rachel's Scores on Quantitative Psychometric Measures*

Measure	Timepoint											RCI	
	Pre- intervention	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Post- intervention	
Outcome measures													
CORE-10		20	16	13	22	13	11	18	18	17	9		2.86 ⁺
WEMWBS		37	40	44	36	40	47	39	38	41	49		−4.04 ⁺
DASS-21	52											24	2.17 ⁺
City BiTS	38											16	4.97 ⁺
MIRS	8											7	0.22 ⁼
PQ: Trauma symptoms (night anxiety, flashbacks)		5	4	4	5	4	3	3	3	3	3 ⁺		
PQ: General anxiety		6	5	4	4	4	3	4	5	5	4 ⁺		
PQ: Feeling disconnected (in relationships)		6	6	5	5	5	4	4	5	5	4 ⁺		
PQ: Not being connected to my body		5	5	5	4	4	4	4	4	4	3 ⁺		

Process measures												
CompACT	72										106	-3.85 ⁺
SRS		32.1	31	35.6	33.6	33.3	36.5	37.4	36.7	36.8	37.3	

Note. RCI stands for Reliable Change Index; reliable change is achieved if RCI exceeds ± 1.96 (or a 1.67-point change on the PQ). + denotes reliable improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration. Blank cells indicate that the corresponding measure was not administered at that specific time point. Values highlighted in bold fall within the clinical range (where applicable).

Abridged Affirmative and Sceptic Briefs

The affirmative brief argued that throughout the intervention, Rachel achieved statistically reliable improvements on all measures apart from mother-infant bonding. Given the chronic nature of some of her difficulties, it can be assumed that ACT played a causal role in these improvements. Rachel also reported being able to handle trauma symptoms more effectively, despite ACT not being a trauma-focused intervention. Retrospectively, Rachel also attributed the observed changes to therapy, stating they would have been unlikely without it. Moreover, Rachel became able to respond to anxiety-provoking situations with greater flexibility.

The sceptic brief rejects the case that Rachel changed significantly during therapy and proposes that changes were attributable to alternative explanations. Just like in Molly's case, the absence of baseline data means it is uncertain how stable Rachel's symptoms were and whether they may have improved without intervention. Moreover, not all idiographic problems showed significant improvement, and the anxiety subscale of the DASS-21 did not indicate meaningful change, despite Rachel's self-reported reduction in anxiety. Notably, of the DASS-21 subscales, anxiety was the only one that did not return to the normal range (Lovibond & Lovibond, 1995), although it did decrease in severity from moderate to mild, with a score reduction from 14 to 8. Finally, relational artefacts (i.e., the hello-goodbye effect; Elliott, 2002), life events (Rachel returning to work from maternity leave) and self-correction efforts (e.g., existing mindfulness practice) may have contributed to observed changes.

Adjudication Results

Table 7 summarises Rachel's judicial results.

Table 7*Judicial Results for Rachel*

	Judge 1	Judge 2	Judge 3
		<u>Client change</u>	
How would you rate the outcome for this participant?	Improved	Improved	Improved
How certain are you of this decision?	80%	90%	80%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> • Rachel spoke about the positive impact of mindfulness on her life (being able to pause and think before responding to situations) • She also acknowledged that the therapy did not address the concern she was referred for (birth trauma) as this was an ongoing 	<ul style="list-style-type: none"> • Improvement in pre/post measures (distress, PF), and session measures (increase in SRS ratings, and some evidence of CORE / WEMWBS change) 	<ul style="list-style-type: none"> • Reliable and/or clinically significant changes on quantitative measures (DASS-21, City BiTS, WEMWBS, CORE-10, CompACT, and PQ problem ratings) • Consistent and convincing picture of overall change that has clinical and statistical significance

	difficulty, albeit symptoms felt less intense following therapy		(however, changes may be quite labile, and symptoms may be exacerbated by changes in life context, as a result of potential underlying trauma/pattern of emotional avoidance that remains unaddressed)
How much do you think the client has changed over the course of the intervention?	Considerable change (60%)	Considerable change (60%)	Considerable change (60%)
How certain are you of this decision?	80%	75%	90%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> • Rachel spoke about her increased ability to acknowledge and experience emotions • However, she is still working on being more flexible 	<ul style="list-style-type: none"> • Increased ability to monitor emotional responses and temper them to fit the circumstances 	<ul style="list-style-type: none"> • Reliable and/or clinically significant changes on quantitative measures (DASS-21, City BiTS, WEMWBS, CORE-10,

around her feelings towards others, therefore the change has not yet happened

CompACT, and PQ problem ratings)

- CI data corroborates quantitative findings but also suggests a sense of unaddressed emotional avoidance, perhaps related to trauma

Change mechanisms

ACT intervention

To what extent do you think that the change is attributable to the intervention?

Substantially (80%)

Substantially (80%)

Considerably (60%)

How certain are you of this decision?

100%

90%

90%

What evidence presented in the rich case record led you to this conclusion and why?

- Rachel mentions several examples of ACT-congruent techniques or strategies that she is now implementing in her daily routine and that

- Specific mention and use of mindfulness skills outside of sessions, in various situations

- Rachel specifically names ACT-related elements in the HAT form
- Clear retrospective attribution

	<p>help her to feel less anxious (e.g., mindfulness)</p> <ul style="list-style-type: none"> • She also speaks about how the values work has enabled her to go back to yoga which is important to her. 		
How strong is your belief that factors specific to ACT contributed to change for the client?	100%	70%	100%
What factors specific to ACT do you think contributed to change?	<ul style="list-style-type: none"> • Mindfulness • Viewing thoughts/feelings as neutral, allowing them to be rather than battling with them 	<ul style="list-style-type: none"> • Present moment awareness • Acceptance • Defusion 	<ul style="list-style-type: none"> • Mindfulness • Thought defusion • Understanding functions of emotions • Values and goals • Relaxation visualisation • The HAT forms suggest that Rachel was retaining at least one component of the intervention per session

- She talks about the intervention in the CI, using ACT-consistent language
- Doing exercises in sessions with the therapist
- Finding ACT easier than other approaches (maybe less anxiety-provoking or more structured / focussed)

	<u>Generic/non-specific factors</u>		
	80%	70%	100%
How strong is your belief that generic/non-specific factors contributed change for the client? (0-100%)			
What generic/non-specific processes do you think contributed to change?	<ul style="list-style-type: none"> • The therapeutic relationship, especially the time the therapist took to build 	<ul style="list-style-type: none"> • Therapeutic relationship, as demonstrated by the gradual increase in SRS scores 	<ul style="list-style-type: none"> • Therapist relational factors

rapport, alongside therapist

honesty and self-disclosure

Extra-therapeutic factors

How strong is your belief that extra-therapeutic factors contributed to change for the client?

60%

30%

100%

What extra-therapeutic factors do you think contributed to change?

- Time since the birth trauma
- Natural changes within and beyond the first year postpartum – adjustment to parenthood, new routines

- Time since the birth trauma
- Return to work (from maternity leave)

- Return to work
- Natural change process of getting used to being a parent
- Good relationship with partner that improves with Rachel's mood improving – virtuous cycle

Overall attribution of change to therapy (ACT-specific factors/non-specific

60/30/10%

60/25/15%

40/15/45%

factors/extra-
therapeutic factors)

Abridged Results for Sally³⁸

Context and Focal Problems

Sally is an employed, married, White British mother of two in her mid-30s.

Sally has experienced anxiety and depressive symptoms for approximately 15 years. She also engages in checking behaviours every night (e.g., checking doors, windows, taps, and plug sockets), repeating them 2-8 times in even numbers to feel at ease. Historically, Sally also reported fears around infertility, driving, and childbirth, as well as a persistent fear of death and dying.

Sally often experiences fear when discussing her uncomfortable thoughts, as she believes that she may “jinx” things and bring on catastrophes. She also struggles to plan and look forward to things as she fears that expressing her anticipation may cause something bad to happen as she would be punished. Sally has a history of self-harm by hitting and biting herself to release frustration.

Previously, Sally accessed CBT and private counselling, which brought some relief but had little effect on her compulsions. Eventually, this prompted a referral to the perinatal service. Sally has recently requested a referral for an ADHD assessment, suspecting her rigid thinking might be related to this.

Quantitative Results

Table 8 summarises Sally’s scores on quantitative measures.

³⁸ Extended Paper section 3.3 provides Sally’s full rich case record, including quotes from qualitative measures

Table 8*Sally's Scores on Quantitative Psychometric Measures*

Measure	Timepoint											RCI	
	Pre- intervention	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Post- intervention	
Outcome measures													
CORE-10		21	16	20	19	18	16	15	16	16	15		1.55 ⁼
WEMWBS		37	36	39	37	36	36	39	38	37	38		–
													0.34 ⁼
DASS-21	62											58	0.31 ⁼
OCI	77											77	0 ⁼
MIRS	9											8	0.22 ⁼
PQ: Fear of death		5	5	6	5	5	5	6	6	6	6		
PQ: Social anxiety (meeting new people)		7	6	5	5	6	7	6	6	6	4 ⁺		
PQ: Lack of self- confidence (am I a good mum, I don't feel like myself anymore,		6	6	6	6	7	7	7	7	7	7		

struggling to make
decisions)

PQ: Struggling to N/A **7** **7** **6** **6** **5** **5** **5** **5** **6**

look forward to
things/arrange
things

PQ: Fear of doing N/A N/A N/A N/A N/A N/A **6** **7** **7** **7**

something wrong
and being
punished

Process measures

CompACT	61												68	–
														0.79 ⁼
SRS		39.5	36.8	36.3	38.5	37.2	39.1	38.2	39	38.8	37.8	39.5		

Note. RCI stands for Reliable Change Index; reliable change is achieved if RCI exceeds ± 1.96 (or a 1.67-point change on the PQ). + denotes reliable improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration. Blank cells indicate that the corresponding measure was not administered at that specific time point. Values highlighted in bold fall within the clinical range (where applicable).

Abridged Affirmative and Sceptic Briefs

The affirmative brief argues that Sally's social anxiety reliably improved throughout the intervention, albeit this did not reach the threshold for clinically significant change. In the CI, Sally linked this change to her increased ability to defuse from judgements. Moreover, Sally demonstrated increased engagement in committed action by joining a baby group despite experiencing anxiety about this. Throughout the intervention, she also developed her own cognitive defusion techniques, reflecting excellent engagement with core ACT concepts. Her retrospective attributions indicated that she viewed most observed changes as "somewhat unlikely without therapy," further supporting the causal role of ACT in facilitating improvements.

The sceptic brief explains that, just like for the other two participants, the lack of baseline data makes it unclear whether Sally's symptoms might have improved naturally over time. Moreover, there was no reliable change on psychometric measures. The lack of change in PF is particularly surprising, given Sally's ability to develop her own cognitive defusion exercises. Additionally, some of Sally's problem ratings on the PQ either did not change or even worsened throughout therapy. It was hypothesised that Sally's potential neurodiversity may have introduced measurement error in quantitative measures. Relational artefacts, psychotropic medication, and previous CBT skills may have also partly contributed to observed changes.

Adjudication Results

Table 9 summarises Sally's judicial results.

Table 9*Judicial Results for Sally*

	Judge 1	Judge 2	Judge 3
	Client change		
How would you rate the outcome for this participant?	Improved	No change	No change
How certain are you of this decision?	50%	55%	65%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> • Some evidence suggests a degree of change e.g. Sally reported practicing mindfulness whilst feeding her baby • However, Sally remains very anxious and unable to do things she wants to (e.g., book a holiday) • Potential neurodiversity may have impacted Sally's ability to engage 	<ul style="list-style-type: none"> • Although Sally was able to make use of pieces of session content, change on quantitative measures is limited • The CI did not fully reflect that she had grasped and was using intervention skills • However, there are some potentially ACT-consistent present-moment awareness/understanding of 	<ul style="list-style-type: none"> • Lack of reliable/clinically significant change on quantitative measures (DASS-21, OCI, CompACT, MIRS, WEMWBS, PQ problem ratings) • Move from "moderate/severe distress" to "moderate distress" on CORE-10

	with ACT strategies (e.g., imagination-based techniques)	emotion/reports of helpfulness	<ul style="list-style-type: none"> CI demonstrates some improvements in life activities. Sally is “pushing herself” to do more positive things (behavioural change) which also create more distress (suggesting a lack of inner psychological change). Internal sense of punishment, criticism, and anxiety narratives remained in place
How much do you think the client has changed over the course of the intervention?	Slight change (20%)	Slight change (20%)	Slight change (20%)
How certain are you of this decision?	60%	75%	60%

What evidence presented in the rich case record led you to this conclusion and why?

- Sally spoke about becoming friends with anxiety and popping it into a box to come back to later. On one hand, this feels ACT-congruent as she is not viewing the anxiety as a negative, but it also might be that she is not allowing herself to really feel the feelings.
- Sally reported being able to calm herself down quicker, which implies change.
- Self-reported attitudes towards emotions/judgements and use of present-moment awareness
- Generally slightly positive feedback
- However, Sally may not have grasped the concept of acceptance, or the purpose of present-moment awareness as a tool towards valued living (and instead sees it as a tool for emotional control)
- No change in problem ratings and quantitative measures
- CI demonstrates a discrepancy between behavioural change and a lack of inner psychological change).
- Internal sense of punishment, criticism, and anxiety narratives remained in place
- Sally tried to engage with the approach as much as she could, but was hampered by various barriers to engagement (e.g., ADHD diagnosis, parenting demands), meaning that a self-punishing system and

high anxiety inhibited
her efforts to change

Change mechanisms			
<u>ACT intervention</u>			
To what extent do you think that the change is attributable to the intervention?	Considerably (60%)	Slightly (20%)	Substantially (80%)
How certain are you of this decision?	90%	50%	80%
What evidence presented in the rich case record led you to this conclusion and why?	<ul style="list-style-type: none"> Sally's use of language suggests that the changes are due to ACT e.g. thanking her mind, "I'm accepting them" (the thoughts) 	<ul style="list-style-type: none"> Reported changes on Change Rating Sheet 	<ul style="list-style-type: none"> In the CI, Sally reported being able to calm herself down more quickly as a result of psychoeducation on the anxiety curve
How strong is your belief that factors specific to ACT contributed to	90%	20%	100%

What factors
specific to ACT do
you think
contributed to
change?

- Thinking about thoughts as her brain's way of trying to be helpful
- Practicing mindfulness in everyday tasks such as feeding her baby
- Present moment awareness
- Some evidence of observing thoughts/judgements and defusion (however, contradicted at points)
- Lack of understanding around valued action
- Mindfulness
- Thought defusion
- Learning about emotions
- Self-care and compassion
- Values
- Use of strategies outside sessions – became embedded

How strong is your belief that generic/non-specific factors contributed change for the client? (0-100%)

100%

What generic/non-specific processes do you think

- The therapeutic relationship, feeling listened to
- Some strengths of the therapeutic relationship (although Sally mentioned
- The therapeutic relationship, confiding

contributed to change?		finding sessions quite long/taxing at times)	in and feeling supported by therapist
		<u>Extra-therapeutic factors</u>	
How strong is your belief that extra-therapeutic factors contributed to change for the client?	90%	60%	100%
What extra-therapeutic factors do you think contributed to change?	<ul style="list-style-type: none"> • Being referred for ADHD assessment • Reaching out to more people since finding out she could have ADHD • Medication (increased antidepressant dose) 	<ul style="list-style-type: none"> • Bond with the baby • Adjustment to partner's working pattern • Realisation around potential ADHD 	<ul style="list-style-type: none"> • Potential ADHD traits and a high-demand high-pressure parenting life may have lessened the effect of ACT change mechanisms (as evidenced by Sally's struggling with the length of session reported in HAT and CI).
Overall attribution of change to	40/30/30%	20/20/60%	35/50/15%

therapy (ACT-
specific factors/non-
specific
factors/extra-
therapeutic factors)

Cross-case synthesis

Across the three participants, the following patterns were identified:

Did reliable and personally meaningful changes occur?

- Both Molly and Rachel were rated as “improved” by the adjudicators (with Molly considered as “recovered” by two judges), whilst two judges determined that Sally showed no change overall.
- The judges drew these conclusions based on psychometric data and qualitative information (which were noted to corroborate each other); however, they acknowledged that the level of change on psychometric measures varied across participants.

Attributions

- ACT processes, particularly mindfulness, defusion, and acceptance, appeared to partially mediate outcomes.
- For Molly, ACT processes were judged to account for changes to a greater extent than non-specific and extra-therapeutic factors. For Rachel, ACT-specific factors also generally outweighed other potential explanations, although the difference was more modest, and one judge attributed slightly more influence to extra-therapeutic factors. For Sally, two out of three adjudicators deemed common or extra-therapeutic factors to be the most influential.
- The therapeutic alliance was an important vehicle of therapeutic change across all participants.
- Extra-therapeutic factors (medication, existing interpersonal relationships, time passing, adjustment to new life circumstances) also played a role in observed changes.

Discussion

To date, no research has explored the effectiveness and change mechanisms of ACT in perinatal women. Therefore, this study makes a novel contribution to the literature by investigating both the efficacy and potential change processes of ACT in perinatal women experiencing psychological distress, using a HSCED. Rich case records from three participants were examined by an expert panel of Clinical Psychologists to determine the efficacy of the intervention and illuminate potential change processes.

Clinical and Theoretical Implications

Effectiveness³⁹

Judicial outcomes indicated that two clients (Molly and Rachel) improved reliably and/or clinically significantly on various psychometric measures of symptomatology and idiographic problem ratings, with Molly being classified as “recovered” by two of three judges. The third client (Sally) showed no change apart from reliable improvement on one of her problem ratings. Qualitative data across cases suggested that participants became more able to engage in meaningful activities (e.g., attending baby groups and planning family trips) and respond with greater acceptance to internal experiences like anxiety. The intervention demonstrated no effect on postpartum bonding, as none of the participants showed reliable change on the MIRS. However, this may be attributable to the absence of bonding difficulties reported at baseline.

Changes were generally attributed to ACT processes; particularly, mindfulness, cognitive defusion, and acceptance. Values and committed action were also highlighted as potentially contributing to therapeutic gains in some cases, although less consistently, and one adjudicator noted that these processes appeared less emphasised compared to other elements of PF. These results suggest that changes in symptomatology were associated with increased PF, which corresponds with existing literature (Bonacquisti et al., 2024; Hayes et al.,

³⁹ Extended Paper section 4.1.1: further information on effectiveness

1999, 2012). However, findings also support the role of the therapeutic alliance – a common/non-specific factor in psychotherapy – and various extra-therapeutic factors in facilitating changes (Mulder et al., 2017; Wampold, 2015).

All three clients reported strong therapeutic alliance both on the SRS and in the CI. This perhaps contributed to intervention effectiveness. However, the judges concluded that common factors were unlikely to fully explain the observed changes; across participants, the average percentage of change attributed to common factors was 26.11%, aligning with prior research suggesting that approximately 30% of psychotherapy outcomes are attributable to non-specific factors (Lambert, 1992). Interestingly, for Sally, Judge 3 attributed 50% of change to common factors, potentially reflecting her difficulties engaging with ACT-specific processes, as highlighted by the judges (Table 9). In most cases, ACT processes were consistently found to have played a more prominent role in facilitating changes. This contrasts with previous estimates that treatment method accounts for only 1% of outcome variance (Wampold, 2001). Yet, given the inherent overlap between specific and common factors in psychotherapy, their independent effects remain difficult to disentangle (Laska & Wampold, 2014).

Acceptability⁴⁰

Although the current study did not formally set out to evaluate acceptability, some potentially relevant, tentative insights emerged from the findings.

Clients generally expressed positive views about the intervention and the therapist, reflecting a high level of affective attitude. Their ability to retain ACT concepts and integrate them with existing skills and values further suggests strong intervention coherence and ethicality. These are considered key aspects of acceptability (Sekhon et al., 2017). Moreover, all clients explicitly linked at least some of the changes they experienced to the therapy, indicating clear retrospective attribution.

Importantly, effectiveness and acceptability may have been influenced by individual client factors. For example, the only participant who did not demonstrate

⁴⁰ Extended Paper section 4.1.2: further information on acceptability

reliable improvement (Sally) is potentially neurodivergent, which may have impacted her engagement. Moreover, participants' prior experience with other forms of psychological therapy may have shaped their attitudes towards the intervention.

Limitations⁴¹

Although the first author's researcher-therapist role provided a rich contextual understanding of the therapist, clients, and therapeutic process (McLeod, 2010), it also increased the potential for researcher bias. To mitigate this, ACT supervision and fidelity checks were conducted to ensure and monitor adherence to the model, and a panel of independent psychotherapy experts performed the adjudication process. In the rich case records, the researcher presented both supporting and contradictory evidence regarding client change and ACT as a mechanism of change in a transparent manner to further reduce bias. However, adjudicators themselves may have held implicit biases shaped by their clinical experience and theoretical orientation (Elliott et al., 2021). This could be minimised through joint adjudication, where judges form a "jury" to evaluate evidence collaboratively, rather than independently (Bohart et al., 2021). This allows for different perspectives to be integrated and balanced out; based on the idea that "the value of the sum of their observations (...) will be greater than the value of any one of the three observers separately" (Bohart et al., 2021, p. 213).

Another limitation was the study's reliance on self-report measures, which are often limited by social desirability (Van de Mortel, 2008), misinterpretation, or response-shift bias (Rosenman et al., 2011). As contextual-behavioural approaches aim to understand and influence behaviour, incorporating behavioural measures alongside self-report may have enhanced process-outcome mapping (Newsome et al., 2019). However, behavioural and self-report measures often show weak correlations, likely due to differences in what they measure (i.e., automatic versus reflective processes) and methodological issues such as low test-

⁴¹ Extended Paper section 4.5: further limitations (design, measurement, sample, and sources of bias)

retest reliability and sensitivity to situational factors (Dang et al., 2020). Therefore, while integrating behavioural indicators may have offered some advantages, it could also have introduced inconsistencies in the data, potentially limiting cross-case synthesis.

Finally, the HSCED is a demanding, resource-heavy design, both for therapist and clients, and its concepts are often blunt or ambiguous, making definitive conclusions difficult and somewhat subjective (Elliott et al., 2009; Elliott et al., 2021). However, this open, interpretative stance is intrinsic to the epistemological basis of the HSCED, which is designed to embrace the complexity of often conflicting perspectives from a reflexive standpoint, allowing for a rich, contextual, hermeneutic understanding of therapeutic change. Therefore, whilst such subjectivity may be considered a flaw in other designs, it is one of the key strengths of the HSCED.

Implications for research and practice⁴²

These preliminary findings suggest that mindfulness, cognitive defusion, and acceptance may help clients respond more flexibly to common challenges during the perinatal period, such as self-judgements and societal expectations around parenting. Clients can learn to recognise unworkable responses and develop a more accepting stance towards their private experiences, whereas mindfulness can help individuals remain present in an intense, often chaotic period.

However, both practice and research would benefit from a stronger emphasis on values and committed action. These processes are especially relevant given the significant identity shifts that often accompany the postpartum period – whether related to career transitions (Lai & Thorpe, 2025), perinatal loss (Rossen et al., 2023), or broader role and identity shifts (Javadifar et al., 2016). Yet, they remain under-researched; this study also failed to explicitly address this gap. Our understanding of the active ingredients of ACT may be further enhanced by incorporating measures capturing specific facets of PF in future studies. Given

⁴² Extended Paper sections 4.2 and 4.4 provide further clinical and research implications

the central role of mindfulness that emerged from this study, it may also be worth exploring whether other mindfulness-based approaches, such as Mindfulness-Based Cognitive Therapy, may offer similar or even enhanced therapeutic benefits.

It should also be explored what, if any, adaptations could improve outcomes for neurodivergent clients. Emerging evidence indicates that ACT may be feasible and effective for autistic individuals (Pahnke et al., 2022; Yao et al., 2024), although outcomes remain mixed (Garcia et al., 2022).

Lastly, further replications are warranted, as the HSCED is well suited for developing practice-based evidence and capturing idiographic therapeutic change.

Conclusion

This study offers novel contribution to literature by exploring an under-researched intervention, ACT, in the perinatal population where psychological interventions have a crucial role. Results demonstrate good effectiveness and acceptability of a 10-session remote-delivered ACT intervention in this sample. Where the intervention appeared effective, this was attributable to ACT-specific factors, with a smaller role for common and extra-therapeutic factors, particularly the therapeutic relationship. Future research and clinical practice should place more emphasis on the behavioural components of PF and explore potential adaptations for neurodiverse clients.

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Extended Paper

Extended Introduction

Perinatal Mental Health Difficulties (PMHDs)

Despite often depicted as a time of joy and emotional stability (Cree, 2015), the perinatal period carries an elevated risk of psychological difficulties (Filippetti et al., 2022; Jones et al., 2014; Munk-Olsen et al., 2016; Woody et al., 2017), which can persist for up to two years postpartum (Womersley & Alderson, 2024). Perinatal mental health disorders (PMHDs) may represent a continuation or recurrence of pre-pregnancy mental health challenges or emerge as first-time episodes.

Approximately $\frac{1}{4}$ of women experience mental health difficulties during pregnancy and in the first two years postpartum (Howard et al., 2018), with mood and anxiety disorders being particularly prevalent (Dennis et al., 2018; Woody et al., 2017). Even when symptoms do not reach clinical thresholds, elevated anxiety and stress levels are common during this time (Almond, 2010). Research demonstrates that rates of PMHDs are increasing (Abel et al., 2019), and that the COVID-19 pandemic exacerbated symptoms for many (Filippetti et al., 2022; Safi-Keykaleh et al., 2022).

PMHDs can present as low mood, fatigue, appetite changes, disturbed sleep, hopelessness, irritability, guilt, suicidality, thoughts of harming the baby, or anxiety symptoms such as hypervigilance, panic, worry, and intrusive thoughts (Dagher et al., 2021; Fairbrother et al., 2016; Meltzer-Brody & Rubinow, 2021). Common, and often co-occurring, diagnoses in the perinatal period include generalised anxiety disorder, obsessive-compulsive disorder (OCD), panic disorder, posttraumatic stress disorder (PTSD), and tokophobia (i.e., fear of childbirth) (National Institute for Health and Care Excellence [NICE], 2020). During the perinatal period, the risk of serious mental illness such as bipolar disorder, schizophrenia, and affective psychosis is also elevated (Jones et al., 2014). Additionally, in their classification of PMHDs, Paschetta et al. (2014) also identified substance use disorders, eating disorders, and personality disorders as common in the perinatal population.

While the prevalence, relapse rates, and characteristics of PMHDs are largely similar to those observed in the general population, there are some exceptions. For instance, perinatal women experiencing bipolar disorder have a higher likelihood of experiencing relapse compared to the general population (NICE, 2020). Additionally, the postnatal period is associated with an increased risk of a first episode of bipolar disorder (NICE, 2020), and perinatal women face a greater likelihood of developing psychosis compared to non-perinatal individuals (NICE, 2020).

Importantly, many features of PMHDs overlap with typical postpartum experiences. Mild depressive symptoms are common during the perinatal period, due to the significant changes women undergo in various life domains (Van Niel & Payne, 2020). Womersley & Alderson (2024) note that up to 70% of women experience emotional lability and tearfulness in the first week postpartum, due to changes to hormones, sleep schedules, and the adjustment to parenthood. This transient, mild form of depression affects around 80% of new mothers and is often referred to as “maternity blues” (Van Niel & Payne, 2020). This condition is attributable to postpartum physical and hormonal changes, such as decreased thyroid hormones, oestrogen and progesterone levels (Tosto et al., 2023).

However, within the first six weeks following childbirth, some women develop clinical depressive and anxious symptoms, such as persistent worry and rumination about the baby’s wellbeing, feelings of parental inadequacy, and thoughts that the baby would be better off without them. Postpartum OCD often involves intrusive thoughts about cleanliness and the baby’s safety, and compulsive behaviours and rituals such as checking, cleaning, or reassurance-seeking. Perinatal psychosis, which usually emerges within two weeks of birth, is characterised by fluctuating psychotic symptoms such as hallucinations, delusions, alongside affective symptoms and sleep disturbance. Though the prognosis of postpartum psychosis is generally good, the risk of recurrence in future pregnancies is high.

The Impact of PMHDs

Perinatal anxiety and depression are the leading causes of disability in women worldwide (Gelaye et al., 2016), and PMHDs contribute significantly to maternal mortality (Oates, 2003), with approximately a quarter of maternal deaths between six weeks and one year postpartum related to mental health problems (Russell et al., 2017). In extreme cases, PMHDs can also be linked to neonaticide or infanticide (Landoni et al., 2022; Naviaux et al., 2023).

Furthermore, PMHDs are associated with adverse pregnancy and postpartum outcomes, such as foetal growth impairments, preeclampsia, haemorrhage, placental abruption, preterm birth, low birthweight, stillbirth, and neonatal intensive care admission (Accortt et al., 2015; Field, 2017; Gelaye et al., 2016; Jarde et al., 2016; McAllister-Williams et al., 2017; Mitchell & Goodman, 2018; Osborne & Monk, 2013; Rusner et al., 2016; Vigod et al., 2014).

Additionally, poor maternal mental health is connected to poorer child emotional and mental health. For instance, maternal anxiety significantly predicts poorer self-regulation, such as crying, sleeping, and feeding problems, in infants (Schwarze et al., 2024). Moreover, children of mothers with mental health difficulties are at risk of cognitive and socioemotional impairments, and neurodevelopmental conditions such as attention-deficit hyperactivity disorder (ADHD) and autism (Aktar et al., 2019; Accortt et al., 2015; Glover, 2015; Paschetta et al., 2014; Stein et al., 2014; Suri et al., 2014; Wisner et al., 2013). One proposed mechanism for these outcomes is that PMHDs negatively affect maternal sensitivity and mentalisation, impairing the child-caregiver relationship (Erickson et al., 2019; van Ijzendoorn & Bakermans-Kranenburg, 2019), and impaired bonding, in turn, affects infants' cognitive and socio-emotional development (Gentile, 2017; Junge et al., 2017; Waters et al., 2014). Moreover, insecure or disorganised attachment styles, which are common in children of women with severe PMHDs (Flowers et al., 2018; Wan & Green, 2009), are associated with increased externalising behaviours in childhood and, to a lesser extent, internalising difficulties (Fearon et al., 2010; Groh et al., 2012).

Given the detrimental impact of PMHDs and growing recognition of the need for timely, accessible, and high-quality support for mothers (Ayers et al., 2019; Doucet et al., 2012; Reupert et al., 2013), perinatal mental health has received growing attention lately. The NHS Long Term Plan (National Health Service [NHS], 2019) committed to improving access to and the quality of perinatal mental health care for mothers, partners, and children, extending support from 12 to 24 months postpartum. Similarly, the Five Year Forward View for Mental Health (Mental Health Taskforce, 2016) set out to invest £365 million in specialist perinatal mental health services, allowing an extra 30,000 women to receive timely, evidence-based treatment as close to home as possible. Further initiatives included the establishment of specialist perinatal mental health pathways and community mental health teams (NHS, 2018), advocating for the full implementation of NICE guidelines for antenatal and postnatal mental health (NICE, 2020), and increasing the capacity of mother and baby units (Mental Health Taskforce 2016; NHS, 2019). Service development was guided by national guidelines promoting various implementation strategies such as multi-agency working across all levels of service provision, workforce expansion, and the inclusion of people with lived experience in service design and delivery (NHS, 2016).

However, the implementation of these guidelines has been largely inconsistent. Webb et al. (2021) identified barriers to implementation on various levels: individual (e.g., limited awareness/knowledge and support around mental health, unhelpful beliefs about medication, reluctance/inability to engage with specialist services), professional (e.g., insufficient training/knowledge), organisational (e.g., service gaps, limited funding and governmental interest in service provision, confusing restructuring of services, unclear referral pathways), and societal (e.g., stigma, negative cultural beliefs). These challenges largely mirror findings from previous systematic reviews (Furuta et al., 2012; Hadfield & Wittkowski, 2017; Smith et al., 2019; Viveiros & Darling, 2018), highlighting significant policy-practice gaps.

Risk Factors

Various biological, psychological, and social risk factors contribute to the development of PMHDs (Womersley & Alderson, 2024).

The most common ones that have been identified across the board are a history of mental health difficulties either antenatally or during pregnancy, recent negative life events, marital conflict, insufficient social/emotional support (Paschetta et al., 2014), and biological vulnerability factors (O'Hara & Wisner, 2014). Birth satisfaction has also been linked to postpartum depression (Bell & Andersson, 2016), anxiety (Field, 2018), and PTSD (Ayers et al., 2016). Psychoanalytical theories suggest that becoming a parent can trigger mothers' own unresolved psychological trauma (Fraiberg et al., 2018; Iyengar et al., 2014), contributing to mental health challenges.

In general, the perinatal period marks an intense transition which includes adjustment to one's new role as a mother and the formation of the mother-infant bond. This period often involves various thoughts, emotions, urges, and other private experiences, some of which are disturbing (Hall & Wittkowski, 2006), besides increased maternal fatigue, which has been linked to higher levels of depression (Cheng & Pickler, 2014; Dennis & Ross, 2005), anxiety and stress, lower parental self-efficacy and warmth, and more hostile attitudes towards the baby (Chau & Giallo, 2015; Giallo et al., 2011). Overall, women's experience of motherhood frequently differs from the blissful "fourth trimester" often discussed in women's peer groups (Douglas & Michaels 2005; Sutherland, 2010), which makes the perinatal period a particularly vulnerable time in terms of psychological difficulties. Due to the social expectation towards mothers to only emphasise the positive aspects of parenthood, these unsettling symptoms often evoke shame and guilt in people, which may hinder help-seeking, further compounding psychological distress (Byatt et al. 2013; Dennis & Chung-Lee, 2006; Dolman et al., 2013; Kingston et al., 2015; McLoughlin, 2013).

In terms of mood and anxiety disorders, various further risk factors have been identified.

Evidence suggests that the etiopathogenesis of clinical postpartum depression is multifactorial (de Castro et al., 2015): risk factors include a history of

depression before/during the pregnancy, low socioeconomic status, having an unplanned pregnancy, and limited social support (Tambelli et al., 2025; Vanwetswinkel et al., 2022). Other studies also demonstrated links between postpartum depression and alcohol use and smoking (Filha et al., 2016; Yang et al., 2022), domestic violence (Khalifa et al., 2016; Yang et al., 2022) stress (Bell et al., 2016; Underwood et al., 2017) perceived isolation and relationship difficulties (Alfayumi-Zeadna et al., 2015; de Castro et al., 2015; Du Preez et al., 2016), lower educational attainment, socioeconomic disadvantage, and multiparity (Yang et al., 2022).

Perinatal anxiety disorders are often comorbid with depression, making it difficult to distinguish between conditions, and potentially leading to missed or inaccurate diagnoses and insufficient treatment (Furtado et al., 2018). Perinatal anxiety has received less attention in research (Farr et al., 2014; Maguire et al., 2018; Nillni et al., 2018): existing studies are sparse and findings on risk factors are inconsistent. For instance, findings on maternal age and parity are mixed (Bayrampour et al., 2012; Biaggi et al., 2016; Lederman & Weis, 2009; Tearne et al., 2016). Some have identified lower educational attainment and income (Biaggi et al., 2016; Yelland et al., 2010), low social support (Dunkel Schetter, 2011; Peter et al., 2017), a history of mood and anxiety disorders (Faisal-Cury et al., 2009; Martini et al., 2015; Rubertsson et al., 2014), and childhood sexual abuse (Leeners et al., 2006) as potential risk factors. Others have connected postpartum anxiety to maladaptive perfectionism, such as doubts and excessive worry regarding parenting mistakes and expectations (Oddo-Sommerfeld et al., 2016). In terms of biological factors, poor sleep during pregnancy has been associated with higher anxiety following childbirth (Skouteris et al., 2009; Swanson et al., 2010), though some studies failed to find an association (Lawson et al., 2015; Tham et al., 2016). A recent meta-analysis (Furtado et al., 2018) examined risk factors for both new onset anxiety and anxiety that worsened in the perinatal period. They identified several risk factors for new-onset anxiety, including primary school level education, living with extended family, a family history of mental health difficulties, severe morning sickness, multiparity, and a history of sleep disorders. In contrast, the only

consistent risk factor for worsening perinatal anxiety was having a comorbid psychiatric diagnosis, while maternal age showed mixed results. Therefore, the aetiology of perinatal anxiety is less clearly established currently.

Evidence-Based Interventions in the Perinatal Period

The National Institute for Health and Care Excellence (NICE, 2020) recommends that perinatal women with known or suspected mental health problems should be offered a comprehensive mental health assessment within two weeks of referral, followed by intervention within a month of the initial assessment. Additionally, it is essential to assess and address the needs of the family system and carers involved in the woman's care (NICE, 2020).

NICE guidelines outline recommendations for a range of PMHDs, including depression, anxiety disorders, eating disorders, alcohol and drug misuse, severe mental illness, and sleep problems (NICE, 2020). For depression and anxiety – the most common PMHDs – treatment is determined by severity. Mild to moderate cases are typically managed with facilitated self-help, while more severe presentations require high-intensity psychological interventions, often in combination with pharmacotherapy. However, immediate high-intensity psychological interventions are suggested for social anxiety and PTSD. For managing eating disorders, severe mental illness, and substance misuse, the guidelines suggest the same approach as for the general population, with additional foetal monitoring where necessary. Whilst pharmacotherapy is also available for many disorders, it carries potential obstetric risks and adverse health outcomes (Dragioti et al., 2019; Huybrechts et al., 2014; Iacobucci, 2018; Masarwa et al., 2019; NICE, 2020; Suján et al., 2017). These concerns, along with fears about dependency and harm to the foetus, often lead perinatal women to prefer psychological interventions (Battle et al., 2013; Wenzel et al., 2016). This highlights the importance of psychosocial interventions in perinatal mental health care.

The current gold standard psychological interventions for PMHDs are Cognitive Behavioural Therapy (CBT) and Interpersonal Psychotherapy (IPT) (Branquinho et al., 2021; Nillni et al., 2018; O'Brien et al., 2023; Womersley &

Alderson, 2024). CBT addresses automatic negative thinking through modifying links between thoughts, emotions, and behaviour (Beck, 1979). In the perinatal context, it targets parenting-related anxiety, role transitions, and maladaptive beliefs, expectations, and attitudes (NHS Education for Scotland, n.d.). Alternatively, IPT aims to enhance coping with interpersonal stressors such as role transitions, grief or loss, interpersonal conflicts, and social deficits (Stuart, 2008; Stuart & O'Hara, 1995). Therefore, both therapies target the psychosocial risk factors commonly associated with PMHDs, such as role transitions, insufficient social support, marital conflict, and identity changes (Lancaster et al., 2010; Pilkington et al., 2017; Stuart, 2012; Stuart & Clark, 2008; Stuart & Robertson, 2012).

CBT has demonstrated significant symptom reduction in perinatal depression and anxiety (Li et al., 2022), blood- and injection-phobia (Lilliecreutz et al., 2010), PTSD (Shaw et al., 2013), postpartum OCD (Challacombe et al., 2017) and in mothers whose babies were kept in neonatal intensive care (Koochaki et al., 2017). A meta-analysis also found IPT to be effective in managing psychological distress, depression, and anxiety in perinatal women (Bright et al., 2020). Nevertheless, several limitations have been noted.

First, interventions often showed limited effect on symptomatology, despite small sample sizes which typically inflate effect sizes (Dennis & Hodnett, 2007; Maguire et al., 2018; Werner et al., 2015). This likely reflects heterogeneity in methodology and intervention structure, targets, and delivery (Cooper et al., 2003; Loughnan et al., 2018; Maguire et al., 2018). Second, research has predominantly focused on the most prevalent (e.g., depression) and severe (e.g., psychosis) conditions, leaving others under-researched (Aktar et al., 2019; Howard & Khalifeh, 2020). Third, the ecological validity and applicability of findings to real-world settings is limited. Studies often exclude participants with comorbid diagnoses (O'Connor et al., 2019; O'Hara & McCabe 2013), despite the high comorbidity rates in PMHDs (Gong et al., 2023; Nakić Radoš et al., 2025), and predominantly sample Caucasian, married, and middle-class participants, thus underrepresenting the diversity of the perinatal population (Dennis & Hodnett, 2007; O'Connor et al.,

2019). Findings from ethnic minorities or low-income groups are mixed, highlighting need for culturally informed interventions (Nillni et al., 2018). Lastly, a substantial proportion of participants do not respond to treatment (Cujipers et al., 2023), which outlines the importance of understanding the unique needs of the population and potential change mechanisms that may mediate outcomes.

Contextual therapies have been proposed as viable alternatives in managing emotional distress in the perinatal period, both for depressive and anxious symptoms (Torres-Giménez et al., 2024). However, much of the evidence focuses disproportionately on mindfulness-based interventions (MBIs), with other approaches remaining under-represented (Torres-Giménez et al., 2024). While MBIs have attracted considerable interest in perinatal mental health research, findings vary on what domains they impact positively. Some studies found MBIs to be associated with improved maternal self-efficacy, perceived social support, self-compassion, wellbeing, and mindfulness skills, as well as reduced fear of childbirth and improved birth experience (Lever Taylor et al., 2017; Liu et al., 2022; Özer & Dişsiz, 2025). In terms of symptomatology, MBIs have demonstrated significant improvements in depression, anxiety, and stress (Hall et al., 2016; Lever Taylor et al., 2017; Min et al., 2023), although some studies reported inconclusive findings for anxiety and stress (Corbally & Wilkinson, 2021) and severe depression (Min et al., 2023). Moreover, MBIs often showed no significant advantage over control conditions (Lever Taylor et al., 2017; Shi & MacBeth, 2017) or other interventions (Min et al., 2023). Yet, evidence suggests that MBIs may be effective for subthreshold presentations, with sustained benefits for depression linked to greater mindfulness skills, although similar long-term benefits were not observed for anxiety (Leng et al., 2023). Despite mixed findings on efficacy, participants generally viewed MBIs positively, with high engagement and completion rates reflecting good acceptability and feasibility (Lever Taylor et al., 2017). Nevertheless, engagement can be hindered by issues such as intervention complexity or technological barriers, particularly in mobile formats (Godage et al., 2025).

Other approaches that have demonstrated some promising outcomes in the perinatal population are behavioural activation (Mancinelli et al., 2023; Yisma et al., 2024) and Compassion Focused Therapy (Cree, 2010; Millard & Wittkowski, 2023). However, evidence remains limited, with reviews including only a small number of studies due to the paucity of research. Recent studies have also highlighted the potential of values-based approaches, such as Acceptance and Commitment Therapy (ACT), which combines mindfulness and self-compassion with a strong focus on behavioural changes through committed action (Bonacquisti et al., 2017, 2024). ACT may be particularly well suited to perinatal care, given its emphasis on psychological flexibility (PF) and applicability across a range of presentations.

Acceptance and Commitment Therapy (ACT)

ACT is a transdiagnostic, third-wave cognitive behavioural approach that considers distress as a natural part of life, rather than the inherent cause of psychological suffering (Harris, 2006, 2019). However, normal mental processes can become destructive and cause suffering when individuals respond to them in rigid ways due to their unwillingness to experience uncomfortable mental phenomena – a process termed experiential avoidance (Hayes et al., 1996). Therefore, ACT posits that it is the pathologising of normal experiences and the struggle to get rid of “symptoms” is what brings about suffering, rather than the experiences per se (Harris, 2006).

Rather than focusing on symptomatology, ACT aims to help people create a rich, meaningful life despite the inevitable pain that is part of the human experience (Hayes et al., 2011), utilising various experiential exercises, mindfulness practices, metaphors, and values-based behavioural interventions (Harris, 2006). The goal is to transform one’s relationship with their private experiences that are often perceived as uncomfortable, negative, or irrational: embracing and accepting these instead can reduce their impact and influence over the individual’s life (Hayes, 2004). This perspective portrays psychological events as transient, albeit sometimes uncomfortable, rather than pathological (Harris, 2006). Through this understanding, ACT enhances PF, which is a vital component of health (Kashdan

& Rottenberg, 2010) and life satisfaction (Lucas & Moore, 2020) and plays a protective role against mental illness and distress (Fledderus et al., 2013; Monteiro et al., 2019; Shallcross et al., 2010).

Philosophical Underpinnings of ACT

ACT is rooted in functional contextualism, an approach extending Skinner's radical behaviourism (Gifford & Hayes, 1999; Hayes et al., 1993). Functional contextualism posits that we must analyse behaviours in their surrounding context and proposes that identifying the function of behaviours is key to understanding them and facilitating behavioural change (Gifford & Hayes, 1999). The context in which unhelpful relationships between cognitions, emotions, and behaviours develop can offer insight into the behaviour's underlying function (Hayes et al., 2012b; Vilardaga et al., 2007). This approach also adopts a non-pathologising stance, suggesting that the same thought, feeling, or behaviour can be functional in one context and dysfunctional in another. Therefore, ACT views distress not as an inherently "maladaptive" phenomenon, but as something that must be understood in its context (Dawson & Golijani Moghaddam, 2015).

ACT also relies on Relational Frame Theory (RFT; Hayes et al., 2001; Roche et al., 2002), which posits that through language, humans form associations between various events and concepts, developing extensive relational networks whose elements are linked based on experience and certain contextual cues. This process, called learned derivation (Luoma et al., 2007), can explain how certain private experiences become associated with psychological distress (Hayes et al., 2011). From this perspective, human language is the very thing that creates struggle with our internal experiences. When individuals take language too literally, they can become fused with their thoughts and beliefs (treating them as absolute truths), which can create emotional pain (Harris, 2019). In response to cognitive fusion, people often engage in various experiential avoidance strategies (i.e., excessive problem-solving or attempts to suppress or escape unwanted emotions) with the aim of reducing emotional pain (Luoma et al., 2007). While these strategies may provide temporary relief, eventually, they cause behavioural rigidity

and disconnect individuals from the present moment, reinforcing negative self-narratives. As a result, life becomes more focused on avoiding discomfort than engaging in meaningful activities – termed psychological inflexibility in ACT (Harris, 2019).

Core Processes of ACT and Their Relevance in the Perinatal Period

The goal within ACT is to increase PF, which can be defined as the ability to contact the present moment and mindfully embrace all private experiences (regardless of their content) without unnecessary struggle, whilst acting in line with one's personal values (Boone et al., 2015; Hayes et al., 2011). Kashdan and Rottenberg (2010) defined PF as a multidimensional construct, encompassing one's ability to adapt to situational demands, manage cognitive resources, change their perspective flexibly, and balance competing needs/desires and areas of life. By fostering PF, ACT helps individuals pursue value-congruent behaviours in the face of distress.

PF is an umbrella term that comprises six core processes, often known as the "ACT hexaflex" (Figure 1 in Journal Paper): cognitive defusion, contact with the present moment, experiential acceptance, values clarity, committed action, and self-as-context. The opposite of these processes, defined in Table 10, form psychological inflexibility (PI). These mechanisms are important in the perinatal period, since elements of PI can serve as psychological mechanisms increasing the risk of distress.

Table 10

Key Processes of Psychological Flexibility and Inflexibility; Based on Francis et al. (2016) and Hayes et al. (2012)

Psychological inflexibility process	Definition	Opposite psychological flexibility term

Cognitive fusion	Over-identification with one's thoughts, accepting cognitions as "truths"	Cognitive defusion
Attentional inflexibility	Rigid dominance of the past/future over one's attention	Contact with the present moment
Experiential avoidance	Attempts to change the form, frequency, or intensity of undesired private experiences	Experiential acceptance
Remoteness from values	Being unsure about meaningful, personally important life directions	Values clarity
Unworkable action	Action/inaction incongruent with one's values	Committed action
Self-as-content	Rigid self-identity, attachment to the conceptualised self	Self-as-context

Cognitive Defusion. Cognitive fusion refers to one's maladaptive overidentification with their private experiences, allowing them to exert excessive influence over their behaviour (Boone et al., 2015). Research has shown that the level of cognitive fusion is positively correlated with scores on anxiety and depression measures (Zhihong et al., 2016). Additionally, cognitive fusion was identified as the second highest risk predictor of postpartum depression among the variables examined, and this pattern showed stability over time (Liu et al., 2023). Cognitive fusion also plays a role in body dissatisfaction and eating disorders,

which are common in the perinatal period, often resulting from natural physical changes after having a baby (Pettersson et al., 2016; Vanderkruik et al., 2022). Evidence suggests that body image-related cognitive fusion significantly mediates the association between body dissatisfaction and body appreciation, the latter of which directly impacts eating disorder behaviours and symptoms (Marta-Simões et al., 2017). Additionally, new parents may become fused with pre-birth expectations about parenthood, which can exacerbate self-judgement, low self-esteem, depression, anxiety, and stress (Lazarus & Rossouw, 2015). Expecting the transition to parenthood to be exclusively positive and joyful can foster feelings of guilt, shame, and self-criticism when expectations are not met, particularly when thoughts and emotions considered socially unacceptable arise (Law et al., 2021). Lastly, birth-related trauma is prevalent, especially in high-risk groups – such as women who experienced difficult or traumatic births, emergency caesarean sections, severe pregnancy complications, intense tokophobia, historic sexual or physical abuse, or whose babies were born preterm or with a foetal anomaly – with 18.5% of women in this population reporting trauma (Yildiz et al., 2017). Fusion with these thoughts and memories can intensify distress and suffering in these cases, negatively impacting functioning. Cognitive defusion techniques, such as visualisation, thought distortion, thanking one's mind for the thought, or repeating distressing thoughts aloud, can help individuals detach from these private experiences, reducing their influence on mood and wellbeing (Harris, 2019).

Contact With the Present Moment. Mindfulness is defined as “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgementally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145), as opposed to being preoccupied with certain private experiences or behaving automatically. Being able to nonjudgmentally appraise one's cognitive content can protect individuals from psychological symptoms (Monteiro et al., 2019). Yet, practising mindfulness may be difficult in the perinatal period for several reasons. First, research indicates that sleep quality is positively associated with mindfulness skills (Zhou et al., 2023). Since new mothers

frequently experience sleep disturbances, they may struggle to remain present. Moreover, the constant multitasking common in the perinatal period significantly increases cognitive load, reducing task accuracy and increasing reaction time (Yuan & Zhong, 2024). This can also impair one's ability to maintain present-moment awareness. Furthermore, Altuntuğ et al. (2024) found that during the first year postpartum, women's memories of traumatic births remained central to their lives and were vivid, consistent, and unfragmented, often including sensory recollections. This suggests that women who have experienced birth trauma may be highly focused on past events, posing another barrier to mindfulness in this population. Mindfulness practices encourage participants to focus their attention on the present moment with interest, curiosity, and acceptance, from a non-judgmental stance (Hall et al. 2016). For instance, mindfulness practices may involve focusing attention on daily activities like walking or eating, noticing if the mind wanders, and observing bodily sensations, thoughts, feelings, and urges without attempting to control them (Baer & Krietemeyer, 2006). In ACT, mindfulness exercises are often shorter and less formal (Baer & Krietemeyer, 2006), which can be particularly suited to the perinatal period, where women frequently face multiple competing demands. Mindfulness is also linked to other key processes of PF, such as cognitive defusion and self-as-context. For example, it involves the nonreactive observation and labelling of thoughts, and recognising the self as the context that contains private experiences and within which the process of observing occurs.

Experiential Acceptance. Experiential avoidance plays an important role in mood and anxiety disorders (Hayes et al., 2004) and has been identified as a mediator between various risk factors and poor psychological functioning in the perinatal period (Bonacquisti et al., 2017; Fonseca et al., 2018). Experiential avoidance can present in different ways across various contexts (Miller et al., 2024). According to Monteiro et al. (2019), many mothers cope with distressing private experiences using avoidance, self-criticism, and negative metacognitive appraisal. For instance, they may suppress emotions to conform societal

expectations of motherhood as a joyful, blissful period even when their lived experience conflicts these ideals (Bonacquisti et al., 2024). Moreover, those who experienced traumatic births may avoid reminders of the traumatic event (Ayers, 2007) or withdraw from situations that could trigger uncomfortable emotions. Furthermore, a large proportion of women experience unwanted infant-related intrusive thoughts, such as fears of harming their baby, which they often try to avoid or control in an attempt to escape or cope with the associated distress (Fairbrother & Woody, 2008; Fonseca et al., 2018; Ojalehto et al., 2021). Other thought control strategies may involve using distraction or thought insertion (Larsen et al., 2006). Although these strategies may provide temporary relief, eventually, they typically result in an increase in unwanted private experiences (Hayes et al., 2006). Miller et al. (2024) found that experiential avoidance significantly mediated the relationship between fear and unhelpful coping mechanisms and anxiety sensitivity, suggesting that avoidance strategies may exacerbate existing symptoms and problems. Conversely, individuals who approach their internal experiences with acceptance usually report lower levels of depressive and anxious symptoms (Fledderus et al., 2013). ACT promotes PF through encouraging individuals to willingly open up to uncomfortable private experiences instead of attempting to change their content or frequency, whilst pursuing valued directions (Harris, 2006, 2019). By helping individuals recognise the unworkability of avoidance strategies, ACT supports a shift toward living a rich, meaningful life, even in the presence of distress.

Values And Committed Action. It is feasible to discuss values and committed together since they are closely intertwined. Valued living (i.e., the extent to which one's actions are congruent with their values; Hayes et al., 2012b; Wilson et al., 2010) entails both a sense of "clarity regarding personally meaningful life directions (i.e., values) and the consistency with which one engages in committed action" (Fields et al., 2022, p. 193). Engagement in value-based action is negatively associated with distress and positively linked to wellbeing (Grégoire et al., 2021) and reward responsivity (Fields et al., 2022). Additionally, living in line

with one's values fosters behavioural flexibility and helps maintain lasting behaviour change (Dahl, 2015). Conversely, lower levels of valued living are associated with various forms of psychopathology (España et al., 2024; Hayes et al., 2006; Michelson et al., 2011; Pakenham et al., 2020).

Values play a crucial role in the perinatal period, since women with PMHDs often struggle with poor self-efficacy (Brazeau et al., 2018) and significant role and identity changes (Javadifar et al., 2016). Many mothers associate motherhood with extreme self-sacrifice (Barkin & Wisner, 2013) and struggle to connect to their agency and individuality (Bonacquisti et al., 2017). This can lead to tension between one's new maternal role and other identities, and between their current and ideal roles (Duncan & Irwin, 2004). Helping clients identify and clarify their values can help them regain their sense of identity, and through committed action, clients can engage in value-consistent behaviours, which can help them reconcile their new social role as a parent with their sense of self (Bonacquisti et al., 2017). Furthermore, focusing on people's idiographic values rather than unrealistic external standards allows mothers to define success in personally meaningful ways. ACT can help achieve this using various practices such as 80th birthday exercise, the Bull's Eye (Lundgren et al., 2012) the Valued Living Questionnaire (Wilson et al., 2010), or the SMART goals framework (Doran, 1981) which help individuals clarify and commit to their values.

Self-as-context. Humans' sophisticated ability to understand themselves and others allows them to clarify their values and set and achieve goals in accordance with them. However, this same ability can also create unhelpful and stigmatising self-descriptions and beliefs (e.g., "I am not good enough"), which may become barriers to living a values-congruent life (Hayes et al., 2012a; McHugh, 2015) and foster thinking patterns associated with certain psychopathologies. For instance, a strong identification with negative self-concept is a pattern common in depression (Rimes & Watkins, 2005). Since our sense of self is rooted in human language (Barnes-Holmes et al., 2001), individuals may frame themselves in restrictive ways (e.g., "I am socially awkward") and then derive further rigid rules

from this, that shapes their behaviour and becomes life-limiting (e.g., an urge to withdraw). Due to the plethora of changes associated with the transition to motherhood, such as identity shifts, role changes, besides changes to women's bodies, interpersonal relationships and social circumstances (Highet et al., 2014; Rallis et al., 2014), many mothers struggle with self-critical narratives, contributing to distress. Self-as-context can help women navigate these changes by taking a broader view of themselves and recognising that their difficulties do not define who they are. This can help reduce one's overidentification with distressing or self-critical thoughts and create more flexibility and adaptability, which, in turn, promotes one's capacity to engage in committed action. ACT aims to enhance clients' ability to notice and open up to internal experiences while recognising that they are more than their mental processes and social roles (Hayes et al., 1999, 2011). This is achieved through several other elements of the hexaflex, such as cognitive defusion or mindfulness, and metaphors such as the Stage Show or the Sky and the Weather metaphor.

Contribution to the Literature

ACT has demonstrated efficacy across presentations like anxiety, depression, substance use, pain, and transdiagnostic populations (Bai et al., 2020; Ferreira et al., 2022; Gloster et al., 2020) and had favourable effects on mental wellbeing (Van Agteren et al., 2021), quality of life, and PF in chronic illnesses such as cancer (Fang et al., 2023; Zhang et al., 2023). ACT generally outperforms control conditions, including waitlist, treatment-as-usual, and placebo (A-Tjak et al., 2015), and is often comparable (A-Tjak et al., 2015; Haller et al., 2021) or superior to CBT in effectiveness (Krotter et al., 2024; Wolitzky-Taylor et al., 2012).

Yet, evidence on the change mechanisms of ACT is sparse. Various authors have attributed treatment outcomes to increased PF, or its specific domains such as acceptance, defusion, and mindfulness (Hämäläinen et al., 2025; Hayes et al., 2011; Macri & Rogge, 2024; Stockton et al., 2019; Vasiliou et al., 2022). For example, Villate et al. (2016) compared two ACT modules: ACT OPEN, focusing on acceptance and defusion, and ACT ENGAGED, targeting values and committed

action. Both modules significantly improved distress, quality of life, present-moment awareness, non-reactivity, and targeted PF processes. However, ACT ENGAGED improved quality of life and values-based activation more, whilst ACT OPEN had more pronounced effects on symptom severity, experiential acceptance, and defusion. This suggests different mechanisms may contribute to different outcomes. Nevertheless, studies have varied widely in methodological quality (Stockton et al., 2019), and samples have been diverse (ranging from headache to insomnia patients), making evidence difficult to synthesise. Moreover, some aspects of PF remain understudied (Macri & Rogge, 2024; Stockton et al., 2019), and many seem to have grouped various mechanisms under the umbrella term “acceptance”, without further differentiation (Kohl et al., 2012), warranting further clarification.

In non-perinatal contexts, ACT has been used to address stressors relevant to perinatal women, such as weight and body image problems (Griffiths et al., 2018), intrusive thoughts (Abramowitz et al., 2010; Russell et al., 2013; Twohig et al. 2006), and physical complaints (Dahl et al. 2005; Nordin & Rorsman 2012, Wicksell et al. 2013; Williamson et al., 2015). In perinatal samples, ACT has also shown initial promising results (Grunberg et al., 2022; Hosseini et al., 2020; Hosseinian et al., 2021; Howard et al., 2023; Kazemeyni et al., 2018; Tunnell et al., 2019; Vakilian et al., 2019; Waters et al., 2020). However, robust evidence regarding potential change mechanisms is still lacking.

Broadly speaking, psychotherapy research often overlooks process mechanisms, limiting our understanding of how, for whom, and under what circumstances specific therapies work (Mulder et al., 2017). While outcomes are partly influenced by specific factors characterising different therapeutic approaches, research also highlights the role of common factors (Constantino et al., 2018; Elliott et al., 2018; Flückiger et al., 2018; Norcross & Lambert, 2018), such as the therapeutic alliance, client expectations, and a rationale that helps clients understand the nature of and reasons behind their difficulties and provides strategies to manage them (Cujipers et al., 2019). Clarifying these unique contributions would aid our understanding of putative change mechanisms in

therapy. This comprehensive evaluation – focusing on both the content and context of interventions, including change processes – is necessary to inform real-world practice and allow for the development of more tailored, effective, and efficient interventions (Bonacquisti et al., 2024; Skivington et al., 2021).

This study aims to address these gaps by evaluating an under-researched intervention (ACT) in a population where its evidence base is limited, using a design focused on understanding complex psychotherapy processes and underlying change mechanisms.

Extended Methods

Rationale for Single-Case Series

Randomised controlled trials (RCTs) are considered the “gold standard” in effectiveness research (Carey & Stiles, 2016; Sharma et al., 2020), due to their high internal consistency resulting from the act of randomisation, the use of strictly controlled conditions, and rigorous statistical analysis. These features ensure that any difference in outcome between groups can be attributed to the intervention being studied. RCTs have been adopted in psychotherapy research based the assumption that the effectiveness of psychological interventions can be evaluated similarly to that of psychopharmacology (Wampold, 2001).

However, this claim has faced critique. Although rigorously conducted RCTs are a key part of the evidence hierarchy and offer valuable insights into therapy outcomes (Carey & Stiles, 2016), they do not always reflect the complexity of therapeutic processes in real-world clinical practice. The aforementioned high level of control, whilst necessary for internal consistency, may limit the applicability of findings to highly individualised interventions, such as psychotherapy, where flexible adaptations are often required and treatment groups are diverse (Backmann, 2017; Christie & Fleischer, 2009).

Furthermore, psychotherapy outcomes are typically shaped by multiple interacting components (Beutler, 2009; Lambert, 1992; Wampold, 2001), and observed changes may stem from common or extra-therapeutic factors, or may even be illusory (Elliott, 2002). Elliott (2002) argued that RCTs are “causally empty” (p. 2): they infer causal associations between variables based solely on temporal precedence and the assumption that cause and effect covary, without allowing for a deeper understanding of change mechanisms.

Additionally, RCTs primarily assess outcomes at the group level (Brewer & Crano, 2014) and thus may overlook complex change processes and intervention effectiveness in individual clients (Carey & Stiles, 2016; Wall et al., 2017). Capturing these idiosyncratic processes is not the primary aim of RCTs and therefore often requires some complementary, process-based methodologies, such

as systematic case studies (Iwakabe & Gazzola, 2009), which can offer a nuanced understanding of therapy processes and test hypothesised causal links at the individual level (Benelli et al., 2015; Wall et al., 2017). These designs enable the continuous monitoring of change, account for contextual influences, and preserve the narrative knowledge inherent in therapy (Wall et al., 2017), thus creating a rich understanding of how therapy outcomes unfold. Consequently, systematic case studies have become increasingly recognised as “scientifically sound and instructive” (Borckardt et al., 2008, p. 78) tools in evaluating therapy efficacy (McLeod & Elliott, 2011)

The Hermeneutic Single Case Experimental Design (HSCED)

An Overview

According to Benelli (2015), the most comprehensive and methodologically robust approach in systematic case study research is the Hermeneutic Single Case Efficacy Design (HSCED; Elliott, 2002). The HSCED is a mixed-methods approach that allows researchers to critically evaluate on a case-by-case basis whether and how change occurred over the course of the intervention. This is achieved through the systematic analysis of a set of qualitative and quantitative outcome and process data, aiming to identify potential contributors to change, including therapy-specific, non-specific/common, and extra-therapeutic factors (Elliott, 2002).

The researcher must adopt a critical-reflective stance, systematically presenting supporting and contradictory evidence with equal rigour (Elliott et al., 2001) before drawing conclusions regarding the presence of and attributions behind perceived changes. Initially, this process was completed by the researchers themselves; however, later it was suggested that the procedure could benefit from insight from external psychotherapy judges from various theoretical backgrounds (Elliott et al., 2009). Therefore, the adjudication process was incorporated into the original design (Elliott et al., 2009), whereby a panel of expert judges review rich case records produced from the data collected from participants and conclude whether change has happened. This procedure mirrors a legal approach to evaluating evidence, ensuring conclusions are drawn with a level of certainty

“beyond reasonable doubt” (Elliott et al., 2009, p. 544). As part of the adjudication process, researchers develop affirmative and sceptic cases that argue either for or against the causal effect of the intervention on the observed changes; arguably, contributing to increased rigour (Elliott et al., 2009; Stephen et al., 2011).

The HSCED is a suitable method for evaluating psychotherapy effectiveness and intervention causality in new, marginalised, or emerging therapies (Stiles et al., 2015) and evaluating existing interventions with new populations (Elliott et al., 2009). This approach can help a) determine whether therapy processes contribute to client outcomes and b) assess the role of non-therapy factors in apparent changes. Thus, the HSCED can answer three important questions in psychotherapy research: 1. Did the client change over the course of the intervention? 2. Are observed changes attributable to the intervention? 3. What events/processes are the observed changes attributable to?

In this study, the HSCED design was employed to evaluate an ACT intervention adapted for postnatal women – a population for whom process and outcome mechanisms have not yet been clarified. A primary aim was to gain a nuanced understanding of how ACT works in this context, beyond simply assessing whether it yielded change. Providing such initial idiographic and tentative evidence of efficacy and process represents an important early step in developing complex interventions (Skivington et al., 2021). Although single-case experimental designs (SCEDs) also provide frameworks for evaluating individual-level change, with equal rigour as the HSCED (McLeod, 2013), they primarily seek to establish causal inference through repeated outcome measurement and experimental control, typically tracking variables across phases (e.g., baseline versus intervention) where participants serve as their own control. They aim to draw causal inferences by observing whether outcome changes coincide with the introduction or withdrawal of the intervention. The HSCED adds a broader, interpretative lens to this valuable foundation. Like SCEDs, it tracks changes over time, but it also expands on it through the triangulation of multiple data sources, and hermeneutic analysis to explore how and why change occurs. This allows for the exploration of subjective meaning, links between process and outcome

variables, and contextual factors that may influence therapy outcomes. Additionally, the adjudicated HSCED involves independent adjudication of the data, enhancing rigour and credibility. Therefore, whilst both the SCED and HSCED are valuable approaches, the HSCED was selected because it better aligned with the aims of this study: to explore not only the efficacy, but also the putative change mechanisms of ACT.

Sources and Development

Elliott (2002) recognised the importance of conducting research that is applicable to real-life clinical work. To meet this need, he developed the HSCED, partly drawing on Kazdin's (1981) general guidelines for enhancing internal validity in single-case studies. These guidelines include the use of systematic quantitative data, assessing change at multiple time points, evaluating multiple cases, and observing changes in chronic, stable difficulties, especially if these happen immediately following the intervention. Additionally, Elliott (2002) incorporated Cook and Campbell's (1979) *modus operandi*, which gives recommendations for identifying and addressing threats to internal and external validity, and advocates for multiple replications. Another notable influence on the HSCED was Bohart and Boyd's (1997) interpretive approach to evaluating clients' accounts of therapeutic change. Bohart and Boyd (1997) argued that when clients report changes, we should critically examine whether these changes are attributable to therapy. This question can be answered either by gathering supporting evidence that change has happened, or by systematically eliminating alternative explanations for the reported changes.

Philosophical Underpinnings

The HSCED method is grounded in the philosophy of pragmatic constructivism, which emphasises an interpretive stance and encourages researchers to utilise complex quantitative and qualitative data simultaneously to leverage the strengths of both designs (Brewer & Hunter, 1989; Tashakkori & Teddlie, 1998). This method aims to construct probabilistic knowledge rather than

assuming the existence of absolute truth (Elliott, 2015), which aligns with the core idea of constructivism (Kuhn, 1970). Therefore, pragmatism corresponds with the key idea behind the HSCED, which aims to find probabilistic explanations of change through the interpretation of rich matrices of quantitative and qualitative data (Stephen et al., 2011).

HSCED Procedure

The HSCED procedure involves two main stages.

During the first stage, rich case records were developed for each participant, based on guidance from Elliott (2002). The procedure was as follows:

1. Contextual information was collated about both therapist and client, including clients' demographic data, history and description of presenting difficulties, previously accessed interventions, and adaptations to the ACT protocol; as well as the therapist's age, gender, training and expertise, supervision received, and relationship to the research context.
2. Quantitative outcome and process measures were utilised to determine client change pre- to post-intervention, using the Reliable Change Index (RCI; Jacobson & Truax, 1991). Self-report measures of PF, postpartum bonding, and various participant-specific measures were administered pre- and post-intervention, and measures of wellbeing, distress, and self-reported client problems were administered at every session. A full list of measures and descriptive data that informed data analysis are presented in Tables 1 and 2 in the Journal Paper.
3. A semi-structured post-therapy interview, the Client Change Interview Schedule (CI; Elliott et al., 1999), was administered by an external researcher approximately two weeks post-intervention. The CI allows researchers to obtain qualitative information about clients' experiences of therapy, including helpful and hindering/unhelpful aspects, and any significant extra-therapeutic events. Another qualitative measure used was the Helpful Aspects of Therapy (HAT) form (Llewelyn, 1988) in order to investigate clients' accounts of significant events occurring in therapy.

4. Records of therapy sessions (therapist process notes) were also used to corroborate (or contradict) information provided on quantitative measures or in the CI. Therapist process notes summarised the focus of the session, interventions/ACT techniques used (applied to clients' difficulties) and their impact, any home practice tasks, and relevant participant feedback/reflections.

Rich case records also included affirmative and sceptic briefs, developed by the first author and reviewed by research supervisors and the field supervisor. Both briefs were developed based on different types of evidence described by Elliott (2002), an overview of which is provided in Table 11. The affirmative case argued that the client changed over the course of the intervention and that changes were mainly attributable to the intervention, based on at least two of the five types of evidence listed in Table 11. In contrast, the sceptic case outlined alternative interpretations of the data presented, to contradict the affirmative case and suggest that changes either did not happen or were attributable to factors other than therapy.

A summary of the HSCED procedure is presented in Figure 2.

Figure 2

The HSCED Process (Stephen et al., 2011)

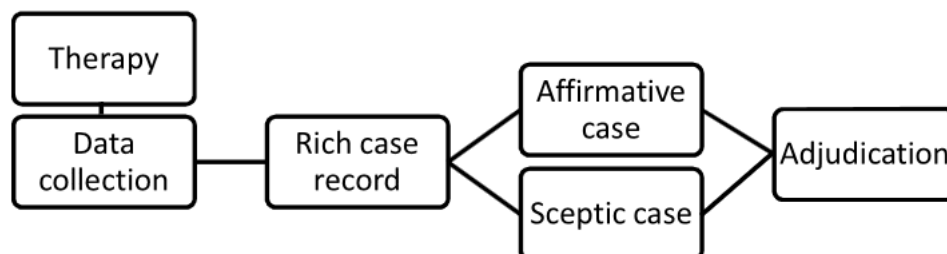


Table 11

An Overview of the Different Types of Evidence Used in the Affirmative and Sceptic Briefs; Based on Elliott (2002)

Type of evidence	Definition
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Affirmative case	
Retrospective attribution	The client's clear attribution of changes to the intervention
Process-outcome mapping	Clear associations between post-intervention changes and certain events, aspects, or processes within therapy
Within-therapy process-outcome correlation	The correspondence between in-therapy process variables and weekly shifts in client problems
Early change in stable problems	The coincidence between therapy and changes to clients' longstanding, chronic difficulties
Event-shift sequences	Instances when important therapy events immediately precede a stable shift in client difficulties (especially when the given therapy process and the change are logically linked)
Sceptic case	
Non-improvements	Changes are either negative or trivial, based on reliable change and clinical significance calculations (Jacobson & Truax, 1991), and/or client and/or therapist narratives
Statistical artefacts	Changes are due to measurement error, regression to mean by outliers, or experiment-wise error
Relational artefacts	Changes are due to clients' attempts to please the therapist/researcher and/or attributable to the therapeutic alliance/rapport
Expectancy artefacts	Changes are influenced by clients' expectations of therapy or wishful thinking (often indicated by stereotyped language use)

	and changes being rated as “expected” during the CI)
Self-correction	Changes are attributable to self-help efforts, maturational processes, or ongoing developmental trends
Extra-therapy events	Changes are attributable to factors outside therapy (e.g., life events)
Psychobiological causes	Changes are attributable to psychobiological factors (e.g., medication, hormonal changes)
Reactive effects of research participation	Client outcomes are affected by participating in research (e.g., research activities can enhance or interfere with therapy, enhanced altruism, social desirability effects)

During the second stage, rich case records underwent critical analysis, or “adjudication,” by three independent psychotherapy experts (“judges”). Judges were selected to represent various theoretical orientations and clinical experience, as recommended by Elliott et al. (2009). The role of judges was to examine outcomes and identify change processes – specifically, the extent to which reported changes could be attributed to therapy versus non-therapy factors, and whether changes attributable to therapy were due to ACT-specific or common factors.

Judges were selected with support from two research supervisors and the field supervisor. Adjudicators had to meet the following criteria: a) practitioner psychologists registered with the Health and Care Professions Council (HCPC), b) experience in psychotherapy research, and c) expertise in either ACT or another evidence-based psychological model (e.g., second-wave CBT, psychodynamic psychotherapy). The primary researcher approached potential adjudicators, and once a panel of three was convened, they were provided with each client’s rich case record, affirmative and sceptic briefs, CI transcripts, and therapist process notes. Judges were asked to answer various semi-structured adjudication

questions assessing the extent and nature of reported changes independently, and to draw conclusions regarding the intervention's effectiveness. Judges were also sent a preliminary list of questions to establish their allegiance to any particular therapeutic model, and to see whether they have any clinical experience working with perinatal clients or using ACT.

The final analysis involved the synthesis of the adjudicators' responses and drawing final conclusions about whether and how change has occurred.

ACT Intervention

After providing informed consent and completing the pre-intervention questionnaires, participants were invited to take part in a one-to-one ACT intervention delivered by the researcher-therapist via Microsoft Teams. The intervention comprised ten, weekly, up to 120-minute sessions. The intervention was delivered remotely as flexible delivery options in perinatal research can decrease participant burden and thus increase engagement (Grunberg et al., 2022). The researcher-therapist sent the meeting link to participants via email in advance of sessions. Participants accessed the sessions using either the online version of Microsoft Teams or downloading the desktop app, which is freely available. Sessions were video recorded for fidelity checking purposes.

Content

Each intervention session followed a structured format. Sessions started with an experiential mindfulness exercise to help participants settle in and develop present-moment awareness. This was followed by a brief review of the previous week's content and a reflection on home practice, with specific focus on participants' experiences with various techniques, as well as potential barriers and difficulties. Then, new content introducing key ACT concepts was presented utilising psychoeducation, experiential exercises, ACT metaphors, and discussion. The session ended with another mindfulness exercise and the setting of home practice. To ensure internal consistency, the same metaphors and exercises were

used between participants. Throughout the intervention, the slideshow contained “Think Baby” slides highlighting perinatal-specific considerations and connecting the content to the perinatal period.

Initial sessions focused on mindfulness, as mindfulness skills are integral to noticing mental states such as thoughts and emotions, which were later targeted through cognitive defusion and acceptance exercises. The mid-stage of therapy focused on experiential acceptance and self-compassion, and the last two sessions that introduced ACT concepts targeted values and ongoing committed action. The final session reviewed the content of the ten-week intervention programme and provided an opportunity for summaries and reflections. The content of each session is summarised in Table 12.

Table 12*The Content of the ACT Intervention*

Session number	Topic	Brief summary
1	Introduction and mindfulness	<p>Aim: to develop initial rapport, normalise anxieties, and provide rationale for the intervention</p> <p>Exploring participants' hopes and fears</p> <p>Practical considerations: housekeeping, confidentiality and record keeping, managing distress</p> <p>Underlying theory and evidence base of ACT</p> <p>Components of psychological flexibility</p> <p>Overview of the intervention programme</p> <p>Psychoeducation: mindfulness</p> <p>Experiential mindfulness exercise</p> <p>Homework: mindfulness practice</p>
2	Mindfulness and acceptance	<p>Aim: to practise and develop mindfulness and acceptance skills</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 1</p> <p>Home practice review</p> <p>Psychoeducation: mindfulness, self-as-context</p>

		<p>The role and impact of judgements/self-criticism</p> <p>Experiential exercises (mindful listening, Notice Five Things)</p> <p>Homework: mindfulness practice, negative judgements record</p>
3	Mindfulness and cognitive defusion	<p>Aim: to practise mindfulness skills and introduce cognitive defusion</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 2</p> <p>Home practice review</p> <p>Psychoeducation: cognitive defusion</p> <p>Experiential exercises (Hands as Thoughts, "I notice I'm having the thought...", Leaves on a Stream)</p> <p>Homework: continued mindfulness practice, cognitive defusion exercises</p>
4	Mindfulness and cognitive defusion	<p>Aim: to practise mindfulness skills and learn more cognitive defusion techniques</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 3</p> <p>Home practice review</p> <p>Psychoeducation: cognitive defusion</p> <p>Experiential cognitive defusion exercises (thanking the mind, labelling thoughts, Radio Triple F, the "3 Ns", visualisation, thought distortion)</p> <p>Mindfulness exercise (Thoughts on a Cloud)</p>

		Homework: continued mindfulness practice, cognitive defusion practice
5	ACT and emotions	<p>Aim: to practise mindfulness skills and develop skills in noticing and expressing emotions</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 4</p> <p>Home practice review</p> <p>Psychoeducation: ACT and emotions, the emotion curve, experiential avoidance, experiential acceptance, core emotions, primary/secondary emotions, the function of emotions, barriers to experiencing and expressing emotions, emotional “myths”</p> <p>Experiential exercises (The Struggle Switch, expanding awareness)</p> <p>Homework: continued mindfulness and cognitive defusion practice, categorising and body mapping emotions</p>
6	ACT and emotions	<p>Aims: to practise mindfulness skills and discuss the functions and urges associated with emotions</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 5</p> <p>Home practice review</p> <p>Psychoeducation: the function/purpose of emotions, helpful aspects of emotions, workable options</p>

		<p>Experiential exercises (Caring for Me)</p> <p>Homework: continued mindfulness and cognitive defusion practice, identifying the function of emotions and workable options</p>
7	Self-soothing and self-compassion	<p>Aims: to practise mindfulness skills and develop awareness of and skills in self-soothing and self-compassion</p> <p>Experiential mindfulness exercise (Compassionate Friend)</p> <p>Review of content from Session 6</p> <p>Home practice review</p> <p>Psychoeducation: the definition and importance of self-compassion, barriers to engaging in self-compassion/self-soothing, six building blocks of self-compassion</p> <p>Practical self-compassion exercises (e.g., self-soothing through the senses, Compassionate Mind)</p> <p>Homework: continued mindfulness and cognitive defusion practice, self soothe kit</p>
8	Valued living and committed action	<p>Aims: to practise mindfulness skills and introduce the concept of values</p> <p>Experiential mindfulness exercises (Loving Kindness, expanding awareness)</p> <p>Review of content from Session 7</p> <p>Home practice review</p>

		<p>Psychoeducation: the definition of values and committed action, the difference between values and goals, identifying one's own values</p> <p>Passengers on a bus metaphor</p> <p>Homework: continued mindfulness and cognitive defusion practice, Valued Living Questionnaire</p>
9	Valued living and committed action	<p>Aims: to practise mindfulness skills, clarify participants' values and set goals in line with them</p> <p>Experiential mindfulness exercise</p> <p>Review of content from Session 8</p> <p>Home practice review</p> <p>Psychoeducation: willingness, SMART goals, barriers to living in line with one's values and potential solutions ("FEAR to DARE")</p> <p>Homework: continued mindfulness and cognitive defusion practice, committed action goal setting</p>
10	Review of the course, endings, taking ACT forward	<p>Aims: to practise mindfulness skills, review the content of the intervention, and reflect on endings</p> <p>Experiential mindfulness exercise</p> <p>Review of the content of the course, week by week (participant reflections on the use of various skills was encouraged throughout)</p>

Endings: What will you remember most from the course? What positive things come from endings? How can you make sure you remember to use the skills?

Thoughtful letter exercise

Final experiential mindfulness exercise

Pre-adaptational Work

The first author reviewed both the facilitator and client manuals to adapt the content for individual delivery. The following modifications were made:

- Pregnancy-specific references were removed from slides and mindfulness scripts (e.g., *“Notice your bump If you are pregnant.”*).
- Group-related statements were removed from slides, scripts, and the client manual.
- Group discussions were replaced by discussion with a facilitator.
- Participants were allowed to have their babies present during sessions.
- Whilst the original group intervention was delivered weekly, and group members were encouraged to attend as many sessions as possible, the individual version allowed for more flexibility. For instance, sessions were occasionally rearranged or due to illness or other commitments.
- Participants were offered regular breaks.
- The intervention was delivered via Microsoft Teams, with PowerPoint slides supporting the intervention delivery shared using the screen-sharing function.
- Participants received a client handbook adapted for individual use, containing session summaries, experiential ACT exercises, and mindfulness scripts, to support home practice.
- The manual was used flexibly, tailored to individual client need, such as checking understanding throughout and revisiting content if needed.

Some additional modifications specific to each client are listed in the full rich case records in the Extended results section.

Treatment Fidelity

Therapist adherence to the ACT model was assessed via session recordings by a third party (another researcher from the University of Lincoln), using the Acceptance and Commitment Therapy Fidelity Measure (ACT-FM; O'Neill et al., 2019; Appendix F). This measure was completed retrospectively, based on a sample of session recordings, carefully selected to represent at least one recording from each participant, and sessions from the early, middle, and late stages of therapy. Overall, sessions were judged to be largely ACT-

consistent, with rare occasions of ACT-inconsistent behaviours. However, it is important to note potential limitations in scoring interpretation. Items were scored as zero if the behaviour was not observed, which does not necessarily indicate poor performance but rather the absence of that behaviour or core concept in the session. Additionally, some ACT-inconsistent items, such as “Therapist lectures the client,” were occasionally rated higher in more protocol-driven or script-heavy sessions. This reflects the interaction between the ACT-FM’s fidelity criteria and the structured nature of the intervention. Table 13 reports the ACT consistency and inconsistency scores calculated for each session evaluated.

Table 13

ACT Consistency and Inconsistency Scores

	ACT Consistency Score	ACT Inconsistency Score
Session 1	20.25	3
Session 2	25.75	1
Session 3	19.75	2
Session 5	21.75	0
Session 6	21.75	1
Session 9	24.5	1
Mean score	22.29	1.33

Therapist Details

In this study, the first author, a 27-year-old female Trainee Clinical Psychologist, employed by Nottinghamshire Healthcare NHS Foundation Trust, acted as the researcher-therapist. She delivered the intervention to participants at the end of her second year and the start of her third year of doctoral training.

At the time of the intervention delivery, the therapist had completed placements in Adult Mental Health, Child and Adolescent Mental Health, and Learning Disability services and used ACT on placement with various clients across the lifespan, under supervision by qualified Clinical Psychologists. Moreover, the therapist attended a two-day training course on the intervention

package led by its developers, provided by Cardiff University, and participated in five ACT supervision sessions with a member of the Cardiff University research team throughout the intervention phase. Additionally, she engaged in monthly research supervision meetings with two academic research supervisors and monthly field supervision meetings with the field supervisor, who supported recruitment for this study and had also completed the two-day ACT training.

The therapist's role in the study as a researcher must also be acknowledged. She was actively involved in the planning and execution of the study, with responsibilities including, but not limited to, selecting questionnaires, data collection, compiling rich case records, preparing affirmative and sceptic briefs, and approaching adjudicators.

Epistemological Position

This study is underpinned by the epistemology of pragmatic constructivism.

Pragmatism encourages the combination of quantitative and qualitative methods to draw upon the strengths of both designs (Brewer & Hunter, 1989; Tashakkori & Teddlie, 1998) and aims to characterise how a specific intervention was implemented with a specific client, with explicit focus on what aspects of the intervention clients found helpful/unhelpful (McLeod, 2013). Constructivism posits that rather than seeking an absolute truth, we should explore feasible explanations and meaning that lie in the specific context, since knowledge is merely a construction created by people in relation to their context, not a representation of reality (Kuhn, 1970).

Pragmatic constructivism fits with the philosophical underpinning of ACT, functional contextualism, which suggests that behaviour should be interpreted in the context in which it occurs (Hayes et al., 2012a). It is also in line with the ethos of the HSCED, which aims to construct probabilistic knowledge regarding whether and how an intervention might work (Elliott, 2015), whilst maintaining high external validity by assessing change in a naturalistic setting (Crowe et al., 2011; Ridder, 2017; Yin, 2014). Moreover, pragmatic constructivism considers interpretation as key to identifying causality, which corresponds with the critical

and interpretive approach HSCED offers to psychotherapy research (Elliott, 2002).

ACT takes a critical realist position, which posits that whilst there is an objective reality that is measurable through scientific enquiry (positivism), our understanding of that reality is mere construction based on subjective experiences and mediated by interpretation and knowledge (social constructionism).

Measures and Rationale

A set of general outcome and process measures was administered to every participant, whilst other, participant-specific outcome measures were administered as long as they were appropriate, validated, available to use, and not too burdensome.

Measures were administered by the researcher-therapist. Mother-infant bonding, PF, and participant-specific measures were only collected at the beginning and end of the intervention phase, with the aim of reducing participant burden. There was no need to record these variables more frequently as data analysis only considered reliable change between pre- and post-intervention time points. This was considered appropriate, since Elliott (2002) suggested that quantitative outcome measures should be administered at least at the beginning and end of the therapy process, or every 8-10 sessions. Distress, wellbeing, client problems, and session ratings were recorded at every session.

General Quantitative Measures

Outcome Measures.

Mother-Infant Relationship Scale (MIRS; Newman-Morris et al., 2020a). The MIRS consists of 19 items measuring distorted maternal representations (i.e., disturbed thoughts/feelings about the infant and oneself as a parent that may impact parenting behaviours, mentalisation, and caregiving). It assesses representations regarding: 1) hostility/rejection (e.g., “I feel rejected by my baby”), 2) apprehension about attachment or parenting (e.g., “I feel that

my baby likes me” – reverse scored item), and 3) helplessness/anxiety regarding infant care (e.g., “I feel worried about my baby’s future”). Items are scored on a 4-point Likert scale (0: never, 3: always), with higher scores indicating potential early relational disturbance. Items 1, 3, 6, 16 and 18 are reverse scored. Scores range from 15 to 45, and scores ≥ 30 indicate potential disturbance in the mother-infant relationship/interaction. The authors of the scale found the internal reliability to be excellent (.91) in the clinical sample and acceptable (.78) in the nonclinical sample, and reported excellent test-retest reliability ($ICC = .81$), good concurrent validity with Parent Development Interview (Aber et al., 1985) and the Emotional Availability Scales (Biringen, 2000, 2008), and good construct validity (Newman-Morris et al., 2020a). Measuring maternal representations of the infant was important in this study since these representations are closely linked to maternal reflective functioning (also known as mentalisation). Higher maternal reflective functioning is associated with more engaged and balanced parenting (Alismail et al., 2022), and maternal bonding has been shown to play a vital role in optimal physical, cognitive, and emotional child development (Bowlby, 1997; de Waal et al., 2023; Meins et al., 2018). Conversely, poor postnatal bonding can impact various areas of infant development negatively (Johnson, 2013; Le Bas et al., 2020) and contribute to poorer child executive function (De Cock et al., 2017) and behavioural problems (Fuchs et al., 2016). Furthermore, Waters et al. (2020) emphasised the need to “assess the impact of ACT on a wider range of outcomes including the mother-infant relationship” (pp. 475-476), making maternal bonding a relevant focus in this study.

Clinical Outcomes in Routine Evaluation – 10 (CORE-10; Barkham et al., 2013). The CORE-10 is a 10-item self-report measure assessing common manifestations of psychological distress (anxiety, depression, physical problems, trauma-related difficulties), various aspects of functioning (general, social, interpersonal), and risk to self. Each item is rated on a 5-point scale (0: not at all, 4: most or all of the time), with higher scores indicating greater distress. Items 2 (“I have felt I have someone to turn to for support when needed.”) and 3 (“I have felt able to cope when things go wrong”) are reverse scored. A total clinical score (ranging from 0 to 40) is calculated by summing the

scores for completed items, dividing the sum with the number of items completed, and then multiplying by 10. The internal consistency of the CORE-10 is excellent ($\alpha = .90$; Barkham et al., 2013). The measure also showed good correlations with the psychometric instrument that it was developed from, the Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM; Barkham et al., 2006), besides good construct and discriminant validity and moderate test-retest reliability over a 2-week period (Lewis, 2016). Moreover, Coates et al. (2020) showed that the CORE-10 is correlated with the GAD-2 at .69 and with Whooley Questions at .64, showing moderate to strong convergent validity in a perinatal sample.

Outcome measures are crucial for establishing practice-based evidence for psychological therapies (Barkham et al., 2010). Many practitioners and services use the CORE-OM (Barkham et al., 2006; Evans et al., 2002) to assess distress, mostly at the start and end of therapy. However, the length of this measure, along with time and resource constraints in services, limits its feasibility for session-by-session administration, creating a need for shorter alternatives to reduce client burden. The 10-item version was created in response to these limitations (Barkham et al., 2013). The CORE-10 has been successfully used in the perinatal period (Coates et al., 2020), demonstrating good diagnostic accuracy for anxiety and depression (Ayers et al., 2024), and was found to be acceptable and easy to complete, with fewer problematic components than other anxiety screening measures (Meades et al., 2024). It is particularly useful for monitoring progress in therapy (Valdiviezo-Oña et al., 2024). Given that the perinatal service from which participants were recruited already used the CORE-10 as part of routine clinical practice, it was implemented in this study, since weekly measurement of distress is a requirement of the HSCED method (Elliott, 2002).

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007). The WEMWBS is a 14-item self-report measure assessing mental wellbeing. Items are positively worded and capture various aspects of mental wellbeing, such as positive relationships, feelings of optimism, and energy. Each item is rated on a 5-point Likert scale (1: none of the time 5: all of the time), and total scores range between 14 and 70. Higher

scores reflect greater wellbeing, with the clinical cut-off determined at 42 points (Tennant et al., 2007). The WEMWBS demonstrates excellent internal consistency ($\alpha = .91$ in the population sample) and high test-retest reliability ($r = 0.83$) over a one-week period, besides good construct and discriminant validity (Stewart-Brown et al., 2011; Tennant et al., 2007). Regarding convergent validity, the WEMWBS has shown moderate to high positive associations with several wellbeing-related indicators, positive affect, life satisfaction and overall health (Castellví et al., 2014; Clarke et al., 2011; López et al., 2013; Ringdal et al., 2018; Santos et al., 2015; Taggart et al., 2013; Tennant et al., 2007). Additionally, it showed significant negative correlations with anxiety and depression symptoms (Bass et al., 2016; Clarke et al., 2011; Tennant et al., 2007; López et al., 2013).

The WEMWBS was selected for this study as it allows for a comprehensive assessment of mental wellbeing, covering both hedonic and eudaimonic aspects (Tennant et al., 2007). The latter, which focuses on finding meaning, purpose, and embracing growth in life, corresponds with ACT's emphasis on living a values-congruent life. Research demonstrates that PF is associated with these aspects of wellbeing (Howell & Demuyne, 2021); more specifically, PF operates as a model of eudaimonic activity through promoting psychological need satisfaction (Howell et al., 2024). Finally, the WEMWBS has been shown to be less susceptible to ceiling effects and social desirability bias than other measures of wellbeing (Tennant et al., 2007), offering additional methodological advantages.

Personal Questionnaire (PQ; Elliott et al., 1999). In line with an individualised approach to outcome measurement (Sales, 2017), the PQ is a personalised questionnaire developed for each client, specifically designed to measure changes in individualised psychological difficulties. It is a simplified version of the Personal Questionnaire developed by Shapiro (1961). Clients are asked to develop a list of up to ten problems that led them to access therapy and rate each problem according to how much it has bothered them during the past week, using a 7-point Likert scale (1: not at all, 7: extremely). They also indicate the duration of each problem on a 7-point scale (1: less than one month, 7: more than 10 years). Clients are then asked to re-rate these problems

during each subsequent session. Psychometric evaluation of the PQ revealed good internal reliability ($\alpha = .80$) and a test-retest reliability of .57 (95% CI: .43 to .68) over an average of 34 days (Elliott et al., 2016). Its validity is supported by strong correlations with other standardised outcome measures such as the CORE-OM (Barkham et al., 2006) and the Symptom Checklist-90 (SCL-90; Elliott et al., 2006). On the PQ, Elliott et al. (2016) proposed a caseness cut-off of 3.25 and a reliable change threshold of 1.67 for pre-to-post scores (or 1.4 points for week-to-week change).

The HSCED method requires weekly measurement of clients' therapy-related problems or goals (Elliott, 2002), making the PQ particularly suitable for this study. The PQ was used to assess whether changes occurred during the intervention phase in clients' idiographic, personalised problem descriptions. The PQ is known to be feasible and easy to implement across various clinical settings and therapeutic approaches, with clients of various ages (Antunes et al., 2020). A further advantage of the PQ is that it allows for the incorporation of individualised goals into therapy, even when participants present with different diagnoses and difficulties. Furthermore, the sensitivity of the measure enables researchers to track client changes session by session as well as over the course of therapy (Elliott et al., 2016). Research suggests that providing clients with feedback on their individual progress in therapy is linked to improved treatment outcomes (Brown et al., 2001) and better awareness of one's own improvement (Boswell et al., 2013; Nordal, 2012). Additionally, it can strengthen the therapeutic relationship (Unsworth et al., 2012), inform the development of treatment plans (Siebum et al., 2015) and highlight clinicians' need for further training (Fitzpatrick, 2012; Nordal, 2012).

Process Measures.

Comprehensive Assessment of Acceptance and Commitment Therapy Processes (CompACT; Francis et al., 2016). The CompACT is a 23-item self-report measure assessing PF on three subscales (Openness to Experience, Behavioural Awareness, and Valued Action). Participants are asked to indicate on a 7-point Likert scale how much each item applies to them (0: strongly disagree, 6: strongly agree). Items 2, 3, 4, 6, 8, 9, 11, 12, 15, 16, 18,

and 19 are reverse scored. The Openness to Experience subscale measures one's willingness to experience internal events without attempting to control or avoid them. The Behavioural Awareness subscale reflects respondents' ability to pay mindful attention to their actions. The Valued Action subscale indicates the extent of engagement in values-congruent actions and meaningful activity. Total scores (ranging between 0 and 138) are computed by adding up the scores on each of the subscales, with higher scores indicating higher PF. Since the CompACT has not been validated in specific clinical populations to date (Giovannetti et al., 2024), clinical cut-offs are not available for this measure. The scale possesses excellent psychometric properties: Francis et al. (2016) reported an internal reliability of 0.91, and Cronbach alpha values ranging between .87 and .90 for each subscale. The convergent and construct validity of the CompACT was also supported in a Portuguese sample (Trindade et al., 2021).

PF and its six core components have been proposed as a change mechanism in ACT across various populations (Forman et al., 2012; Ren et al., 2019; Stockton et al., 2019; Trompetter et al., 2015; Vasiliou et al., 2022). Given its crucial relevance, measuring PF was essential in this study. While numerous ACT process measures exist within specific clinical contexts (e.g., diabetes management – Gregg et al., 2007; weight management – Lillis & Hayes, 2008; chronic pain – Vowles et al., 2018), these are not necessarily suitable for broader use. Other measures target specific ACT processes such as experiential acceptance/avoidance (Gámez et al., 2014); fusion/defusion (Gillanders et al., 2014); and values (Wilson et al., 2011); however, they fail to capture the complexity of the PF as a whole. The most widely used measure of PF is the Acceptance and Action Questionnaire (Bond et al., 2011). Nonetheless, this has been criticised for overlapping with distress outcome variables (Wolgast, 2014) and for placing a heavy emphasis on avoidance and cognitive fusion whilst neglecting other areas of the ACT model (Francis et al., 2016). Given these limitations, the CompACT was selected as a recent, comprehensive, and psychometrically sound measure of PF.

Session Rating Scale (SRS; Duncan et al., 2003). The SRS is a visual-analogue scale assessing the quality of the therapeutic relationship.

Clients rate four domains of the therapeutic relationship on a 10-centimetre line, focusing on the overall relationship, the goals and topics discussed in sessions, the therapist's approach/method, and the overall alliance. Scores are summed to create a total alliance score (ranging between 0 and 40), with higher scores representing higher therapeutic alliance and scores under 36 signifying potential concerns in the therapeutic relationship. A narrative review (Murphy et al., 2020) found that the average internal consistency of the scale ranged between .70 and .97 for clinical populations, whilst the test-retest reliability values fell between .54 and .84. Surprisingly, the concurrent validity of the SRS with other working alliance measures, such as the revised Helping Alliance Questionnaire (Luborsky et al., 1996) and the Working Alliance Inventory (Horvath & Greenberg, 1989) was low to moderate, ranging from .29 to .65. In this study, the SRS was used as a sessional process measure; however, its findings were triangulated with qualitative feedback from participants and therapist process notes, supporting a richer, context-sensitive interpretation. Its brevity also made it a practical option for the study, since the demands associated with the perinatal period may have risked being impractical or compromising data quality.

Participant-Specific Quantitative Measures.

Depression Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995). The DASS-21 is a brief, 21-item self-report measure assessing symptomatology across three subscales: depression, anxiety, and stress. The depression subscale includes items related to symptoms such as dysphoric mood, sadness, or worthlessness. The anxiety subscale mainly focuses on physiological symptoms, such as dry mouth, changes in breathing, or trembling. Items of the stress subscale capture symptoms such as irritability, tension, and reactivity. Respondents are asked to indicate how often each item applied to them over the past week on a 4-point scale (0: never, 3: almost always). Total scores are computed by summing the individual item scores, with higher scores indicating more severe symptoms. As the DASS-21 is a shortened version of the original 42-item DASS-42 (Lovibond & Lovibond, 1995), total scores must be multiplied by two before interpretation. The DASS-

21 has satisfactory psychometric properties, with its internal consistency estimates ranging from .74 (Moya et al., 2022) to .93 (Henry & Crawford, 2005). However, it has shown mixed results in different cultural contexts. For example, in a Malawian sample, Moya et al. (2022) reported low Cronbach's alpha values for the depression (.66), anxiety (.29), and stress (.52) subscales, despite higher internal consistency for the full scale (.74), indicating unsatisfactory to very poor internal reliability at the subscale level. Yet, ordinal alpha values in the same study suggested better internal consistency. The scale's convergent, discriminant, and nomological validity have also been established (Lee, 2019). Overall, the DASS-21 was found to lack sufficient specificity for common mental health problems (Moya et al., 2022; Tran et al., 2013).

Despite psychometric limitations, several factors justify the use of the DASS-21 in the present study. First, all participants reported difficulties with mood or anxiety, necessitating the inclusion of a measure capturing these domains. Furthermore, while not specifically designed for perinatal populations, the DASS-21 has been validated for use in perinatal samples (Moya et al., 2022; Silva et al., 2022; Xavier et al., 2016). Moreover, the 21-item version is often preferred over the original 42-item instrument, due to its brevity and clearer factor structure, which may reduce participant burden and enhance the scale's ability to distinguish between anxiety, depression, and stress (Antony et al., 1998). A further advantage is that the DASS-21 excludes somatic items such as sleep disturbance, low energy, and concentration problems, which may not be valid symptom indicators for perinatal women (Meades & Ayers, 2011). Finally, the DASS-21 was already being used by the perinatal service as part of routine clinical practice; therefore, its inclusion was pragmatically justified as it did not significantly increase participant burden.

City Birth Trauma Scale (City BiTS; Ayers et al., 2018). The City BiTS is a 29-item self-report measure assessing birth-related post-traumatic symptoms, developed based on the diagnostic criteria for PTSD as defined by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). It consists of two subscales: birth-related and general PTSD symptoms. Items 1 and 2 require a yes/no response, items 3-24 are scored on a 4-point Likert scale (0: not at all, 4: 5 or

more times), and items 25-29 use a 3-point scale with varying response options. A total PTSD score (0-60) can be calculated by summing scores for each of the items, with higher scores indicating higher symptom severity. Psychometric evaluations of the City BiTS indicate excellent internal consistency. Ayers et al. (2018) reported a Cronbach's α of .92, followed by similar values being reported in cross-cultural validation studies: .92 in a Croatian sample (Nakić Radoš et al.; 2019), .90 in a French sample (Sandoz et al., 2022), and .90 in a Lithuanian sample (Riklikienė et al., 2024). Studies also report high convergent validity with other PTSD measures, such as the Impact of Event Scale – Revised (Weiss & Marmar, 1997) and the Posttraumatic Stress Disorder Checklist for DSM-5 (Blevins et al., 2015), besides high divergent validity with the Edinburgh Postpartum Depression Scale (Cox et al., 1987) (Di Gesto et al., 2024; Sandoz et al., 2022; Škodová et al., 2025). Overall, Teil et al. (2025) described the City BiTS as the most comprehensively validated psychometric tool for assessing birth trauma, emphasising its correspondence with international diagnostic criteria and its two subscales that allow for the differentiation between general and childbirth-specific PTSD symptoms. In this study, the City BiTS was used due to its strong psychometric properties, specific focus on the perinatal period, and its established use in the perinatal service. It was administered with one participant who had been referred for support with birth trauma, ensuring the measure was clinically appropriate and relevant to the participant's difficulties.

Obsessive Compulsive Inventory (OCI; Foa et al., 1998). The OCI is a self-report measure designed to assess symptoms associated with OCD. It comprises 42 items, divided into seven subscales: washing, checking, doubting, ordering, obsessions, hoarding, and mental neutralising. Respondents are asked to rate each item on a 5-point Likert scale (0: not at all, 4: extremely) based on the level of distress experienced in relation to the described symptom. Total scores range between 0 and 168, with higher scores indicating greater symptom severity and associated distress. Psychometric evaluation of the OCI by Sica et al. (2009) revealed very good internal consistency for the full scale ($\alpha = .85$) and excellent one-month test-retest reliability ($r = .93$), although the internal consistency of some subscales (washing and mental neutralising) fell below the acceptable threshold of $\alpha = .70$. Moreover, the OCI showed good

concurrent validity with another instrument assessing OCD symptoms, as well as positive correlations with various anxiety and depression measures (Sica et al., 2009). It has also demonstrated strong clinical utility, effectively differentiating OCD patients from non-OCD anxious patients and nonclinical controls (Sica et al., 2009). More specifically, Foa et al. (1998) found that a clinical cut-off score of 40 “allowed correct identification of 80% of patients with OCD and 80% of the participants without OCD” (p. 211), with the OCD group consistently scoring higher on subscales than those with other diagnoses. This is particularly relevant to the present study, as the DASS-21 was administered to all participants, whilst the OCI was used with two participants who explicitly presented with OCD-type symptomatology therefore it helped differentiate between anxiety, depression, and OCD symptomatology.

Another reason for utilising the OCI was the fact that covers a wide range of OCD symptoms, capturing the diverse clinical picture of OCD. In contrast, other measures may not provide such a comprehensive evaluation, potentially overlooking important clinical features. Furthermore, although perinatal-specific OCD measures, such as the Perinatal Obsessive-Compulsive Scale (Lord et al., 2011), are now available, they are relatively recent developments with limited evidence supporting their psychometric validity and clinical utility (Fairbrother & Abramowitz, 2014). In this study, adopting a well-established and comprehensive OCD measure was key to enhance methodological rigour.

Qualitative Measures

The Client Change Interview Schedule (CI; Elliott et al., 2001). The CI is a 30-45-minute-long semi-structured interview, designed to obtain qualitative information about the process of therapy, focusing on helpful and unhelpful aspects and key changes experienced by the client. Following an initial check-in, clients are asked about their general experience of being involved in therapy. They are then asked to describe any changes they have experienced and rate these in terms of how expected these changes were (1: very expected, 5: very surprising), how likely they thought the change would have been without therapy (1: very unlikely, 5: very likely), and how important each change was to them personally (1: not at all, 5: extremely). A copy of the Change Rating Sheet

is included in Appendix D. Separate questions also address potential negative changes and aspects that did not change despite clients' hopes. The interview schedule also explores clients' attributions for each change (i.e., their interpretation of what may have brought each change about). The interview also includes questions on helpful and problematic aspects of therapy, as well as an opportunity for interviewees to provide further feedback regarding the therapy and the research. Whilst quantitative measures help answer the question *whether* clients changed throughout the intervention, the CI provides insight into *how* changes were achieved.

CIs were conducted approximately two weeks following the intervention phase by an external researcher (another Trainee Clinical Psychologist) remotely, via Microsoft Teams. Interviews were recorded and transcribed using the University of Nottingham Automated Transcription Service. Although the protocol initially planned for CIs to be completed approximately one week post-intervention, this was not possible due to participants' commitments, the Christmas holidays, or unforeseen circumstances such as illness.

Helpful Aspects of Therapy form (HAT; Llewelyn et al., 1988). The HAT is an open-ended, 7-item qualitative measure used to explore clients' perceptions of any significant events during therapy. Clients are asked to identify the most helpful or important within-session event, describe what made this event helpful, and rate the perceived helpfulness of the event on a 9-point scale (1: extremely hindering, 9: extremely helpful), allowing for half-point ratings. Clients can record up to two helpful events per session. Additionally, clients are asked to identify and describe any hindering events and rate their impact (1: extremely hindering, 4: slightly hindering).

This measure aims to highlight within-therapy processes that may be linked to changes on weekly outcome measures, or corroborate information provided in the CI. The HAT can be either administered at the end of every session or used to structure the post-intervention CI (e.g., Robinson, 2022; Wicks, 2019). In this study, it was used at the end of each intervention session to allow for real-time feedback and enable the researcher-therapist to make adaptations to subsequent sessions if needed. The link to the HAT form was sent to participants via the chat function in Microsoft Teams, and participants

were encouraged to complete this measure as soon as possible after the session in order to capture accurate reflections.

Participants and Recruitment

Since its inception, HSCED has been implemented in studies assessing various therapy approaches, often including a single participant (Bagheri & Arabnejad Khanuki, 2022; Benelli et al., 2016a, 2016b, 2017a, 2017b, 2018a, 2018b; Calvo et al., 2018; Carvalho et al., 2008; Elliott et al., 2009; Greco et al., 2017; Kerr, 2013; MacLeod & Elliott, 2012, 2014; MacLeod et al., 2012; Mannarini et al., 2017; Söylemez et al., 2023; Stephen et al., 2011; Thurston et al., 2012; Widdowson, 2012a, 2012b, 2012c, 2013; Zanchetta et al., 2019a, 2019b). Only few studies utilised a case series approach (Morris, 2018; Robinson et al., 2023; Spence, 2015; Wicks, 2019; Widdowson, 2013), perhaps due to the complexity and time-consuming nature of the method. Yet, in case series research, examining multiple cases increases replicability (McLeod, 2013) and allows for the cross-synthesis of findings across cases (Crowe et al., 2011; Wall et al., 2017). While the HSCED does not aim for generalisability across populations, comparing participant outcomes enhances our understanding of what works and why (McLeod, 2013). Eisenhardt (1989) suggested that cross-case analyses should involve four to ten cases to allow for analytical generalisation. Yin (2014) suggested two or three replications when testing straightforward theories, and five or more in case of more subtle theories. According to the What Works Clearinghouse (2022), single-case research must be “designed in a way that allows for at least three demonstrations of an intervention effect at three different points in time with reasonable certainty that the observed data are sufficient to capture important information about the pattern of responding.” (p. 111) With attrition being a major concern under at least three conditions (Kratochwill et al., 2010), this study aimed to recruit between three and six participants to allow for non-responsivity and partial data.

Recruitment took place at a single NHS site, drawing from two separate psychology waiting lists: the Perinatal Community Mental Health Team and the Trauma and Bereavement Service lists. Due to the transdiagnostic nature of

ACT, no specific diagnoses were required for participation. Inclusion criteria were intentionally broad to mirror the diversity of real-life perinatal settings. However, all participants were under the care of the Perinatal Community Mental Health Team, indicating that they were experiencing PMHD severe enough to warrant ongoing support and reach the threshold for secondary care. Recruitment was supported by a local Perinatal Clinical Psychologist acting as field supervisor.

After ethical approval had been obtained from the University of Nottingham, the NHS Local Research Ethics Committee, and Nottinghamshire Healthcare NHS Foundation Trust, the first author introduced the study at a perinatal team meeting. Team members were asked to identify potential participants who may benefit from the ACT intervention, including clients already on the psychology waiting list. To support this process, the first author shared a basic overview of the study as well as the inclusion and exclusion criteria with the team.

Clients were screened against inclusion criteria by the field supervisor. Of the five individuals who agreed to be contacted, four chose to participate and provided written consent, and three completed the full intervention, whilst one decided to withdraw from the study after three intervention sessions due to other commitments. As this participant's data was largely incomplete, it was not used in the final analysis.

Ethical Considerations

The study was developed through several stages to ensure methodological and ethical rigour. The project idea was presented at a research proposal panel, and the study protocol was submitted in partial fulfilment of the Trent Doctorate in Clinical Psychology. Additionally, the first author received ongoing research supervision as part of her doctoral training, and study progress was monitored through the Research Annual Review procedure. Ethical approval was granted by the Leicester Health Research Authority (Appendix B) and locally by Nottinghamshire Healthcare NHS Foundation Trust's Research and Development department. Before commencing

recruitment, the first author also completed an e-learning package on Good Clinical Practice (GCP).

Informed Consent

Written informed consent was collected from each participant before they entered the study or completed any measures. Potential clients who met inclusion criteria were approached by their care team and provided with an invitation to participate in the study (Appendix P). Those interested completed a consent to contact form (Appendix Q), allowing the researcher to contact them via their preferred channel (email or telephone). The researcher then contacted interested individuals and provided them with an electronic Participant Information Sheet (PIS; Appendix R) and e-consent form (Appendix S). Participants were given seven calendar days to study the PIS and complete and return the consent form if they wished to participate. It was emphasised that participation was voluntary and that clients could withdraw from the study at any time without any implications on their future care.

Confidentiality and Data Protection

Study forms were treated as confidential documents and held securely in keeping with GCP recommendations. Completed outcome measures were only accessible to the primary researcher via JISC Online Surveys. Once downloaded from the website, questionnaires were stored on secure University of Nottingham (UoN) platforms with the rest of the research data. Sessions and CIs were recorded using Microsoft Teams. The recordings of the sessions and interviews were stored the UoN OneDrive system accessed from an NHS laptop until CIs were transcribed (and anonymised) and session recordings were checked for treatment fidelity. Afterwards, the recording files were deleted from the laptop. Anonymous recordings are kept on secure UoN platforms and will be archived with source data after seven years in accordance with University of Nottingham storage policy.

Following each intervention session, the therapist made an entry in the participant's progress notes on RiO. As RiO is an NHS electronic patient record system, these notes were only accessible to the participant's usual care team,

and access to patient records is regularly audited to ensure that healthcare records are only accessed by authorised staff members.

Each participant was assigned a study identity code number (generated from their initials and year of birth), for use on study forms, other study documents and the electronic database. Throughout the rich case records and the write-up of the project, pseudonyms were used to protect participants' anonymity. The researcher kept a separate confidential record of the participant's name, year of birth, study identity code number, and pseudonym, to enable identification of participants enrolled in the study. This participant log was also kept on the secure UoN OneDrive server.

Risk Management

Clients receiving support from other practitioners of the perinatal team were not excluded unless they were engaged in another form of psychological therapy. Withdrawing any existing support would have been unethical, therefore it remained in place.

Safety endpoints for the study included adverse events (AEs) reported by participants during the intervention, including episodes of self-harming behaviour, suicide attempts and acute hospital admissions, as well as any discontinuations due to said AEs or inability to withstand treatment. AEs and safety considerations were monitored throughout the intervention, and participation could be discontinued in cases of: serious and severe AEs associated with participation; participants feeling that the intervention was no longer needed; changes in participants' level of risk; participants' inability to withstand the intervention; and participants' decision to withdraw for any reason. The researcher also had the discretion to remove participants from the study in case of regular non-attendance, following discussion with the participant.

The PIS also outlined the possible disadvantages and risks of taking part, highlighting that participants may find discussing personal experiences distressing. However, this risk was not deemed to exceed the level of distress considered inherent in psychological therapy. As with any therapy, it was expected that clients would develop a working alliance with the therapist,

allowing for the exploration of personal content, even when this may feel upsetting or uncomfortable. Moreover, as a Trainee Clinical Psychologist, the researcher-therapist was responsible for monitoring distress, using clinical skills to manage it and identifying when referral to external services or additional support from the care team was needed. Emergency contact numbers were established in advance with the field supervisor, and throughout the intervention, participants remained under the care of the perinatal team for additional support if needed. Upon their initial assessment with the perinatal team, all participants were provided with emergency and crisis contacts as part of their care plans.

The study protocol outlined clear procedures for reporting and managing AEs, whereby the researcher would consult the Chief Investigator and the participant's care team if participants displayed concerning levels of distress. Finally, participants requiring further support were to be encouraged to contact their General Practitioner, the Crisis Home Resolution Team, or other relevant support services.

Before commencing the intervention, the researcher reviewed participants' risk assessments on RiO. In the initial session, participants were reminded of confidentiality and its limitations. Throughout the study, the researcher maintained weekly e-mail contact with the field supervisor (besides monthly field supervision meetings) to provide regular updates on the progression of the intervention and address potential risks and concerns. During the intervention phase, risk assessments were updated by the researcher-therapist whenever changes occurred.

Further Support

No routine care interventions were withheld because of research participation. Participants were advised that they could access further intervention following the study, following liaison with the perinatal team. Towards the end of the intervention phase, discussions were held with participants about their ongoing support needs, and case review meetings were arranged with care team members (e.g., Community Psychiatric Nurses) as needed. The field supervisor also liaised with the team to assess further care

options. Following the intervention, participants were sent a letter summarising their involvement in the research study and outlining the plan for ongoing support.

All three participants expressed interest in additional therapy: one wished to proceed with previously planned trauma-focused intervention, while two were referred to an external service for further intervention (although one of them eventually chose not to engage in further therapy). External referral was deemed appropriate because participants' outstanding mental health needs were not specifically perinatal in nature.

Reducing Participant Burden

The PIS clearly outlined the commitment associated with participation in this study. This included completing outcome and process measures at pre- and post-intervention, as well as on a weekly basis. Besides, participants were asked to devote some of their time (approximately 5.5 hours per week) to therapy and home practice each week, which could be burdensome.

Various steps were taken to minimise client burden. Potential participants were fully informed about the responsibilities and expectations associated with the study, as well as of their right to withdraw from the intervention at any time, without any negative impact on their future care. Participants were also informed that if they chose to prematurely withdraw from the intervention or expressed an interest in accessing further support following the research, this would be discussed with the perinatal team. This was important so that participants did not feel pressured to stay in therapy out of concern that they might lose their access to support.

Furthermore, to mirror routine clinical practice, weekly measures were completed during sessions wherever possible, to minimise time commitment and reduce missing data. In addition, this study utilised several measures already in routine use within the perinatal service, thus ensuring that data collection was as unobtrusive as possible. Finally, to further reduce client burden, breaks were offered during sessions. This allowed participants to tend to their babies or just step away from the intervention for a few minutes if the session felt very content-heavy.

Extended Results

The journal paper presents abridged versions of participants' rich case records, including contextual information, qualitative and quantitative outcomes, and abridged affirmative and sceptic briefs. This section presents the rich case records and affirmative and sceptic briefs in their entirety, as presented to the adjudicators. However, detailed scoring information already provided in the Methods section have been omitted to avoid duplication.

Molly's Full Rich Case Record⁴³

Contextual Information

Molly is a married mother of three in her early 30s, her children are aged 6, 3, and 1 years old. Molly grew up in South Africa and attended boarding school from the age of 12, which she describes as very strict. She worried a lot about going to boarding school and she describes that this was forced upon her. Due to her difficult experiences at boarding school, Molly used to self-harm by cutting herself between ages 14-16 and started using illicit substances later. Eventually this resulted in her being expelled and moved to another boarding school. Molly also gained further education. Initially she started an undergraduate degree in psychology, which she discontinued, since this was something that her family had wanted her to do, whereas her desire was to become a teacher. Molly eventually started working as a teaching assistant and progressed to being a teacher. She moved to the United Kingdom in 2017 and worked in customer service afterwards.

Molly has a lifelong history of obsessive-compulsive symptoms, characterised by intrusive thoughts of harm coming to her family/children, leading to compulsions such as obsessive counting/blinking rituals and handwashing. Her anxiety symptoms started around age 7. Molly describes a fear of something bad happening if she was not at home. At this time, she also started blinking repeatedly, and counting steps between breaks in the pavement, which had to be an even number. Around age 13, she remembers

⁴³ Molly's full CI transcript and Change Rating Sheet are provided in Appendix T

blinking excessively between lamp posts on a long trip, she believed that this would help keep her and her father safe in the car. Around 2018, Molly also struggled with panic attacks.

Molly's fear of germs and contamination was exacerbated during the COVID-19 Pandemic; this was perhaps the height of her difficulties but caused the least disruption to normal life due to lockdown. However, once lockdown was relaxed, Molly remained stuck with rigid rules and routines associated with keeping her and her family safe, and she felt unable to relax the boundaries in line with the Government message that the pandemic was over/under control. Molly was also fearful of catching COVID and dying – this fear reduced once she caught COVID and nothing catastrophic happened.

Molly's OCD symptoms exacerbated with each pregnancy. Following the birth of her second child, she would not let anyone near her baby for five months apart from her husband due to her fear of germs and contamination. She also continued to worry about her family members becoming unwell or contaminated. Therefore, she washed her hands around 50 times a day and requested that her family change their clothes immediately on coming into the house. She also used latex disposable gloves at home whenever possible. Molly had a particular handwashing pattern with concrete steps that she had to follow – if her concentration waivered during the process, she had to start the ritual again from the beginning.

Molly has had CBT in the past for health anxiety – OCD was likely missed in this instance. Later, she also had some exposure therapy focused on OCD symptoms. As a result of these interventions, Molly initially experienced some relief and was able to go out, although her handwashing and cleaning rituals continued. When Molly became pregnant with her third child, she described that she “crashed, stopped all visits, and straight back into my cocoon... I was at my worst point.” Molly was referred to a perinatal team in 2023, and after moving house, her care was transferred to a perinatal team in the Midlands in April 2024.

Molly is currently taking Sertraline for her OCD symptoms. She took Citalopram at one point but discontinued this due to side effects.

Molly has strong relationships within her family. She describes her husband as caring and supportive, and she also regularly maintains contact with her parents, who supported with childcare during our sessions.

Adaptations to ACT Protocol

Molly attended 10 sessions of ACT over 15 weeks (July-November 2024). She completed pre- and post-intervention measures, with additional sessional measures administered at each intervention session.

The following adaptations were made to the intervention protocol:

- Offer of regular breaks (although Molly did not take any)
- Use of the screen-sharing feature in Microsoft Teams to share PowerPoint slides supporting the delivery of sessions
- Removal of pregnancy-specific prompts from mindfulness scripts (e.g., *“Notice your bump if you are pregnant.”*)
- Removal of group-related statements from slides, scripts, and client manual (e.g., *“When you are ready, bring your attention to what you are feeling as you come into the group today.”*)
- Group discussions replaced by discussion with facilitator
- Flexibility: Molly’s baby was present during the session a few times when she was unable to source childcare for the entire duration of the session. On some occasions, sessions were cancelled due to illness or planned holidays and/or annual leave.

Goals

Using the Personal Questionnaire (PQ; Elliott et al., 1999), Molly generated the following problems:

1. Fear of future – something bad happening
2. Fear of going out and getting sick
3. Rituals becoming a part of me permanently
4. Thoughts: will I be everything that my children need with their (e.g., educational) upbringing?

It is noteworthy that ACT aims to improve psychological flexibility (PF), which was therefore considered as a universal goal across clients.

Quantitative Outcome Measures

Problem Ratings. Molly's problem ratings are shown in Table 14.

Table 14*Molly's Problem Ratings*

Problem and duration (as defined on the PQ)	Minimum change required for reliable change	Clinical cut-off	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
1. Fear of future – something bad happening (6-10 years)	1.67	>3.25	6	5	5	6	4	5	4	3	4	3 ⁺
2. Fear of going out and getting sick (3-5 years)	1.67	>3.25	5	6	5	4	3	3	3	3	3	3 ⁺
3. Rituals becoming a part of me permanently (3-5 years)	1.67	>3.25	7	7	7	7	5	6	6	6	5	4 ⁺
4. Thoughts: will I be everything that my children need with their (e.g., educational)	1.67	>3.25	N/A	N/A	N/A	N/A	6	5	6	5	3	2 ⁺

upbringing? (1-5
months)

Note. S: session. The duration of each problem is provided in brackets in the first column. Values highlighted in bold fall within the clinical range. Problem 4 was added to the list at session 5 and was therefore not rated beforehand. + denotes reliable improvement when comparing the first and last available score; = denotes no change; - denotes reliable deterioration. Minimum change required for reliable and clinically significant change defined by Elliott et al. (2016).

Process Ratings. Molly's ratings on the Session Rating Scale (SRS; Duncan et al., 2003) are presented in Table 15. This represents that the therapeutic alliance was generally strong, indicating a potential ceiling effect. Unfortunately, data from the last session is missing as Molly did not return the final SRS despite being prompted to do so via email.

Table 15

Molly's SRS Ratings

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
37	38.7	39.2	39.6	38.8	39.6	39.8	39.7	39.8	-

Note. S: session; - denotes missing data

Sessional Measures. The changes to Molly's distress and wellbeing scores are depicted in Figure 3 and Table 16, as measured on the Clinical Outcomes in Routine Evaluation – 10 (CORE-10; Barkham et al., 2013) and Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007).

Figure 3

Molly's CORE-10 and WEMWBS Scores

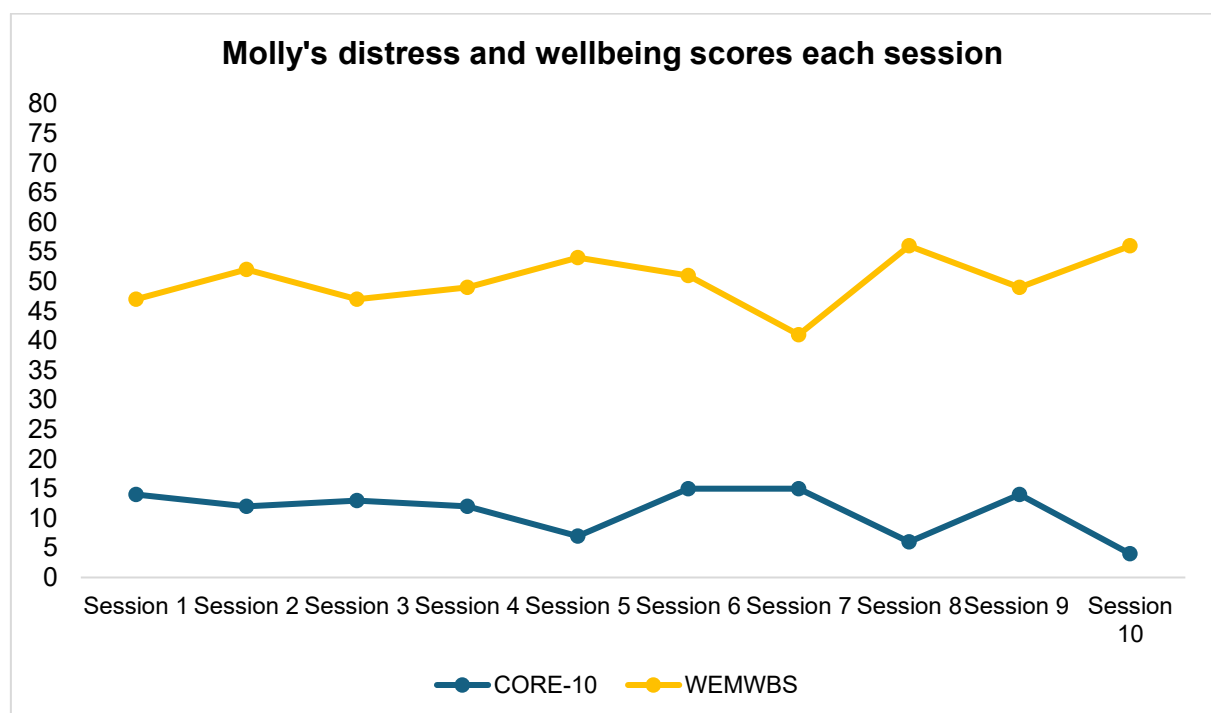


Table 16*Molly's Distress and Wellbeing Scores*

Measure	Timepoint									
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
CORE	14	12	13	12	7	15	15	6	14	4 ⁺
WEMWBS	47	52	47	49	54	51	41	56	49	56 ⁺

Note. S: session; + denotes reliable improvement between S1 and S10; = denotes no change; - denotes reliable deterioration.

According to Connell & Barkham's (2007) cut-offs, Molly's S1 CORE-10 score represented "mild psychological distress" whereas her S10 score fell in the "healthy" range, demonstrating reliable and clinically significant change. When calculating the reliable change index using reference data provided by Barkham et al. (2013), reliable change was also achieved (RCI = 2.597).

On the WEMWBS, Molly achieved "minimally important" change (Maheswaran et al., 2012), which is also supported when calculating the RCI based on descriptive data provided by Tennant et al. (2007) (RCI = -3.03).

Pre- and Post-Intervention Measures. Table 17 demonstrates that Molly achieved reliable improvement in OCD scores and PF from pre- to post-intervention according to the Obsessive Compulsive Inventory (OCI; Foa et al., 1998) and the Comprehensive assessment of Acceptance and Commitment Therapy Processes (CompACT; Francis et al., 2016). As Foa et al. (1998) established a clinical cut-off score of 40 on the OCI (which allowed for the identification of 80% of OCD patients), Molly's post-intervention score still demonstrates a lack of clinically significant change. Additionally, her score remained within one standard deviation of the clinical sample mean reported by Sica et al. (2009). Since the CompACT has not yet been validated in a clinical sample (Giovannetti et al., 2024), it was not possible to determine clinically significant change. There was no reliable change in depression, anxiety, and stress, and mother-infant bonding. These were measured using the 21-item version of the Depression, Anxiety, and Stress Scale (DASS-21; Lovibond &

Lovibond, 1995) and the Mother-Infant Relationship Scale (MIRS; Newman-Morris et al., 2020a).

Table 17

Molly's Pre- and Post-Intervention Scores on Symptom and Process Measures

Measure	Timepoint		RCI
	Pre-intervention	Post-intervention	
DASS – depression	2	0	
DASS – anxiety	10	0	
DASS – stress	10	0	
DASS – total	22	0	1.71 ⁼
OCI – washing subscale	28	17	
OCI – checking subscale	13	5	
OCI – doubting subscale	6	3	
OCI – ordering subscale	11	10	
OCI – obsessing subscale	10	5	
OCI – hoarding subscale	0	1	
OCI – mental neutralising subscale	19	11	
OCI – total	87	52	2.02 ⁺
CompACT – Openness to Experience subscale	15	38	
CompACT – Behavioural Awareness subscale	11	19	
CompACT – Valued Action subscale	32	41	
CompACT – total	58	98	–4.54 ⁺
MIRS	5	3	0.45 ⁼

Note. Pre-intervention refers to up to two weeks before the intervention, post-intervention refers to up to two weeks after the intervention. + denotes reliable

improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration.

Evidence for and Against ACT-Specific Processes

Table 18 enlists evidence whether meaningful changes occurred for Molly. The table contains supporting evidence that argues that meaningful change *did* occur, as well as refutational evidence, arguing that there was no meaningful change.

Table 19 presents evidence whether changes are attributable to therapy (supporting evidence) or nontherapy factors (Elliott et al., 2009) such as client attributes or events/factors occurring outside of therapy (refutational evidence).

Table 20 outlines specific mechanisms/factors within and outside of therapy that contributed to observed changes. This table aims to answer the question “What exact factors are changes attributable to?” The supporting evidence argues for the role of ACT-specific processes in bringing about the observed changes. The refutational evidence proposes that changes were either due to common factors, or that the ACT intervention was hindering or ineffective.

Potential alternative attributions have been suggested by the first author throughout.

Table 18

Have Meaningful Changes Occurred for Molly Throughout and After the ACT Intervention?

Therapeutic goals	Supporting evidence	Refutational evidence
Change in general	<p><u>Change Interview</u> “for me, a big thing was I struggled with not having control. I needed control, yet ACT taught me that it's OK not to have control and it also taught me how to let go of that need for control and the thoughts that would surround the control that I wanted.” (46-48)</p> <p>“...and I told her of all the things that I've learned before. My only thing that I would want out of this is that I would learn tips or skills that I could keep using, because everything I've learned before I forget about it, or it just doesn't seem to help me as much as it did when I was in the intensive therapy. Whereas this I can definitely say it's provided me with lasting skills and skills that genuinely help me and that I find very easy to use.” (51-56)</p> <p><u>Change Interview – Change Rating Sheet</u> Throughout the interview, Molly identified that:</p> <ul style="list-style-type: none"> • She had become more sociable and started socialising more. She rated this change as very surprising and personally extremely 	<p><u>Change Interview</u> “I suppose you know, the anticlimax that comes after finishing therapy, you know, you think it's going to be all OK and you're all better now. But so, I've had some trouble realising that (...) my physical symptoms are still very much there, the compulsions related to the OCD.” (61-68)</p> <p><u>Change Interview – Change Rating Sheet</u> When reflecting on her PQ scores, Molly hesitantly agreed that she had noticed a change in her perception of her rituals. However, she stated that they are still part of her currently, although she verbalised her hopes that this may change in the future.</p> <p><u>Therapist notes</u> Molly shared that she had been fairly well in-between sessions, however, her distressing thoughts and her rituals had been bothering her (S4).</p>

important, and she believed that this would have been somewhat unlikely without therapy.

- She had found more joy in life and reported feeling less scared. This change was somewhat surprising and personally extremely important, and according to Molly, would have been extremely unlikely without therapy.
- Her relationship with her husband and children had improved. She stated that her rigidity related to her expectations towards them had reduced, and she was not worried about passing her anxieties on to her children anymore (100-107). This change was somewhat surprising and personally extremely important; however, Molly felt that this would have been somewhat likely to happen without therapy anyway.
- She was feeling more accomplished and coping better. Molly rated this change as very surprising and extremely important, and reported that it would have been very unlikely without therapy.
- She had gained understanding and self-awareness. This was somewhat surprising and extremely important, and according to Molly, very unlikely without therapy. Importantly, Molly noted this as a negative change as her enhanced self-awareness increased her self-criticism.

Molly reported having some intrusive thoughts related to her baby's health that made her feel guilty and got in the way of mindful connection with the baby (S4).

Molly seemed to have become fused with some distressing thoughts after being asked to submit a report of her home-schooled daughter's educational progress to the local authority. Although Molly stated that she believed that her distress was "probably situational" and will naturally resolve once the report is submitted, she still reported that these thoughts were on her mind a lot and were bothering her "very considerably" (according to her PQ rating). (S5)

Molly reported having had a few difficult weeks and her perception was that she had been unable to use the intervention skills at times (S7).

Molly eventually expressed a wish to undergo further talking therapy following the 10-week ACT intervention.

- She was not constantly fearful of the future anymore. Molly rated this as somewhat surprising and very important personally, and she stated that this would have been somewhat unlikely without therapy.
- She also reported being less afraid of going out and getting sick. This change was somewhat surprising and would have been somewhat unlikely without therapy. Molly rated this change as very important personally.
- Molly reported an increased ability to analyse problems without being overcome with worries. She was very surprised by this change and deemed it somewhat unlikely to have happened without therapy. She rated this change as very important.

Fear of future (something bad happening)	<p><u>PQ scores</u></p> <p>Statistically reliable reduction in PQ ratings of this problem (S1 score: 6 → S10 score: 3)</p> <p><u>Change Interview</u></p> <p>“it's not, doesn't have such a huge hold on me anymore. I'm not constantly fearful of what's going to happen.” (434-435)</p>	<p><u>Therapist notes</u></p> <p>Molly sometimes reported feeling anxious that something bad is going to happen; for example, she continued worrying about the health of her baby, which included checking him for lumps/abnormalities whilst feeding him.</p>
Fear of going out and getting sick	<p><u>PQ scores</u></p> <p>Statistically reliable reduction in PQ ratings of this problem (S1 score: 5 → S10 score: 3)</p>	<p><u>Therapist notes</u></p> <p>Molly still reported some “initial panic” when her children got sick during the week between S1 and S2.</p>

Therapist notes

Molly reflected on experiential avoidance in her life (e.g., her refusal to wear a certain jacket again after wearing the same jacket whilst out and getting sick a few days later). In this session, Molly stated that she will probably try wearing the jacket again. (S5)

Change Interview

“So my daughter (...) caught a cold and it made its way throughout the whole family. And it was my 11-month-old's first time getting sick as well. And even in the midst of it, I wasn't stressed at all. (...) A cold used to bring me a lot of anxiety and it used to be like something bad is going to happen because of this. And I was quite surprised with how yeah, I didn't feel great, but mentally I was fine. It wasn't a massive worry for me. I was like, it's OK, this is normal.” (464-470)

“the fear of getting sick is... it's not really a fear now. It's more of a, “ugh, I really don't want to because it feels horrible”, but it's not a fear. So that has been a huge change.” (472-474)

Rituals

becoming a part
of me
permanently

PQ scores

Statistically reliable reduction in PQ ratings of this problem (S1 score: 7 → S10 score: 4)

Therapist notes

PQ scores

The change in Molly's PQ scores was not clinically significant in this domain as her final score was still above the clinical cut-off.

	In an outpatient review, Molly reported that the frequency and extent of her rituals have reduced significantly (handwashing only 20 times/day rather than 50).	<u>Change Interview</u> “I suppose that I know now that they won't be a part of me forever, but that they are currently still a part of me.” (496-497) Molly reported to have gained some increased self-awareness as a result of therapy, which increased her self-criticism related to her OCD symptoms, which still felt very present and ritualistic: “So now I'm criticising myself a little bit because I'm like, you could do so much better. You don't have to let this, kind of, run your life. You don't have to be scared of the fact that you can't remember if you washed your hands or not.” (122-124)
Thoughts: will I be everything that my children need with their (e.g., educational) upbringing?	<u>PQ scores</u> Statistically reliable reduction in PQ ratings of this problem (S5 score: 6 → S10 score: 2) <u>Therapist notes</u> When completing the PQ, Molly explicitly stated that this problem became less prevalent for her after the report about her daughter's educational progress had been submitted.	<u>Therapist notes</u> Following a very stressful incident on the family camping trip, Molly became fused with various distressing thoughts around her parenting skills (“ <i>Am I a good enough mother?</i> ”) and worry regarding something being “wrong” with her daughter (S6).
Change in symptomatology	<u>Psychometric measures</u> Molly achieved reliable improvement in OCD scores from pre- to post-intervention (please refer to Table 4). <u>Therapist notes</u>	<u>Psychometric measures</u> Molly did not achieve reliable change in depression, anxiety, and stress, and mother-infant bonding (please refer to Table 4). <u>Change Interview</u>

	<p>Molly made reference to “things having been good/better recently” in several sessions (S5, S8), indicating lower level of symptomatology/higher wellbeing.</p> <p>During an outpatient review, Molly reported feeling “very well” within her mental state and stated that she had seen a reduction in her anxious thoughts and OCD behaviours. Her handwashing had reduced from 50 times a day to around 20 after using the bathroom, returning home from being out or touching mail/packages. Also, her family were no longer required to change their clothes immediately after coming home.</p> <p><u>Change Interview</u> “that fear that I had around socialising has also, it's not fully gone, but it's a good chunk gone.” (94-95)</p> <p>“And yeah, OCD is still there and the compulsions are still there, but they're not as intense.” (141-142)</p>	<p>“the physical symptoms of OCD are still very much there. I... I don't know, I suppose along the way I hoped that they would stop.” (135-136)</p> <p><u>Therapist notes</u> Molly reported an increase in her anxiety symptoms, characterised by physical symptoms and increased worry (S7). At this point, Molly also struggled to recognise that she had been using the skills covered in earlier sessions throughout the week and needed more reflection around this to acknowledge her progress so far.</p>
Change in psychological flexibility	<p><u>CompACT scores</u> Molly achieved reliable improvement in psychological flexibility scores from pre- to post-intervention (please refer to Table 4).</p> <p><u>Therapist notes</u></p>	<p><u>Change Interview</u> “it was a heavy week because afterwards I felt like, you know, you as a parent, you don't want to be angry, you don't want to be sad when it, when, when it comes to your children or when you're around your children” (356-358) This quote demonstrates that after learning about the function</p>

During an outpatient review, Molly reported that she was able to do things that she could not have imagined doing six months ago, such as taking her children for food or ice skating lessons. She also stated that her anxious and compulsive thoughts were "not bothering her as much" and she realised that "thoughts do not control her."

and importance of emotions, Molly still struggled with the idea of acceptance and her initial reaction was experiential avoidance (a wish to avoid anger in relation to parenting).

Molly reported being sceptical of mindfulness initially since "it does not take her problems away" but quickly realised that this was not the aim of mindfulness (S2).

Molly seemed to become able to engage in previously feared and avoided activities as therapy went on; for example, she went on a family camping trip midway through (S5).

Molly reported that mindfulness had become an integral part of her life, and she had also started using cognitive defusion techniques outside of sessions (S5, S10).

Despite a very stressful incident on the family camping trip, Molly had "forced herself" to book another camping trip as she did not want this one incident to get in the way of future activities (S6).

Molly reported that she was able to respond to challenging situations well using ACT skills. For instance, after being unsuccessful at potty training her middle child, she was able to defuse from self-judgements and respond with self-compassion instead (S9).

Molly also gave an example of being able to respond to a stressful parenting situation in a way that was in line with her value of wanting to be a good mother (S10).

Change Interview

“[ACT] gave me such a sense of freedom that I didn't know I could have. And also, I felt understood, and I felt that the techniques specifically the (...) centring on mindfulness, and a few of the exercises like thought distortion and that kind of stuff, that really sat well with me. (...) For me, a big thing was I struggled with not having control. I needed control, yet ACT taught me that it's OK not to have control and it also taught me how to let go of that need for control and the thoughts that would surround the control that I wanted.” (42-48)

Note. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Table 19

Are Reported Changes Generally Attributable to Therapy (or Alternatively: to Client Attributes and/or Factors Outside of Therapy)?

Supporting evidence	Refutational evidence
<u>Change Interview / Change Rating Sheet</u> Molly rated all changes but one as somewhat or very unlikely to have happened without therapy. She has also explicitly linked one of the changes (becoming more self-aware) to therapy (147-149). Molly stated that she had found skills learn from previous therapies difficult to implement post-therapy, whereas ACT “provided me with lasting skills and skills that genuinely help me and that I find very easy to use. They come naturally to me, so ACT as a whole has been so good for me.” (55-57) When asked what brought about the observed changes, Molly answered: “Well, I have to (...) place it solely or let me say 90% on what I learnt in therapy (...) The videos, the homework that was... that helped keep me really engaged. And also, it gave me that opportunity to because you know, when you're having a video call you, you're trying to concentrate, (...) you're trying to not waste other person's time. However, when I could go away and do that stuff on my own, I was able to dive a little bit deeper, look at a few more videos on YouTube that might	<u>Change Interview / Change Rating Sheet</u> Molly rated one of the changes (improved relationships with husband and children) as “somewhat likely without therapy.” <i>Attribution: existing positive interpersonal relationships</i> Molly stated that she attributed the changes 90% to therapy. When asked what the remaining 10% would have been, she answered: “I would say it was down to the medication because as I said, I started meds in Feb, and I only started this therapy in July, and I had noticed a huge difference with the fear that I was experiencing after taking the meds. But then everything else was still there. So yes, things were not scaring me as much, but I still didn't want to go out or not wash my hands 50 times a day or whatever.” (249-253) <i>Attribution: psychotropic medication</i> “I mean, of course, the support that I had from my husband and also from my extended family, like my parents, that went a long way as well, for sure.” (260-261) <i>Attribution: family support</i> <u>Therapist notes</u>

be related and stuff. (...) I was really able to just take it in a little bit more and engage with it a little bit more.” (237-244)

Therapist notes

Molly stated that after our first session, her view of mindfulness had shifted as she realised that this was not aimed at getting rid of her problems. She also started utilising skills covered in therapy from the start, engaging in home practice in between sessions (S2). This continued throughout the intervention. For instance, she incorporated mindfulness into her feeding routine with her baby (S3).

Molly was observed to engage well in experiential mindfulness and cognitive defusion exercises. She also expressed a strong desire to pass these skills on to her children. Her engagement with and understanding of the materials presented was excellent.

Molly was able to personalise some techniques learnt in therapy and relate the content of the sessions to her life. For instance, she started using a Mr Bean voice to practise thought distortion at home, which is something she was already doing with her children (S4).

Molly reflected on the skills she had learnt in therapy. She described mindfulness as an integral part of her life, and she expressed her thanks to me, stating that she was glad that she had decided to participate in this intervention (S5).

During the intervention phase, Molly celebrated her 8th anniversary with her husband (S3) and was looking forward to a family camping trip (S5). *Attribution: significant positive extratherapeutic events*

At times, Molly found it difficult to practise skills outside of therapy. For instance, after S3 (the first session addressing cognitive defusion, out of two), she stated that she had practised mindfulness but not cognitive defusion outside the session. *Attribution: skills not understood/practised enough to be implemented independently; more time-consuming skills being covered in S3 (e.g., leaves on a stream), whereas S4 focused on brief, everyday cognitive defusion skills (e.g., thought distortion)*

Note. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Table 20

Specific Factors (Within and Outside of Therapy) That Contributed to Observed Changes

Supporting evidence (ACT-specific processes/internal factors)	Refutational evidence (ACT either hindering/ineffective or changes are due to common factors)
<u>ACT techniques</u> <i>Change Interview</i> Molly's general attitude towards ACT was very positive. She described it as a "huge blessing" (246) and later elaborated on this: "I think it was just a very good form of therapy, especially for me, the type of person that I am: emotional, I'm usually compassionate towards other people. So all of the things that I was learning, it's like, OK, I can be those things for others. Now it's like I can be that for myself. So I think (...) it was the type of therapy was I was receptive towards" (371-376) Molly also enjoyed specific resources used in the sessions: "Russ Harris... learning about his videos was, oh man, it felt so validating to watch these videos and be like: "so it's OK, you know, I, I don't have to worry about those things. I don't have to feel all of these negative feelings." (331-334) Molly was able to implement some skills in her daily life: "I was having some, I was worrying about my son who was, I was holding him while I was doing this. I think I was actually feeding him. (...) I'm still breastfeeding him. So firstly, that is	<u>Therapeutic alliance</u> <i>SRS scores</i> Molly's scores on the SRS ranged between 37 and 39.8, indicating strong therapeutic alliance. This suggests that she was satisfied with the therapeutic relationship and the therapist's approach. <i>Change Interview</i> "Kinga was, she was a huge help. I felt comfortable with her. I wouldn't have been able to, I don't think I would have been able to take it in as much, you know, if I wasn't feeling comfortable with her. And that's the thing I was saying is that I am usually quite shy and introverted unless I know a person well. So yes, the fact that I was able to take it on so well as I would say is because my psychologist was good or let me say good with me." (366-371) <u>Unhelpful factors</u> <i>Change Interview</i> "...there was so much, it was almost an information overload." (254) "The only thing maybe that I felt like I would have liked a little bit more of was the ability for me to speak a little bit more in

such a good, I learned that I can use that as a good mindfulness time, you know, just to take him in, look at his features, practise some breathing and, so, yeah, it was just a nice quiet moment and I was feeling a bit worried about him unnecessarily. He's fine, but you know, I was just worried for no reason. And yeah, I just started to, while I was feeding him, literally just imagining myself placing these worrying thoughts on the cloud. And also what I've loved is I would never be able to actually say the thought out loud because it would almost feel like if I do that, it will come true. Yet with thought distortion, if I say the word, the thought out loud in a silly voice, and one thing I'd say to Kinga is, I really like to do it as Mr. Bean. And if I say these thoughts that would actually cause me so much anxiety, and I say them in this funny voice, they almost feel like not that bad anymore. And so that's what I did." (293-307)

"I don't forget about what I was worrying about, but all of a sudden what I was worrying about doesn't seem so bad anymore. And that is... that happens a lot where I'm able to practise these things that I've learned." (310-311)

"And also giving myself self-compassion and treating myself as (...) if I had a compassionate friend, how would they treat me? And all of those things has just helped me, especially with the (...) critical side of things. (...) And obviously it's still a work in progress, but I'm aware of it, and I'm trying to be less like judgmental." (312-317)

depth about what I was struggling with from a physical point, with my, with the compulsions. I think I did feel like (...) it wasn't tailored to the physical side of OCD." (325-329)

HAT form

"There was a lot of information. And I particularly found all the emotions quite difficult to grasp. They are very complex and I feel like more time could have been spent discussing them." (S5)

Nonspecific factors

Change Interview

"I was in a very vulnerable position, and I just knew that I needed some kind of help. So I was open to it." (38-39)

Attribution: maybe other therapies would have been perceived as helpful, too, in this vulnerable state

"I'm able to, what is the word, like, sit with my thoughts and then look at them properly and see, OK, what is actually, what is actually the worry here, and what is actually the truth?" (520-523) *Attribution: Molly had previously completed CBT, which may have led her to consider the content of her thoughts, rather than the context and impact of them*

Therapist notes

Molly expressed her appreciation of ACT but stated that initially she was not sure whether this would be the right approach for her; however, she was keen to get any support that was being offered. (S5)

Therapist notes

Molly felt able to connect with the idea of values as she was able to link this to some religious concepts that she was already familiar with, suggesting that she has been able to embed the idea of "values as a moral compass" into her personal belief system. (S9)

Molly was able to approach various situations with self-compassion, such as an appointment with a health visitor, or failure to potty train her middle child. (S8, S9)

Molly was using techniques learnt from therapy to cope with challenging situation such as her husband being away from work and leaving her alone with the children for a few days. She acknowledged her anxiety around the situation, but this did not get in the way of coping. Molly also particularly valued some cognitive defusion techniques, such as the "thoughts on a cloud" exercise, thanking the mind, or labelling thoughts. (S5, S10)

HAT form

Molly described mindfulness as a "superpower" and stated "I felt extremely relieved to know mindfulness can help with so many things and I'm so excited to teach these skills to my children." (S2)

HAT form

Molly found it helpful when the therapist stated that she did not need to practice every skill and encouraged her to find the ones that are helpful or interesting to her. (S4)

"I was able to talk about my week and what's been particularly challenging. I left the session feeling better than when I entered" (S6)

Molly found the self-soothing techniques helpful "which I wouldn't have known could be helpful to begin with" (S7)

Molly also reported finding the overall review of skills helpful in the final session.

She also described a specific example of using mindfulness with her baby: "This mindfulness exercise helped me to see that the fact that I still cherish these night feeds with him especially because he tends to fall back to sleep, is okay and that I don't have to feel any judgement from myself or others and that if I do, I can just acknowledge them but still enjoy this quiet and alone time with my baby boy. During wake feedings, he's a busy, fiddly boy but during dream feeds, he's resting peacefully and this provides me with amazing calmness right before I go to bed. I'm going to soak that up as much as I can before he's too old." (S9)

Molly also appreciated the therapist's modelling and self-disclosure: "My therapist throughout the session gave me her own experiences with some of the mindfulness techniques. She helped me to see all the different ways that I could practice mindfulness and once again having her share her own experiences was extremely helpful in doing so. I was able to realise all the different ways that mindfulness could prove useful. I've also loved learning about some other techniques that are common with acceptance and commitment therapy such as the leaves on a stream activity. There is something about watching and visualising your thoughts floating away on leaves that I find very freeing." (S3)

Molly described an increased ability to notice and label her thoughts and feelings without judgement: "I learnt that I don't

need to try avoid them and I also don't need to try explain or understand why I'm having them. Just need to notice they're there, label them accordingly and let them pass my by. Come and go as they please." (S4)

Molly learned that emotions are not negative or positive, they just are, and they serve various functions:

"Kinga made a good point about 'positive vibes only'. It can make you feel guilty for having negative emotions. Russ Harris also said it well when he said how can we not have negative emotions when life is difficult and the people we love the most bring out some hard emotions." (S5)

"No emotions are negative. All emotions are essential and prove useful in the different aspects of life. We have been lead to believe that feeling sad or angry is bad but actually they can be very helpful and can prompt us to act accordingly." (S6)

Note. SRS stands for Session Rating Scale. HAT refers to Helpful Aspects of Therapy. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Molly's Briefs

Affirmative Brief. The affirmative brief proposes the presence of clear links between therapy process and outcome, and requires at least two of the following pieces of evidence (Elliott, 2002):

1. Retrospective attribution (client attributes reported changes to therapy – e.g., low “likelihood without therapy” ratings)
2. Process-outcome mapping (the content of posttherapy changes correspond to specific aspects, events, or processes of therapy)
3. Change in stable client problems (e.g., longstanding, chronic difficulties)
4. Event-shift sequences (significant therapy events preceding a stable shift in client problems, especially when the nature of the therapy process and the resulting change are logically connected)

Changes Across Therapy. Molly's scores reliably improved on the OCI, PQ, CORE-10, WEMWBS, and CompACT. This indicates that her symptoms reduced throughout the intervention period, although this is not the focus of ACT. Symptom reduction may be attributable to Molly's increased PF that allowed her to open up to uncomfortable thoughts and emotions, contact the present moment, and engage in meaningful, values-congruent action. The reduction in Molly's obsessive thoughts (e.g., fear of something bad happening, fear of getting sick) may be attributable to cognitive defusion skills, which is further supported by an excerpt from the Change Interview: “I don't forget about what I was worrying about, but all of a sudden what I was worrying about doesn't seem so bad anymore” (313-314). As Molly became able to tolerate such thoughts with greater success, this allowed her to abandon some safety behaviours and participate in activities that she had not done for a long time, such as socialising with others or taking her children out. Moreover, Molly engaged well with mindfulness exercises during sessions and reported to have found these grounding. Therefore, through Molly's good engagement with and understanding of core ACT processes, we can hypothesise that ACT could have caused the reported changes for Molly.

Retrospective Attribution. Retrospective attribution requires clients to attribute any observed meaningful changes to therapy in the Change Interview and on the Change Rating Sheet. Molly rated all changes but one as “somewhat” or “very” unlikely without therapy, which demonstrates clear retrospective attribution.

Therapist Attributed These Changes to Therapy. We should consider whether the therapist attributes any client changes to therapy using their knowledge of the client, their presentation, and discussions within sessions. Molly demonstrated excellent engagement with home practice throughout the intervention. She consistently practiced mindfulness and cognitive defusion skills between sessions and arranged family trips despite experiencing anxiety, indicating decreased experiential avoidance and increased acceptance. Additionally, she showed greater flexibility in responding to distressing events, such as an incident during a family camping trip. Although this led to a temporary increase in her distress scores, this was not accompanied by a marked decrease in wellbeing scores. Over the course of the intervention, Molly’s use of ACT-consistent language increased notably, as reflected in her narratives during the Change Interview.

Process-Outcome Mapping. Process-outcome mapping refers to information about significant events corresponding with aspects or processes within therapy. Molly stated that specific aspects of therapy, such as mindfulness and values, resonated with her, which was also obvious from her engagement with home practice. She expressed her appreciation of mindfulness from session two and of the whole of the intervention in session five, therefore, it was expected that her PF scores would increase by the end of the intervention. However, more robust conclusions could be drawn if PF scores had been monitored at regular intervals throughout the intervention phase.

Changes in Stable Problems. Although baseline scores were not obtained, Molly rated most of her problems on the PQ as chronic and long-standing (Table 1), except for problem 4, which was triggered by external factors (a letter from the local authority requesting a report on Molly’s home-

schooled daughter's educational progress). Molly's history indicates that she has struggled with OCD since childhood, and in her Change Interview, she reported that her symptoms worsened during the COVID-19 pandemic. It was only after therapy that she began inviting people over and visiting others in their homes. Given the reliable change in OCD symptoms and her problem ratings, it is reasonable to attribute these improvements in chronic, pervasive difficulties to the ACT intervention.

Changes Not Due To Relational Artefacts. Arguably, it is unlikely that the observed changes were due to relational artefacts (i.e., the client emphasising change to please the therapist), as the Change Interview was conducted by a researcher independent of the research team to decrease demand characteristics. Additionally, Molly's scores on the PQ, CORE-10, and WEMWBS fluctuated throughout the intervention, and Molly occasionally provided higher problem ratings compared to previous weeks, suggesting no deliberate attempt to overemphasise improvements. However, the consistently high SRS scores indicate a strong therapeutic alliance from the start, rather than a gradual increase over time. Molly also mentioned the positive nature of the therapeutic relationship in her Change Interview. However, it remains unclear whether in-person sessions would have influenced this dynamic differently, as face-to-face delivery may have required greater effort and been associated with a higher participant burden compared to remote appointments. Nonetheless, relational factors between the therapist and Molly are unlikely to fully account for the improvements identified over the course of the therapy.

Changes Not Due To Expectancy Artefacts. Expectancy artefacts refer to changes resulting from client expectations (therapy "scripts") or wishful thinking. Molly reported being surprised by the observed changes and used idiosyncratic language to describe the importance and personal meaning of each change. She also contrasted her experience of ACT with previous therapies, noting that past therapies had been unhelpful because the skills learned did not generalise beyond therapy, whilst she felt that this time she had gained long-lasting skills. Furthermore, in session 1, when discussing her hopes, she simply mentioned wanting to gain skills that would "get me out of

this hole that I'm in," which is a very generic statement. This indicates that Molly did not have particular hopes or expectations from therapy, making it unlikely that expectancy artefacts played a significant role in the changes observed.

Statistical Artefacts. Clinical cut-off scores were either obtained from literature (e.g., Elliott et al., 2016) or calculated using reference data from other research papers investigating clinical and/or non-clinical samples. However, this means that cut-off values for reliable change are approximate as their calculation was based on data from various authors. Therefore, we cannot exclude the possibility that Type II errors could be responsible for the lack of significant change in some measures.

Conclusion

This affirmative case proposes that

- There was substantial change in Molly's difficulties
- Molly attributed these changes to therapy
- The therapist attributed most of these changes to therapy
- This evidence contradicts sceptic non-therapy reasons for change and/or lack of change.

This evidence provides a basis for you to support the case that Molly changed substantially during therapy and infer that this change was caused by the ACT intervention.

Sceptic Brief. The sceptic case aims to counter the argument that Molly changed substantially during therapy and/or that this change was due to the ACT intervention. It also aims to highlight nontherapy processes that may explain observed changes (Elliott, 2002). Relevant pieces of evidence for Molly will be explored below.

Trivial/Negative Changes (Illusory or Artefactual Changes). Baseline scores for Molly's difficulties were not obtained. Consequently, her pre-therapy scores alone are insufficient to determine whether her symptoms and distress would have remained stable over time or improved without therapy, as some clients experience spontaneous remission over time. Although she

demonstrated improvement on some measures, on others she did not, suggesting that the effectiveness of ACT may have been limited. Additionally, Molly's third problem on the PQ ("Rituals becoming a part of me permanently") did not change clinically significantly. Since this problem aligns closely with ACT principles, with the wording implying that the difficulty was not the rituals themselves, but cognitive fusion with them, the lack of improvement further suggests that ACT may not have resulted in idiographic changes in PF, despite Molly's reliable change on the CompACT. Moreover, Molly used somewhat ambiguous language when describing this change, expressing that her rituals are still part of her, but she was hoping that perhaps this may change one day. This suggests that the reported change may have been trivial.

Statistical Artefacts. As statistical analysis relied on reference data reported in previous studies, statistical errors cannot be ruled out. Therefore, reliable changes on the OCI, CompACT, CORE-10, and WEMWBS may be partially attributed to statistical inaccuracy. Also, since participants completed the pre- and post-intervention questionnaires remotely, it was not possible to verify whether they understood each item and completed the questionnaires independently, rather than seeking insight from others such as family members. Furthermore, the reliability and validity of distress and wellbeing measures may be questionable. When individuals are asked to report on their past emotions or overall well-being, they frequently rely on their current affective state rather than providing a balanced evaluation of recent events (Robinson & Clore, 2002). This implies that responses on instruments such as the CORE or WEMWBS may be influenced by the respondents' mood at the moment of completion, even if instructions ask them to consider a longer time frame. Also, some of Molly's post-therapy ratings on the CompACT still indicated psychological inflexibility (e.g., she moderately agreed with the statement "One of my big goals is to be free from painful emotions" and slightly agreed with the statement "I tell myself that I shouldn't have certain thoughts"), despite qualitative data and therapist notes suggesting an increase in experiential acceptance. This discrepancy may also be explained by measurement error.

Relational Artefacts. Elliott (2002) suggests specific changes reported by Molly must be assessed carefully, since they may reflect a desire to please or impress the therapist/researcher. In his influential paper, Elliott discusses the "hello-goodbye" effect, whereby clients may exaggerate distress at the start of therapy to gain clinician acceptance or validation and may overstate improvements at the end of therapy to express gratitude or justify ending therapy. A possible manifestation of this effect in Molly's case is her post-therapy DASS-21 score of 0 (despite still reporting anxiety but being able to manage it differently). Similarly, her CORE-10 score at session 9 was identical to her session 1 score but then showed a sudden 10-point reduction by session 10, which may indicate a desire to emphasise improvement. Finally, the strong therapeutic alliance, as demonstrated by Molly's SRS scores, might have also played a role in her reported outcomes.

Expectancy Artefacts. Molly was very psychologically minded and motivated to engage in therapy. She also verbalised that when she was contacted about the study, she felt that she was in a vulnerable position and was inclined to accept any support being offered. This suggests that she may have entered therapy with certain expectations or hopes regarding its effectiveness. Moreover, at session 5, she explicitly expressed her appreciation of ACT and described the benefits she had already experienced, which, again, may have increased her motivation for further improvement. Additionally, some of Molly's responses on the Change Interview reflect some shared cultural schemas about therapy, such as "gaining understanding and self-awareness" and "coping better."

The remaining nontherapy explanations suggest that "change has occurred but that factors other than therapy are responsible" (Elliott, 2002, p. 13), such as: self-correction, life events, psychobiological factors, or reactive effects of research participation.

Self-Correction and Other Factors. This potential explanation proposes that improvements are caused by self-help outside of therapy. Molly reported watching videos by Russ Harris between sessions to deepen her understanding of ACT and specific techniques, indicating that she may have explored potentially helpful content not covered in sessions. Also, in the session on self-compassion, she mentioned a friend whom she imagined as a compassionate other, suggesting the presence of existing social support that may have contributed to outcomes. Moreover, Molly stated that one of her observed changes (improved relationship with husband and children) might have happened without therapy, which reflects the possibility that she engaged in efforts of self-correction that may have contributed to this change. Furthermore, Molly reported finding mindfulness particularly helpful in managing her difficulties. She emphasised that mindfulness had become integral to her life, and she was practising it automatically. However, a key characteristic of mindfulness is "consciously bringing awareness to your here-and-now experience with openness, interest and receptiveness" (Harris, 2006, p. 2). While Molly's approach may not align with ACT's understanding of mindfulness, it gave her an effective coping strategy and must be mentioned as a self-correction tool. However, Molly's description of mindfulness as an "automatic" skill could have benefitted from further exploration in the Change Interview, as without this, definitive claims cannot be made.

Life Events. Molly celebrated her eighth wedding anniversary with her husband during the intervention, an event she considered significant enough to mention during the check-in at the beginning of the session. Moreover, she took on some new recreational abilities, as she was able to book and attend some family trips. Sadly, on a camping trip Molly experienced a very distressing incident with one of her children, which was followed by an increase in her distress scores at session 6. This event may have temporarily halted her progress, as it caused a shift from her optimism and appreciation in session 5, where she highlighted the benefits of ACT, to feelings of uncertainty in session 6, where she questioned whether she had used any skills at all. This highlights the potential influence of external life events on therapeutic progress.

Psychobiological Factors. Although not explicitly explored with Molly, hormonal changes in the perinatal period are common and may contribute to fluctuations in mood and anxiety. Molly also reported having a difficult week when her baby was going through a growth spurt impacting his sleep, which impacted Molly's energy levels and mood. In addition, Molly's medication was increased post-intervention (approximately a week before the Change Interview), which may have impacted her perception of therapy and her progress.

Reactive Effects of Research Participation. Molly voiced her interest in research and emphasised during the final session that she was keen to receive a summary of the findings once they had been written up. Additionally, Molly expressed gratitude for being able to commence therapy immediately, without needing to wait to get to the top of the psychology waiting list, implying that she may have viewed participation in the study as a unique opportunity to access support sooner.

Lack of Event-Shift Sequences. Molly's scores on weekly measures of distress and wellbeing fluctuated throughout the intervention. We would expect significant events in therapy to cause significant changes in difficulties, but in Molly's case, there was only weak evidence for this, despite there being reliable change between session 1 and session 10 distress and wellbeing ratings and Molly's reports of helpful within-session events as indicated on the HAT form.

Conclusion

This sceptic case proposes that

- There was no substantial change in Molly's difficulties
- Molly did not attribute these changes to therapy
- Any observed changes were attributable to extra-therapeutic factors
- This evidence contradicts evidence presented by the affirmative case.

This evidence provides a basis for you to reject the case that Molly changed substantially during therapy and infer that any changes were caused by extra-therapeutic factors.

Rachel's Full Rich Case Record

Contextual Information

Rachel is a White British mother of one in her early 40s; her baby has recently turned one year old. She had had one miscarriage previously. She works in HR and has recently increased her hours back to full-time following her maternity leave. She lives with her partner of 12 years, whom she describes as supportive.

Rachel shared that antenatally she had a long history of anxiety, starting from a young age. She reported growing up in an unsettled home environment with little emotional stability. At age 17, she was sexually assaulted. Now Rachel has a difficult relationship with her parents and is keeping her distance from them. She often reflected on difficult dynamics with her mother in our sessions, whereby she felt that her mother ignored her boundaries or said things that upset Rachel. Rachel also described school as overwhelming and challenging, she felt a lot of pressure on her and struggled to make friends. She studied a creative degree at university, which she did not particularly enjoy but felt that it helped her get away from the family home.

Rachel's difficulties were exacerbated following a particularly difficult birth experience. She felt like she had done everything she could to prepare for having a baby, she was healthy and knew what she wanted, however, things still "went wrong." Rachel was offered an induction due to being 40 years old at the time of the birth. She described having felt "bullied" into induction because of her age, as she was otherwise fit and well. This turned into a very medicalised birth, during which Rachel felt completely out of her control. She ended up having a forceps delivery which was very different to what she had planned for. Rachel described feeling trapped and not being able to see her baby or her partner. This made her feel very vulnerable and disappointed.

Two days after birth, Rachel started feeling unwell and was taken to A&E in an ambulance. She was readmitted into hospital for a week with unexplained high blood pressure and periods of bradycardia. Rachel described feeling very physically unwell and out of control, she was undergoing various medical investigations, which were very anxiety-provoking. She also has memories of

staff constantly reiterating the need to get her blood pressure down, otherwise she would have a stroke or a heart attack. Rachel was prescribed various types of medication, which did not work and had significant side effects. Rachel also got the sense that staff did not believe her when she was telling them that the drugs were making her feel worse, and they attributed her physical symptoms to anxiety. Whilst in hospital, Rachel also described being left on her own, not being informed about what was happening, and being blamed by staff that she was doing this to herself. During this admission, Rachel thought that she was going to die or have a heart attack or stroke.

Once Rachel was discharged from hospital, she struggled with feeling like she was going to die or something terrible was going to happen. At night, she often felt like she was back in hospital, and she described feeling constantly on edge and jumpy. She also struggled with nightmares, panic attacks, and feelings of terror, alongside flashbacks of being wheeled into theatre and the physical sensation of her heart rate dropping. Rachel tried to manage these symptoms by avoiding thinking about her hospital admission, but this was not always effective. Eventually, Rachel was referred to the perinatal team in December 2023. During her initial assessment, she described having good days and bad days and at times feeling flat or low and not being able to express what she is feeling.

Previously, Rachel accessed counselling and CBT from the local IAPT service. She was not on any medication whilst we were working together.

Adaptations to ACT Protocol

Rachel attended 10 sessions of ACT over 12 weeks (October 2024-January 2025). She completed pre- and post-intervention measures, with additional sessional measures administered at each intervention session.

The following adaptations were made to the intervention protocol:

- Offer of regular breaks (although Rachel did not take any)
- Use of the screen-sharing feature in Microsoft Teams to share PowerPoint slides supporting the delivery of sessions
- Removal of pregnancy-specific prompts from mindfulness scripts (e.g., *"Notice your bump if you are pregnant."*)

- Removal of group-related statements from slides, scripts, and client manual (e.g., *“When you are ready, bring your attention to what you are feeling as you come into the group today.”*)
- Group discussions replaced by discussion with facilitator
- Flexibility with starting time to accommodate Rachel’s commitments whenever possible
- On some occasions, sessions were cancelled due to illness or planned holidays and/or annual leave
- Offering two sessions (session 8 and 9) within one week due to Rachel’s schedule and upcoming facilitator annual leave. These sessions focused on related concepts (values and committed action), therefore offering them close together supported the therapeutic process.

Goals

Using the Personal Questionnaire (PQ; Elliott et al., 1999), Rachel generated the following problems:

1. Trauma symptoms (night anxiety, flashbacks)
2. General anxiety
3. Feeling disconnected (in relationships)
4. Not being connected to my body

It is noteworthy that ACT aims to improve psychological flexibility (PF), which was therefore considered as a universal goal across clients.

Quantitative Outcome Measures

Problem Ratings. Rachel’s problem ratings are shown in Table 21.

Table 21*Rachel's Problem Ratings*

Problem (as defined on the PQ)	Minimum change required for reliable change	Clinical cut-off	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
1. Trauma symptoms (night anxiety, flashbacks) (1-2 years)	1.67	>3.25	5	4	4	5	4	3	3	3	3	3 ⁺
2. General anxiety (more than 10 years)	1.67	>3.25	6	5	4	4	4	3	4	5	5	4⁺
3. Feeling disconnected (in relationships) (1-2 years)	1.67	>3.25	6	6	5	5	5	4	4	5	5	4⁺
4. Not being connected to my body (1-2 years)	1.67	>3.25	5	5	5	4	4	4	4	4	4	3 ⁺

Note. S: session. The duration of each problem is provided in brackets in the first column. Values highlighted in bold fall within the clinical range. + denotes reliable improvement when comparing the first and last available score; = denotes no change; -

denotes reliable deterioration. Minimum change required for reliable and clinically significant change defined by Elliott et al. (2016).

Process Ratings. Rachel’s ratings on the Session Rating Scale (SRS; Duncan et al., 2003) are presented in Table 22, illustrating a gradual increase in the therapeutic alliance. Initially, Rachel appeared to struggle to open up, which is reflected in her lower SRS scores during the first five (especially the first two) sessions. In her Change Interview, Rachel mentioned that she tends to find therapy challenging at the start due to not knowing what might come up (19-21). This may explain her initial lower scores, as she likely experienced some discomfort or apprehension during the earlier sessions.

Table 22

Rachel's SRS Ratings

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
32.1	31	35.6	33.6	33.3	36.5	37.4	36.7	36.8	37.3

Note. S: session; - denotes missing data.

Sessional Measures. The changes to Rachel’s distress and wellbeing scores are depicted in Figure 4 and Table 23, as measured on the Clinical Outcomes in Routine Evaluation – 10 (CORE–10; Barkham et al., 2013) and Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007).

Figure 4

Rachel's CORE-10 and WEMWBS Scores

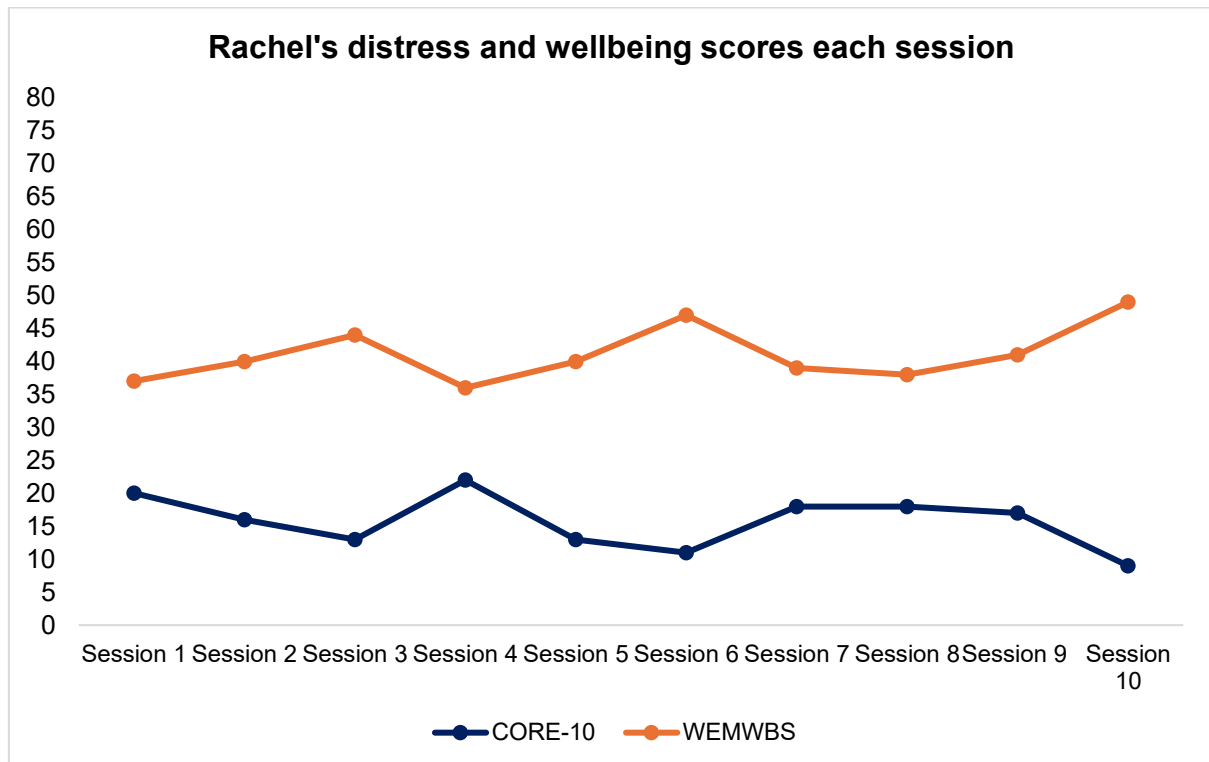


Table 23

Rachel's Distress and Wellbeing Scores

Measure	Timepoint									
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
CORE	20	16	13	22	13	11	18	18	17	9 ⁺
WEMWBS	37	40	44	36	40	47	39	38	41	49 ⁺

Note. S: session; + denotes reliable improvement between S1 and S10; = denotes no change; - denotes reliable deterioration.

According to Connell & Barkham's (2007) cut-offs, Rachel's S1 CORE-10 score represented "moderate to severe psychological distress" whereas her S10 score fell in the "low level distress" range, demonstrating reliable change ($RCI=2.86$). However, this change is not clinically significant as her final score still did not fall in the "healthy" range.

On the WEMWBS, Rachel achieved “minimally important” change (Maheswaran et al., 2012), which is also supported when calculating the RCI based on descriptive data provided by Tennant et al. (2007) (RCI = −4.04).

Pre- and Post-Intervention Measures. Table 24 demonstrates that Rachel achieved reliable improvement from pre- to post-intervention in depression, anxiety, and stress scores according to the Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995), and in birth-related posttraumatic stress symptoms, measured by the City Birth Trauma Scale (City BiTS; Ayers et al., 2018). On the DASS-21, Rachel achieved clinically significant change on the depression and stress subscales, but not on the anxiety subscale, according to criterion c of Jacobson & Truax’s (1991) clinical significance criteria, using reference data from Ronk et al. (2013). Rachel’s pre-therapy score on the City BiTS exceeded two standard deviations above the community mean as reported by Ayers et al. (2018), whereas her post-intervention score fell within one standard deviation from the non-clinical mean, demonstrating clinically significant change. There was also reliable change in psychological flexibility, which was measured using the Comprehensive assessment of Acceptance and Commitment Therapy Processes (CompACT; Francis et al., 2016). Since the CompACT has not yet been validated in a clinical sample (Giovannetti et al., 2024), it was not possible to determine clinically significant change. There was no reliable change in mother-infant bonding on the Mother-Infant Relationship Scale (MIRS; Newman-Morris et al., 2020a).

Table 24

Rachel’s Pre- and Post-Intervention Scores on Symptom and Process Measures

Measure	Timepoint		RCI
	Pre-intervention	Post-intervention	
DASS – depression	16	6	
DASS – anxiety	14	8	

DASS – stress	22	10	
DASS – total	52	24	2.17 ⁺
City BiTS – re-experiencing	6	4	
City BiTS – avoidance	4	0	
City BiTS – negative cognitions and mood	16	6	
City BiTS – hyperarousal	12	6	
City BiTS – dissociative symptoms	6	0	
City BiTS – total PTSD	38	16	4.97 ⁺
CompACT – Openness to Experience subscale	23	45	
CompACT – Behavioural Awareness subscale	11	21	
CompACT – Valued Action subscale	38	40	
CompACT – total	72	106	–3.85 ⁺
MIRS	8	7	0.22 ⁼

Note. Pre-intervention refers to up to two weeks before the intervention, post-intervention refers to up to two weeks after the intervention. + denotes reliable improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration.

Evidence for and Against ACT-Specific Processes

Table 25 enlists evidence whether meaningful changes occurred for Rachel. The table contains supporting evidence that argues that meaningful change *did* occur, as well as refutational evidence, arguing that there was no meaningful change.

Table 26 presents evidence whether changes are attributable to therapy (supporting evidence) or nontherapy factors (Elliott et al., 2009) such as client attributes or events/factors occurring outside of therapy (refutational evidence).

Table 27 outlines specific mechanisms/factors within and outside of therapy that contributed to observed changes. This table aims to answer the question “What exact factors are changes attributable to?” The supporting evidence argues for the role of ACT-specific processes in bringing about the observed changes. The refutational evidence proposes that changes were either due to common factors, or that the ACT intervention was hindering or ineffective.

Potential alternative attributions have been suggested by the first author throughout.

Table 25

Have Meaningful Changes Occurred for Rachel Throughout and After the ACT Intervention?

Therapeutic goals	Supporting evidence	Refutational evidence
Change in general	<p><u>Change Interview</u></p> <p>"I would say, in general, I feel more positive. Sometimes I can't work out the reasons for it." (56-57)</p> <p>"I think having had this therapy, there have been moments where I can feel myself being more aware. And I had this conversation with Kinga where I just said like, I wouldn't have done this before. I wouldn't have stopped and thought about why am I reacting this way or why am I thinking this and what's really going on. I don't think I would have given myself that little bit of time." (59-63)</p> <p>"...there's just moments where I feel like situations haven't escalated in the same way as they would have done. (...) I haven't allowed my mind to kind of spiral as much as it might have done." (70-72)</p> <p>"I still feel more positive and more able to just sort of take back control a little bit of my emotions." (77-78)</p>	<p><u>Change Interview</u></p> <p>"well, just because I've done this, you know, 10 sessions, doesn't mean everything's fixed, and doesn't necessarily mean there was something wrong with me either." (296-298)</p> <p>"...originally what I'd been referred for was the trauma therapy. (...) And obviously there's been some, there has been some positive impact on that. But I think we didn't... it focused on other areas, and more about coping strategies, rather than talking about the thing. So as much as sometimes it would come up in a session and we would have a brief discussion, I think, there was quite a, there was (...) quite a time lapse between actually giving birth, having gone through (...) the trauma, which is what triggered the referral, and then actually having the, the interaction with the therapy. So I think about a year. And in, so in reality, I guess the, the things that I was struggling with, I continued to struggle with for that year on my own." (339-350)</p>

"I've had periods in this last year or so and I've just been so consumed by, you know, the anxiety of being a parent all of a sudden and whether I'm doing it right. But I do feel more confident now. I do have more good days now." (94-96)

"So obviously it has brought up some emotions [laughs] and sometimes I think they're just hiding there and then they come out." (162-163)

"I feel more able to, in the moment, just pause and think about what's happening." (238-239)

Rachel also noticed that her feeling calmer has impacted her family relationships positively:
"I think probably, probably my relationship with my partner, because I think when, if I'm in a better place and I feel calmer, it has a positive effect for all of us in the house. I think me being kind of more regulated and feeling more like myself has, I think it's yeah, it's definitely benefitted both of us." (541-544)

Change Interview – Change Rating Sheet

Throughout the interview, Rachel identified that:

- Therapy had helped her see mindfulness in a different light. She learnt that mindfulness

"...we did acknowledge the fact that some of the symptoms that I was feeling were directly related to that trauma (...) all of the kind of physical symptoms and stuff that were going on. We still talked about that and kind of went back to those. It's just, yeah, we maybe just didn't go into as much depth talking about specific things." (365-359)

Therapist notes

Some external factors (e.g., her husband being away for work, having some difficult conversations with her parents, and struggling with sleep) left Rachel struggling to complete home practice.

Rachel still reported struggling in her relationships due to differences in values/priorities and found it difficult to navigate certain conversations with family members (S9).

does not have to be a structured practice lasting a specific amount of time; one can be mindful by simply attending to everyday activities. She rated this change as very surprising and very important and stated that it would have been somewhat unlikely without therapy.

- She had learnt skills to cope with thoughts, feelings and emotions. This change was somewhat expected and personally extremely important, and according to Rachel, would have been extremely unlikely without therapy.
- She started responding better to her anxiety and nighttime flashbacks. She rated this change as somewhat surprising and very important personally, and stated that it would have been extremely unlikely without therapy.
- Rachel's ability to recognise and tolerate her dissociative symptoms had also improved. This change was somewhat surprising and very important personally, and Rachel deemed this extremely unlikely without therapy.
- Rachel also reported feeling calmer and more positive, and she has found it easier to prioritise self-care in her life. She was somewhat surprised by this change and deemed it somewhat unlikely to have happened without therapy. She rated this change as extremely important.

Therapist notes

Early on during therapy, Rachel started incorporating mindfulness into some everyday activities such as interactions with her baby (S2). She did this alongside engaging in more formal mindfulness practice using the Headspace app (S3).

Rachel also started using ACT consistent language relatively early on (S3, S4, S5).

Rachel's ability to express and tolerate emotions increased, despite the messages she had received from her family of origin about emotions being deemed "unacceptable" (S5 vs S10).

Rachel was able to navigate stressful situations with more flexibility, such as a near miss road traffic accident due to icy weather, a kitchen accident (S6), and returning to work full-time (S10). Rachel reported being less reactive and more able to tolerate and "ride the wave of" emotions (S10) under different circumstances.

Rachel's engagement in home practice was excellent throughout the intervention.

	<p>Rachel also reported being able to engage in more self-care, such as going for walks on her own every day as a form of “time-out.” (S10)</p> <p>In general, Rachel reported using the skills covered in sessions to manage some difficult situations and symptoms (e.g., S2, S3)</p>	
<p>Trauma symptoms (night anxiety, flashbacks)</p>	<p><u>PQ scores</u></p> <p>Statistically reliable and clinically significant reduction in PQ ratings of this problem (S1 score: 5 → S10 score: 3)</p> <p><u>Psychometric measures</u></p> <p>Rachel demonstrated statistically reliable improvement on the City BiTS (Table 4).</p> <p><u>Change Interview</u></p> <p>“...before, say, if I woke up in the middle of the night, I feel that my body was much more on high alert. So as soon as I woke up, I could feel my heart racing and I could feel all the physical symptoms. But it would escalate quite quickly and then it would be really difficult to come back down again. Whereas now I think because I'm doing a little bit more of your mindfulness and I'm trying to do some just before I go to sleep, if I do wake up, or the baby wakes up in the night, I feel like I'm able to sort of talk myself down a little bit rather than that... spiralling.” (207-214)</p>	<p><u>Therapist notes</u></p> <p>Rachel continued to report trauma-related symptoms throughout the intervention (e.g., disrupted sleep, waking up feeling panicky). (S3, S4)</p> <p>Rachel stayed on the waiting list for further trauma therapy following the 10-week ACT intervention.</p> <p><u>Change Interview</u></p> <p>Although Rachel spoke about handling flashbacks better (and highlighted this as a change on the Change Rating Sheet); this implies that she was still experiencing them.</p>

General anxiety	<p><u>PQ scores</u> Statistically reliable reduction in PQ ratings of this problem (S1 score: 6 → S10 score: 4)</p> <p><u>Psychometric measures</u> Rachel's scores on the Anxiety subscale of the DASS-21 changed from 14 to 8 pre-to-post-intervention. This represents a shift from the "moderate" range to the "mild" severity range (normal: 0-7; mild: 8-9; moderate: 10-14; severe: 15-19; extremely severe: 20+).</p> <p><u>Therapist notes</u> Rachel became able to engage in some meaningful activities towards the end of therapy that she had not for a while, partly due to anxiety around potential judgements from others (and unhelpful beliefs regarding self-care). For instance, she rejoined a yoga class and went for regular walks.</p> <p><u>Change Interview</u> "So I do think I'm quite an anxious person and I think it's something that I've struggled with for a very long time, which is probably why I went to therapy in the past. (...) I've had periods in this last year or so and I've just been so consumed by, you know, the anxiety of being a parent all of a sudden and whether I'm doing it right. But I do feel more</p>	<p><u>PQ scores</u> The change in Rachel's PQ scores was not clinically significant in this domain as her final score was still above the clinical cut-off.</p> <p><u>Psychometric measures</u> Rachel's change on the Anxiety subscale off the DASS-21 was not clinically significant.</p> <p><u>Therapist notes</u> Rachel experienced some anxiety in response to some experiential exercises in sessions, which suggests that this was still an area of difficulty for her (S2). She also had some anxiety in response to some tricky interactions with others (S4, S9).</p> <p><u>Change Interview</u> "I wonder if sometimes people think that I'm hard work. And I think part of that is my anxiety thinking that because it can feel hard work for me, it must seem like that for other people." (145-147)</p>
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	confident now. I do have more good days now.” (85-98)	
Feeling disconnected (in relationships)	<u>PQ scores</u> Statistically reliable reduction in PQ ratings of this problem (S1 score: 6 → S10 score: 4) <u>Therapist notes</u> Rachel reported being able to respond to her partner in a calm, constructive way in difficult situations, which she believes would have escalated into arguments in the past. (S6, S10)	<u>PQ scores</u> The change in Rachel’s PQ scores was not clinically significant in this domain as her final score was still above the clinical cut-off. <u>Therapist notes:</u> Rachel reported some interpersonal difficulties and tricky interactions within her family, and, although she was able to respond to these more positively, this was still an area of difficulty for her. (S9, S10) <u>Change Interview</u> Rachel reported some ongoing interpersonal difficulties post-therapy: “...the benefits that I feel having done it [therapy] are great. But in contrast, when I'm then going back to, I guess sort of normal everyday life, with the people that I'm around, who maybe haven't gone to therapy, haven't done work on themselves, (...) or don't appreciate how much you've put into it and, and what it means to you. I think that's one of the things that I find challenging.” (275-280)
Not being connected to my body	<u>PQ scores</u> Statistically reliable and clinically significant reduction in PQ ratings of this problem (S1 score: 5 → S10 score: 3)	<u>Change Interview</u> “The other one, which is the feeling detached, is something a bit different. And that was more often happening in the day.” (221-222)

	<p><u>Psychometric measures</u> Rachel scored 0 on the Dissociative symptoms subscale of the City BiTS post-intervention.</p> <p><u>Change Interview</u> “...initially in the first few weeks, I was having a lot of these, these kind of episodes, where I would feel really, really detached from my body (...) almost feeling disorientated and dizzy and having moments where I felt, you know, when you feel like you're watching yourself, you don't really feel like you're present. I think at this end of having done the therapy, I definitely feel like those things have improved and reduced. So I'm not noticing that as much, or (...) when I notice it happening, I don't feel like it lasts for as long, and I'm more able to feel positive, rather than negative about it.” (200-207)</p> <p>“I feel like I've been able to, I guess, acknowledge it [<i>feeling detached</i>] and allow myself to just feel it rather than it, yeah, escalating or continuing for longer.” (222-224)</p>	<p>This quote demonstrates that Rachel was still experiencing the feeling of disconnection, particularly during the day, and she clearly distinguished this experience from her other symptoms.</p>
<p>Change in symptomatology</p>	<p><u>Psychometric measures</u> Rachel achieved reliable improvement in depression, anxiety, stress, and birth-related trauma scores from pre- to post-intervention (please refer to Table 4).</p>	<p><u>Psychometric measures</u> Rachel did not achieve reliable change in mother-infant bonding (please refer to Table 4).</p> <p><u>Change Interview</u></p>

Change Interview

"I feel generally calmer in myself. I think I was feeling quite... I could feel the physical sensations of being quite worked up and quite anxious at the beginning." (256-257)

Rachel and I explicitly discussed goals and expectations from the ACT intervention during the first session (i.e., the fact that this was not trauma therapy, that Rachel was already on the waiting list for). She reflected on this in her Change Interview:

"And by the time I came to doing this ACT therapy, it was useful, but for different reasons, because I think what we did was work more generally on things that I was feeling anxious about, things that I was struggling with, and probably had been for a while. I'm just thinking about some coping strategies and how this could support. But I guess that's something for me that... that's the only thing I can think of, is that the timing and the focus was maybe different than what could have been useful. But I'm still being referred for the trauma therapy anyway." (350-357)

Therapist notes

Rachel still wanted to proceed with her originally planned trauma therapy after the intervention, suggesting that she did not feel that her symptoms were fully resolved. (However, she noted that this was not something she expected from the intervention, based on our initial conversation.)

Change in psychological flexibility	<p><u>CompACT scores</u></p> <p>Rachel achieved reliable improvement in psychological flexibility scores from pre- to post-intervention (please refer to Table 4).</p> <p><u>Therapist notes</u></p> <p>In the initial session focused on cognitive defusion, Rachel understood this concept easily, stating that the techniques demonstrated had helped her “create some distance between herself and some of her difficult thoughts.” (S3)</p> <p>Rachel reported having experienced some anxiety and overwhelm but struggling less with this and using coping skills to manage these feelings. (S5, S10)</p> <p>Rachel clearly demonstrated a good use of ACT consistent language, e.g., “what would be considered negative emotions.” (S5)</p> <p>Rachel became able to tolerate and notice patterns in difficult emotions, observing them mindfully and non-judgementally. (S7)</p> <p>Rachel reflected on having become less reactive and better able to tolerate emotions over the course of the intervention (S10).</p>	<p><u>Change Interview</u></p> <p>Rachel slightly struggled with the concept of values: “we talked a lot about values and what motivates you. And I found it really difficult. I always find it really difficult to talk about myself, because I don't always know if, especially in this past year or so, since having a baby, I think it just makes you question like, do you really know who you are?” (89-93)</p> <p><u>Therapist notes</u></p> <p>External factors (e.g., being judged by family members, different values/worldviews within the family) sometimes made it challenging for Rachel to put her values into practice. (S8, S9)</p>
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Change Interview

Rachel was able to reflect on quite a few of her values in the Change Interview, which suggests that eventually she did connect with this concept.

“And we did a bit, quite a lot of work on the idea of emotion not being... *[pause]* that it's not you, essentially, you are not those things. They're just passing through when they're happening. They're not, they're not your, all of your true thoughts and feelings. So I think that's also been helpful because that's definitely something I would have done in the past because my, the, the anxious parts of my brain will just convince me that everything that I'm hearing in my head is true, when it's not.” (241-247)

“And I've been able to go back to yoga this month, and I feel like it's just put me back into a more positive place in my mind, that I feel able to prioritise some of those things. I think it's made me remember that... all those little things that I was doing for self-care that I'd sort of put on hold because I had a baby, I need to get back to.” (258-263)

Note. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Table 26

Are Reported Changes Generally Attributable to Therapy (or Alternatively: to Client Attributes and/or Factors Outside of Therapy)?

Supporting evidence	Refutational evidence
<u>Change Interview / Change Rating Sheet</u> Rachel rated all changes as somewhat or very unlikely to have happened without therapy. She has also explicitly linked some changes to therapy: She stated that although her difficulties may have improved naturally over time, she found that therapy had helped pause and became more aware of her reactions: “So, you know, when there's like naturally, things get better just with time. So as you get used to being a parent, and you adjust to life and like new routines, but I think having had this therapy, there have been moments where I can feel myself being more aware. And I had this conversation with Kinga where I just said like, I wouldn't have done this before. I wouldn't have stopped and thought about why am I reacting this way or why am I thinking this and what's really going on. I don't think I would have given myself that little bit of time.” (56-63) “But I do think in general, (...) it's made me view mindfulness and mindful practises in a different way. So I already had the Headspace app as an example, but I've barely been using it. And I felt like the only way for me to do meditation was, it had to be structured, and I had to do enough of it. I felt like,	<u>Change Interview / Change Rating Sheet</u> “I mentioned before that I think sometimes life events and other changes, and just time passing, can help or hinder. In this case probably has helped because in some ways I think outside of therapy, going back to work and having, during that period of time, and having a sense of like another purpose probably was useful and I'd really enjoyed, I had like a whole year off for maternity leave, and I felt really lucky to be able to have that time off. But I also did feel like going back to work was a positive. It was really challenging because it was such an adjustment to go back into that environment and to challenge myself in a different way. And yeah, I think that was one of the major things that was happening in the background while I was doing the therapy.” (506-515) <i>Attribution: life events (returning to work)</i> “...and just time passing and naturally becoming more used to being a parent and some of the challenges and things that brings up.” (518-520) <i>Attribution: adjustment to parenthood</i> <u>Therapist notes</u> Rachel already had the Headspace app which she started using more during therapy (S2). For instance, she reported using the app more during a stressful week (S5). <i>Attribution: existing coping mechanisms (albeit facilitated by therapy)</i>

you know, just doing a few minutes wasn't enough and I had to sit down and do a full meditation every day. And, and in reality, just having different kinds of mindful practice has been really useful and that's been a big change. (...) So I think that's one of the biggest things that it felt like the mindfulness was really important as a way of cementing everything and just bringing it in to day-to-day. (...) I feel like I was ready for it, but until I did these sessions, I hadn't really thought about how to fit it in." (164-183)

"Yeah, I guess the ways to cope is just some of the tools that we've worked through. So things like the we've done the thought defusion and different ways of reducing the impact, or the feeling being overwhelming." (232-234)

"I was already doing some mindfulness and had a bit of awareness, and I think I'm lucky that my workplace is also quite supportive in terms of mental health and well-being. And I would say I probably would have done some, but I think having the guided sessions and structured kind of approach cemented that, and I don't think I would have done it in the same way." (396-400)

"Like this definitely made me feel less guilty about some of the, the thoughts I was having and that kind of overwhelming feeling of everything that comes with being a parent. And just, I think going from, like I said, that transition from being on maternity leave when (...) you feel like your only purpose is to just look after the baby, that's what you're supposed to do, that's your job. And then transitioning out of that into like, having a different focus, but still not feeling guilty for doing that." (545-551)

Rachel had already reflected on the concept of values at work and in her personal life, therefore, she was already familiar with the idea of thinking about what mattered to her in life (S8). *Attribution: client attributes*

Therapist notes

Rachel expressed that throughout our sessions, her view of mindfulness had shifted as she started viewing it as an everyday, informal skill that she could tailor to her life rather than formal practice (S2, S3, S10). For instance, she made attempts to be more present when playing with her baby (S2) or when driving to work (S5).

Rachel described some stressful situations from the week between S5 and S6 and clearly reflected on her use of ACT skills in managing these difficulties.

Note. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Table 27

Specific Factors (Within and Outside of Therapy) That Contributed to Observed Changes

Supporting evidence (ACT-specific processes/internal factors)	Refutational evidence (ACT either hindering/ineffective or changes are due to common factors)
<p><u>ACT techniques</u></p> <p><i>Change Interview</i></p> <p>“...this particular therapy I've found probably more enjoyable than some that I've done before, because I've done traditional talking therapy and CBT and different types of therapy. But this was because there was more focus on mindfulness. I found it a bit easier.” (24-27)</p> <p>“And I was having some of the, those kind of like trauma symptoms, which we talked about, the fact that therapy isn't specifically dealing with that, but if those things come up, it's a way of being able to cope with the, the thoughts, the feelings, the emotions. And so for me, that was quite significant.” (196-200)</p> <p>“So we did that exercise of imagining that you have a ball, and you kind of describe it and feel it and have the sensations and you imagine the colours and you focus so much on that, that it starts to reduce the feeling itself like the, the physical sensation. So I'm not necessarily using that one every time, but I, I think I feel more able to, in the moment, just pause and think about what's happening.” (234-239)</p> <p>Rachel also reported to have found the experiential nature of the therapy helpful:</p>	<p><u>Therapeutic alliance</u></p> <p><i>SRS scores</i></p> <p>Rachel's scores on the SRS ranged between 31 and 37.4, indicating her ability to build therapeutic alliance. This suggests that she was satisfied with the therapeutic relationship and the therapist's approach.</p> <p><i>Change Interview</i></p> <p>“Probably just the delivery. I think Kinga was really good. Like she was really, she was easy to talk to. Her approach was good. She was always really flexible. She was really understanding that dealing with someone that's got a baby and they don't always do what you want. And sometimes stuff would come up, and I couldn't make the session, or I was late. And she was just, I think understanding of the whole process and everything that you're going through.” (575-580)</p> <p>“I think she was a big part of it, because I know from experience in the past, when you have therapy, you're in a very vulnerable position. And if you don't have the right therapist, it can completely change your experience. But I feel like from the first session, she just put me at ease and</p>

“one of the things I always felt when I came to the sessions was that the shared mindful practises we did at the start and the end, (...) I felt like it's the first time I've actually been more likely to put things into practise, because (...) we did those activities together. So in the past we've talked about, I don't know, like the theories or models or kind of thought processes, but actually putting it into practise. And some of the videos, for example, that we watched, it will show you in reality, what does this look like? So like, how does this thought process work or how can you change that? And I definitely think for me, that was really useful and it that's what helped to cement the change instead of it just being like, oh, you've just gone to a session and watched that and then forgotten about it. I feel like it definitely stayed with me for days afterwards, I'd still think about it and kind of remember what we talked about.” (527-539)

“I think what I've just described about the practical approach has been really helpful, and having exercises that you can do in between, like having the workbook so that you can work through if you want to do extra bits of practice, or having a reminder of what you've talked about in the sessions.” (556-559)

Rachel also listed the therapists' modelling behaviour and therapeutic self-disclosure as helpful, which are key to ACT: “And she [therapist] was really honest about her own experiences. So she would share things at the start of the session, and we would talk about like, how has the past week been? And she would also talk about her week, which I feel like she was really good at building that relationship where you kind of trust each other.” (580-584)

explained everything, and she focused on the, like, most important parts of the session.” (584-588)

Therapist notes

Rachel reported having mixed feelings regarding therapy coming to an end as she really appreciated having a space with someone to listen. (S10)

Unhelpful factors

Change Interview

“I just sometimes found it difficult working around having childcare because we've got limited options and trying to make myself available. The sessions are, well, the sessions we did were all online, and we were limited to having to do them on a certain day of the week. And it was just a little bit tricky sometimes to work around that.” (601-605)

“I think in the past when I've been able to do face to face therapy, it is slightly different. It's not that it's not effective, because I've definitely still felt the benefits. That's the only thing that felt different is not, you know, not seeing the person and being in a room, and you pick up on maybe different things.” (645-649)

Nonspecific factors

Change Interview

“So for me, I feel like when you're in that, like the busyness of being a mum and having so much going on, just once a

Therapist notes

Rachel engaged well in experiential mindfulness and cognitive defusion exercises and demonstrated good engagement with and understanding of the intervention materials. For instance, she recognised that the leaves on a stream exercise had helped her create some distance between herself and some of her difficult thoughts (S3). She also found the physicalising emotions exercise very interesting (S5) and referred to this during her Change Interview, too (235-239).

Rachel's previous experiences of reflecting on her values made it easier for her to connect with the idea of values and committed action in sessions (S8). This suggests that her pre-existing knowledge may have enhanced her engagement with therapy.

HAT form

Rachel reported finding an introduction to the ACT model and demonstrating exercises together helpful (S1).

Rachel listed various ACT-specific elements as helpful throughout the intervention, such as:

- Mindfulness exercises (S2, S8, S9) and a broader reflection on mindfulness as part of everyday life (S2)
 - Thought defusion exercises (S3, S4)
-

week, having something that forces you to sit for that period of time and just be focused on yourself and do the mindful practises with someone else, because it's really difficult to do on your own..." (47-51) *Attribution: other therapies would have prompted Rachel to take time for herself, too*

HAT form

- Rachel found various elements of therapy helpful which are not specific to the ACT model, or are more integral to other therapeutic approaches, such as:
- Discussing the function of emotions (S6)
- "Compassionate friend" script and discussion about self-soothing through the senses (S7)
- Discussion about handling interpersonal difficulties (S9)

-
- Practices aimed at experiential acceptance, such as physicalising emotions, the emotion curve, and the struggle switch (S5)
 - Reflection on values and considering one's current resources when turning them into committed action (S8)
-

Note. SRS stands for Session Rating Scale. HAT refers to Helpful Aspects of Therapy. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Rachel's Briefs

Affirmative Brief. The affirmative brief proposes the presence of clear links between therapy process and outcome, and requires at least two of the following pieces of evidence (Elliott, 2002):

1. Retrospective attribution (client attributes reported changes to therapy – e.g., low “likelihood without therapy” ratings)
2. Process-outcome mapping (the content of posttherapy changes correspond to specific aspects, events, or processes of therapy)
3. Change in stable client problems (e.g., longstanding, chronic difficulties)
4. Event-shift sequences (significant therapy events preceding a stable shift in client problems, especially when the nature of the therapy process and the resulting change are logically connected)

Changes Across Therapy. Rachel demonstrated reliable improvement on the DASS-21, City BiTS, and CompACT. This suggests symptom reduction throughout the intervention period, which is not the focus of ACT but may well be attributable to Rachel's increased PF that allowed her to open up to uncomfortable thoughts and emotions, contact the present moment, and engage in meaningful, values-congruent action (such as returning to yoga classes). Although Rachel still underwent trauma therapy following the intervention, and it was explicitly communicated to her that the ACT intervention was not a substitute for this, she reported a decrease in trauma symptoms and a better ability to handle flashbacks when they arose, as also supported by her narrative throughout the Change Interview. Moreover, Rachel engaged well with mindfulness exercises during sessions and reported to have found these calming and grounding. Therefore, through Rachel's good engagement with and understanding of core ACT processes, we can hypothesise that ACT could have caused the reported changes for Rachel.

Retrospective Attribution. Retrospective attribution requires clients to attribute any observed meaningful changes to therapy in the Change Interview and on the Change Rating Sheet. Rachel rated all changes but one as

“somewhat” or “very” unlikely without therapy, which demonstrates clear retrospective attribution.

Therapist Attributed These Changes to Therapy. We should consider whether the therapist attributes any client changes to therapy using their knowledge of the client, their presentation, and discussions within sessions. Rachel demonstrated excellent engagement with home practice throughout the intervention, especially with mindfulness and cognitive defusion skills. Additionally, she showed greater flexibility in responding to distressing events, such as a near-miss car accident. Rachel also became more able to notice, name, and express her emotions, relying on her experience of cognitions, physiological sensations, and motoric urges associated with the emotion. Over the course of the intervention, Rachel’s use of ACT-consistent language increased notably, which further supports the claim that the changes are attributable to a shift towards PF.

Process-Outcome Mapping. Process-outcome mapping refers to information about significant events corresponding with aspects or processes within therapy. Rachel stated that specific aspects of therapy, such as mindfulness and values, resonated with her, which was also obvious from her engagement with home practice. She also made reference to a specific technique aimed at increasing experiential acceptance multiple times during the intervention and at her post-therapy Change Interview, demonstrating long-term skill acquisition. Therefore, it was expected that her PF scores would increase by the end of the intervention. However, more robust conclusions could be drawn if PF scores had been monitored at regular intervals throughout the intervention phase.

Changes in Stable Problems. Although baseline scores were not obtained, Rachel rated problem 2 (general anxiety) on the PQ as chronic and long-standing (Table 1), which is also corroborated by historical information. Additionally, she stated in her Change Interview “So I do think I’m quite an anxious person and I think it’s something that I’ve struggled with for a very long time, which is probably why I went to therapy in the past.” (85-87). Given the

reliable change on problem 2 on the PQ and in DASS-21 scores, it is reasonable to attribute these improvements in chronic, pervasive difficulties to the ACT intervention.

Changes Not Due To Relational Artefacts. Arguably, it is unlikely that the observed changes were due to relational artefacts (i.e., the client emphasising change to please the therapist), as the Change Interview was conducted by a researcher independent of the research team to decrease demand characteristics. Additionally, Rachel's scores on the CORE-10, and WEMWBS fluctuated throughout the intervention, and Rachel occasionally provided higher problem ratings on the PQ compared to previous weeks (especially on problems 2 and 3, which did not demonstrate clinically significant change over the course of the intervention). This suggests no deliberate attempt to overemphasise improvements. Rachel also mentioned the positive nature of the therapeutic relationship in her Change Interview. Yet, she was open and honest about the difficult aspects of therapy and raised the question whether in-person sessions would have affected outcomes. The impact of this on the therapeutic relationship and engagement with the intervention remains unclear, as face-to-face delivery may have required greater effort and been associated with a higher participant burden compared to remote appointments. Nonetheless, relational factors between the therapist and Rachel are unlikely to fully account for the improvements identified over the course of the therapy.

Changes Not Due To Expectancy Artefacts. Expectancy artefacts refer to changes resulting from client expectations (therapy "scripts") or wishful thinking. Rachel expressed being somewhat or very surprised by most of the changes she experienced and used idiosyncratic language to describe each one in detail. However, she found it unsurprising that she had learned ways to cope with thoughts, feelings, and emotions, suggesting the presence of some expectations. In her Change Interview, she stated "I don't think I really knew what I was signing myself up for, because I wasn't really thinking straight still, but I knew that it would be helpful, because I'd been out of therapy for a couple of years and felt like I was really overwhelmed." This indicates both an openness to the intervention and a perspective influenced by her previous

experiences of therapy. She also contrasted her experience of ACT with previous therapies, noting that this intervention was felt structured and practical. Furthermore, in session 1, when discussing her hopes, she simply mentioned wanting to gain skills from the intervention, which is a very generic statement. This indicates that Rachel did not have particular hopes or expectations from therapy, making it unlikely that expectancy artefacts played a significant role in the changes observed.

Statistical Artefacts. Clinical cut-off scores were either obtained from literature (e.g., Elliott et al., 2016) or calculated using reference data from other research papers investigating clinical and/or non-clinical samples. However, this means that cut-off values for reliable change are approximate as their calculation was based on data from various authors. Therefore, we cannot exclude the possibility that Type II errors could be responsible for the lack of significant change in some measures.

Conclusion

This affirmative case proposes that

- There was substantial change in Rachel's difficulties
- Rachel attributed these changes to therapy
- The therapist attributed most of these changes to therapy
- This evidence contradicts sceptic non-therapy reasons for change and/or lack of change.

This evidence provides a basis for you to support the case that Rachel changed substantially during therapy and infer that this change was caused by the ACT intervention.

Sceptic Brief. The sceptic case aims to counter the argument that Rachel changed substantially during therapy and/or that this change was due to the ACT intervention. It also aims to highlight nontherapy processes that may explain observed changes (Elliott, 2002). Relevant pieces of evidence for Rachel will be explored below.

Trivial/Negative Changes (Illusory or Artefactual Changes). Baseline scores for Rachel's difficulties were not obtained; however, Rachel reported experiencing longstanding anxiety. Yet, this is insufficient to determine whether her symptoms and distress would have remained stable over time or improved without therapy, as some clients experience spontaneous remission over time. This is something that Rachel also acknowledged in the Change Interview: "naturally, things get better just with time. So as you get used to being a parent, and you adjust to life and like new routines" (57-59). Additionally, Rachel's second and third problems on the PQ ("General anxiety" and "Feeling disconnected in relationships") did not change clinically significantly.

Statistical Artefacts. As statistical analysis relied on reference data reported in previous studies, statistical errors cannot be ruled out. Therefore, reliable changes on the DASS-21, City BiTS, CompACT, CORE-10, and WEMWBS may be partially attributed to statistical inaccuracy. Also, since participants completed the pre- and post-intervention questionnaires remotely, it was not possible to verify whether they understood each item and completed the questionnaires independently, rather than seeking insight from others such as family members. Furthermore, the reliability and validity of distress and wellbeing measures may be questionable. When individuals are asked to report on their past emotions or overall well-being, they frequently rely on their current affective state rather than providing a balanced evaluation of recent events (Robinson & Clore, 2002). This implies that responses on instruments such as the CORE or WEMWBS may be influenced by the respondents' mood at the moment of completion, even if instructions ask them to consider a longer time frame.

Relational Artefacts. Elliott (2002) suggests specific changes reported by Rachel must be assessed carefully, since they may reflect a desire to please or impress the therapist/researcher. In his influential paper, Elliott discusses the "hello-goodbye" effect, whereby clients may exaggerate distress at the start of therapy to gain clinician acceptance or validation and may overstate improvements at the end of therapy to express gratitude or justify ending therapy. A possible manifestation of this effect in Rachel's case is the steep

improvement in her CORE-10 and WEMWBS scores between session 9 and session 10, despite a smaller magnitude of change between previous sessions. On the CORE-10, her distress reduced from “moderate” to “low”, whereas in the WEMWBS, she demonstrated an 8-point change in this timeframe. These scores may indicate a desire to emphasise improvement. Finally, Rachel consistently prioritised therapy, often making significant efforts to attend sessions – such as taking the bus to a friend’s house so that her friend could look after her daughter. This, combined with her steadily increasing SRS scores, indicates a strong therapeutic alliance, which might have contributed to positive outcomes.

Expectancy Artefacts. Rachel had attended therapy before and therefore was very psychologically minded and motivated to engage. However, her previous experiences may have also led to some preconceived notions of what therapy may entail. In the Change Interview, she stated “I guess you're anticipating what might come up. And I also think it just, it can be quite hard work. So staying committed to doing regular therapy sessions, knowing that you've got that period of time where you're kind of working through it. I think, yeah, it's just sometimes, it can feel like it's quite a commitment.” (20-24) However, she also described feeling surprised during the first session, since the therapy was more structured and practical than what she was expecting based on her previous experiences. Rachel also verbalised some expectations related to the outcomes of therapy: “But then when you finish, it's like, “oh, well, so you're all sort of no fixed, so you've got no issues, so that you just don't have anxiety anymore.” And that's just not a thing.” (300-302) This suggests that she may have entered therapy with certain expectations regarding its nature or effectiveness. Additionally, some of Rachel’s responses on the Change Interview reflect some shared cultural schemas about therapy, such as “finding ways to cope with thoughts, feelings, and emotions” and “prioritising self-care.” However, it is unclear whether the wording of these changes may have been influenced by the interviewer’s summaries.

The remaining nontherapy explanations suggest that “change has occurred but that factors other than therapy are responsible” (Elliott, 2002, p. 13), such as: self-correction, life events, psychobiological factors, or reactive effects of research participation.

Self-Correction and Other Factors. This potential explanation proposes that improvements are caused by self-help outside of therapy. Rachel was already using the Headspace app to practise mindfulness pre-intervention, and she described her workplace as being “quite supportive in terms of mental health and wellbeing” (397-398). Rachel also started attending yoga classes towards the end of the intervention, which also may represent an attempt at self-correction.

Life Events. During the intervention, Rachel returned to full-time work, which she found exciting and rewarding, as she described her career as very important to her. Reflecting on this transition in the Change Interview, she noted, “being about back at work is kind of, it's helping me to remember that I have other things that I am good at.” (97-98). Simultaneously, her daughter began attending childcare more regularly and showed progress in her development. In session 5, Rachel described a rewarding aspect of parenting (watching her daughter develop her own language as part of her language acquisition). These reflections highlight the potential influence of external life events on Rachel's therapeutic progress.

Psychobiological Factors. Although not explicitly explored with Rachel, hormonal changes in the perinatal period are common and may contribute to fluctuations in mood and anxiety. Rachel also reported more difficulties in sessions if her sleep had been disrupted due to illness or her baby's growth spurts.

Reactive Effects of Research Participation. Rachel identified the therapist's limited flexibility (due to limited study days on the course) as one of the unhelpful aspects, suggesting a potential drawback of research

participation. However, she also expressed a strong interest in receiving a summary of the research findings once they had been written up.

Lack of Event-Shift Sequences. Rachel's scores on weekly measures of distress and wellbeing fluctuated throughout the intervention. We would expect significant events in therapy to cause significant changes in difficulties, but in Rachel's case, there was only weak evidence for this, despite there being reliable change between session 1 and session 10 distress and wellbeing ratings and Rachel's reports of helpful within-session events as indicated on the HAT form.

Conclusion

This sceptic case proposes that

- There was no substantial change in Rachel's difficulties
- Rachel did not attribute these changes to therapy
- Any observed changes were attributable to extra-therapeutic factors
- This evidence contradicts evidence presented by the affirmative case.

This evidence provides a basis for you to reject the case that Rachel changed substantially during therapy and infer that any changes were caused by extra-therapeutic factors.

Sally's Full Rich Case Record

Contextual Information

Sally is a White British mother of two in her mid-30s; her children are aged 5 years and 8 months. She lives with her husband, whom she has been married to for nearly 7 years. Sally works part-time in sales.

Sally has struggled with anxiety and depressive symptoms for about 15 years. Her anxiety started around low self-esteem and worrying she may do or say something wrong and has worsened over the years and now focuses on loss/death. She reports checking behaviours at night around anything that might cause a danger, she checks doors/windows are locked, taps are off due to fear of flooding and plugs are off due to fear of fire. She says she does this between

2-8 times on an even number to feel relaxed. She says if she cannot do this, she panics.

Sally's anxiety was initially managed using Sertraline, which Sally stopped after getting pregnant due to anxiety regarding harming the baby. Additionally, Sally has several fears that fluctuate and change over time. Sally experienced a fear of not getting pregnant and thereby not providing a sibling for her daughter. Driving has also been a fear since her daughter was born, as she worries about leaving her without a mother. Sally also experienced fear of childbirth whilst she was pregnant with her second child.

Sally experiences anxiety when discussing her fears and uncomfortable thoughts, as she believes that she may "jinx" things and bring on catastrophes. She also struggles to plan things and look forward to things as she believes that expressing her anticipation may cause something bad to happen (e.g., someone falling ill, an event being ruined) as she would be punished. Sally also struggles with her self-esteem and confidence and has an intense fear of death and dying. Sally has a history of self-harm by hitting and biting herself to release frustration.

In the past, Sally accessed Cognitive Behavioural Therapy (CBT) through Nottinghamshire NHS Talking Therapies (8 sessions) and 6-8 sessions of private counselling. During lockdown, Sally paid privately for CBT due to germophobia and health anxiety. Sally reported symptoms of OCD, lots of checking behaviours, checking the doors were locked, taps were off, the home was clean and germ free. Sally described a complex bedtime ritual that she would have to complete every night lasting around 40 minutes, which has reportedly improved following CBT. Overall, Sally reported that CBT had helped her understand herself and rationalise her thoughts but had little effect on her compulsions. She was referred to the perinatal service in February 2024.

Sally lives with her husband who is supportive, but Sally believes he does not understand mental health difficulties. Her sister is more supportive as she also struggles with anxiety.

Sally has recently requested to be referred for an ADHD assessment as she feels that her rigid thinking might be related to this.

Adaptations to ACT Protocol

Sally attended 10 sessions of ACT over 15 weeks (September 2024-January 2025). She completed pre- and post-intervention measures, with additional sessional measures administered at each intervention session.

The following adaptations were made to the intervention protocol:

- Offer of regular breaks (although Sally did not take any)
- Use of the screen-sharing feature in Microsoft Teams to share PowerPoint slides supporting the delivery of sessions
- Removal of pregnancy-specific prompts from mindfulness scripts (e.g., *"Notice your bump if you are pregnant."*)
- Removal of group-related statements from slides, scripts, and client manual (e.g., *"When you are ready, bring your attention to what you are feeling as you come into the group today."*)
- Group discussions replaced by discussion with facilitator
- Flexibility: Sally's baby was present during the session a few times. On some occasions, sessions were cancelled due to illness or planned holidays and/or annual leave.
- Sally found visualisation challenging due to her potential neurodiversity (she is currently awaiting assessment). Therefore, we attempted to utilise techniques that she could naturally connect to or she has developed herself, for instance, imagining "filing away" her thoughts in boxes without lids (as a cognitive defusion exercise). We also made some imagery more concrete by utilising real-life scenarios (e.g., imagining thoughts as passing cars) rather than more abstract concepts (e.g., putting thoughts on clouds and letting them float away)

Goals

Using the Personal Questionnaire (PQ; Elliott et al., 1999), Sally generated the following problems:

1. Fear of death
2. Social anxiety (meeting new people)
3. Lack of self-confidence (am I a good mum, I don't feel like myself anymore, struggling to make decisions)
4. Struggling to look forward to things/arrange things

5. Fear of doing something wrong and being punished

It is noteworthy that ACT aims to improve psychological flexibility (PF), which was therefore considered as a universal goal across clients.

Quantitative Outcome Measures

Problem Ratings. Sally's problem ratings are shown in Table 28.

Table 28*Sally's Problem Ratings*

Problem (as defined on the PQ)	Minimum change required for reliable change	Clinical cut-off	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
1. Fear of death (more than 10 years)	1.67	>3.25	5	5	6	5	5	5	6	6	6	6
2. Social anxiety (meeting new people) (3-5 years)	1.67	>3.25	7	6	5	5	6	7	6	6	6	4⁺
3. Lack of self-confidence (am I a good mum, I don't feel like myself anymore, struggling to make decisions) (3-5 years)	1.67	>3.25	6	6	6	6	7	7	7	7	7	7
4. Struggling to look forward to things/arrange things (1-2 years)	1.67	>3.25	N/A	7	7	6	6	5	5	5	5	6
5. Fear of doing something wrong and being punished (more than 10 years)	1.67	>3.25	N/A	N/A	N/A	N/A	N/A	N/A	6	7	7	7

Note. S: session. The duration of each problem is provided in brackets in the first column. Values highlighted in bold fall within the clinical range. Problem 4 was added to the list at session 2 and problem 5 at session 7; therefore, these were not rated

beforehand. + denotes reliable improvement when comparing the first and last available score; = denotes no change; - denotes reliable deterioration. Minimum change required for reliable and clinically significant change defined by Elliott et al. (2016).

Process Ratings. Sally’s ratings on the Session Rating Scale (SRS; Duncan et al., 2003) are presented in Table 29. This represents that the therapeutic alliance was generally strong, indicating a potential ceiling effect.

Table 29

Sally's SRS Ratings

S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
39.5	36.8	36.3	38.5	37.2	39.1	38.2	39	38.8	37.8

Note. S: session; - denotes missing data.

Sessional Measures. The changes to Sally’s distress and wellbeing scores are depicted in Figure 5 and Table 30, as measured on the Clinical Outcomes in Routine Evaluation – 10 (CORE–10; Barkham et al., 2013) and Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007).

Figure 5

Sally's CORE-10 and WEMWBS Scores

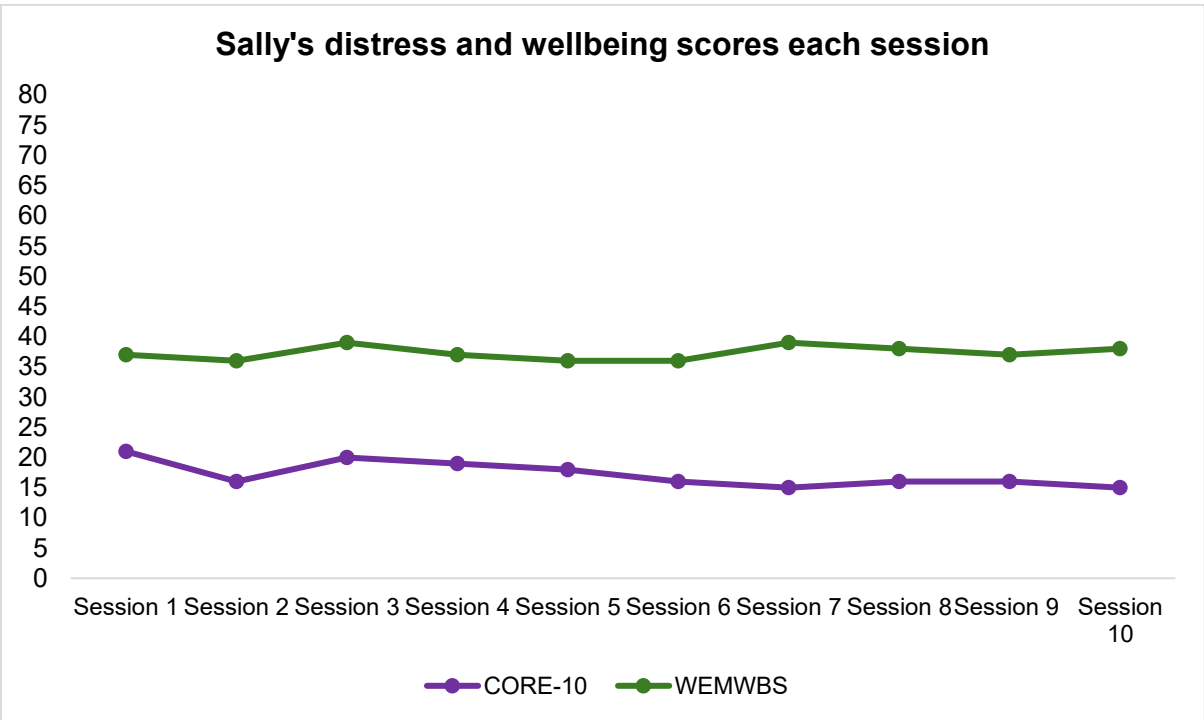


Table 30*Sally's Distress and Wellbeing Scores*

Measure	Timepoint									
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
CORE	21	16	20	19	18	16	15	16	16	15
WEMWBS	37	36	39	37	36	36	39	38	37	38

Note. S: session. + denotes reliable improvement between S1 and S10; = denotes no change; - denotes reliable deterioration.

According to Connell & Barkham's (2007) cut-offs, Sally's S1 CORE-10 score represented "moderate to severe psychological distress" whereas her S10 score fell in the "moderate psychological distress" range. However, this change is not reliable ($RCI = 1.55$) or clinically significant when compared to reference data provided by Barkham et al. (2013).

On the WEMWBS, Sally did not achieve "minimally important" change between S1 and S10 (Maheswaran et al., 2012), which is also supported when calculating the RCI based on descriptive data provided by Tennant et al. (2007) ($RCI = -0.34$).

Pre- and Post-Intervention Measures. Table 31 demonstrates that Sally did not achieve reliable improvement in OCD symptomatology according to the Obsessive Compulsive Inventory (OCI; Foa et al., 1998) or psychological flexibility based on the Comprehensive assessment of Acceptance and Commitment Therapy Processes (CompACT; Francis et al., 2016). There was no reliable change in depression, anxiety, and stress, and mother-infant bonding either, using the 21-item version of the Depression, Anxiety, and Stress Scale (DASS-21; Lovibond & Lovibond, 1995) and the Mother-Infant Relationship Scale (MIRS; Newman-Morris et al., 2020a).

Table 31

Sally's Pre- and Post-Intervention Scores on Symptom and Process Measures

Measure	Timepoint		RCI
	Pre-intervention	Post-intervention	
DASS – depression	18	16	
DASS – anxiety	18	16	
DASS – stress	26	26	
DASS – total	62	58	0.31 ⁺
OCI – washing subscale	19	17	
OCI – checking subscale	23	25	
OCI – doubting subscale	6	6	
OCI – ordering subscale	8	5	
OCI – obsessing subscale	9	12	
OCI – hoarding subscale	4	4	
OCI – mental neutralising subscale	8	8	
OCI – total	77	77	0 ⁼
CompACT – Openness to Experience subscale	15	23	
CompACT – Behavioural Awareness subscale	13	15	
CompACT – Valued Action subscale	33	30	
CompACT – total	61	68	–0.79 ⁼
MIRS	9	8	0.22 ⁼

Note. Pre-intervention refers to up to two weeks before the intervention, post-intervention refers to up to two weeks after the intervention. + denotes reliable improvement between pre- and post-intervention; = denotes no change; - denotes reliable deterioration.

Evidence for and against ACT-specific processes

Table 32 enlists evidence whether meaningful changes occurred for Sally. The table contains supporting evidence that argues that meaningful change *did* occur, as well as refutational evidence, arguing that there was no meaningful change.

Table 33 presents evidence whether changes are attributable to therapy (supporting evidence) or nontherapy factors (Elliott et al., 2009) such as client attributes or events/factors occurring outside of therapy (refutational evidence).

Table 34 outlines specific mechanisms/factors within and outside of therapy that contributed to observed changes. This table aims to answer the question “What exact factors are changes attributable to?” The supporting evidence argues for the role of ACT-specific processes in bringing about the observed changes. The refutational evidence proposes that changes were either due to common factors, or that the ACT intervention was hindering or ineffective.

Potential alternative attributions have been suggested by the first author throughout.

Table 32

Have Meaningful Changes Occurred for Sally Throughout and After the ACT Intervention?

Therapeutic goals	Supporting evidence	Refutational evidence
Change in general	<p><u>Change Interview</u></p> <p>“...it's like trying to find ways to incorporate all these practises into day-to-day life without... because I find it really hard to just kind of sit and have half an hour with myself. So it's been really helpful to understand how to do that in like a busy lifestyle.” (43-46)</p> <p>“So maybe kind of, you know, is it when I get overwhelmed with stuff at home, and if that is the case, then ask for help more to stop getting to that point. So I think that that is a bit of a change as well.” (295-297)</p> <p>“So I think I've started to understand that the judgements I think people have for me are actually judgements that I have for me and I'm just putting them on somebody else. So I think that's massively helped because when I start to think about that, I just think, no, no, this is just my... I'm portraying that.” (556-560)</p> <p><u>Change Interview – Change Rating Sheet</u></p> <p>Throughout the interview, Sally identified that:</p>	<p><u>Change Interview</u></p> <p>Sally continued to seek explanations for her difficulties and believed that this would help her engage with ACT skills more:</p> <p>“I think something I really struggle with is like, why? Why am I like this? Why do I think differently for everyone else in my life? And if I actually had an explanation for that, I think it would almost give me the push to use the tools more because I wouldn't constantly be looking for like why, why, why and maybe find my answer, and then I could just concentrate on how to help it.” (72-76)</p> <p>Sally was still unsure whether she would be able to deal with unexpected challenges post-intervention:</p> <p>“I think the problem is everything else comes in waves. So it might be right now I think that it's quite low, but it might just be that it's not... I haven't kind of had that wave come yet. So it might be that when that wave comes, I might not be able to deal with it.” (158-161)</p>

- She had become able to calm herself down quicker. She rated this change as somewhat surprising and very important to her personally, and stated that it would have been somewhat unlikely without therapy.
- She started seeing anxiety as “unhelpful help.” She was very surprised by this change and stated that it would have been somewhat unlikely without therapy. Sally deemed this change very important.
- She started using mindfulness in her daily life, without realising it. She was neither surprised by this change, nor did she expect it, and she rated it as “moderately important.” She believes that this change would have been somewhat unlikely without therapy.
- She also mentioned a negative change, as her fears that her anxiety would come back with full force if she does not take it seriously enough had increased. She somewhat expected this change and rated it as extremely important; however, she stated that she believed that this was neither likely nor unlikely without therapy as this fear could fluctuate anyway.
- Later, when re-rating the PQ, Sally decided to add a decrease in her social anxiety to the list of changes. She was somewhat surprised by this change and rated this as moderately important to her. She believes

“I think like the health anxiety and the struggling to look forward to things, I think they've increased because my general decreased and it's almost like I'm waiting for something to happen and I'm waiting to almost be punished that I feel like it's calmed down a bit.” (498-501)

Therapist notes

Initially, Sally found it difficult to apply the skills when feeling overwhelmed and anxious (S2).

After finding a lump on her baby's head, Sally was very preoccupied and fused with unhelpful thoughts, which were understandable in the context of her concerns related to her baby's health (S3). This corresponded with an increase in Sally's anxiety and distress (S4).

Sally expressed a desire to better understand potential explanations behind her intrusive thoughts and dichotomous thinking. She was particularly curious about the possible role of neurodiversity and decided to undergo assessment to explore this further (S7).

Sally struggled with the concept of self-compassion when this was first introduced (S7) and still reported finding this difficult when

	that this would have been somewhat unlikely without therapy.	reflecting on skills in the final session, attributing this to low self-worth (S10). As Christmas approached, Sally experienced increased anxiety, fearing that someone would become ill as punishment for her looking forward to the holiday. She struggled to defuse from these thoughts, which made her consider cancelling activities, implying experiential avoidance (S8).
Fear of death	There was no evidence suggesting that there had been a change to this problem.	<u>PQ scores</u> Sally's problem ratings worsened remained in the clinical range throughout the intervention (S1 score: 5 → S10 score: 6)
Social anxiety (meeting new people)	<u>PQ scores</u> Statistically reliable reduction in PQ ratings of this problem (S1 score: 7 → S10 score: 4) <u>Therapist notes</u> Sally started attending a baby group despite feeling anxious about not knowing other group members, as she realised that attending the group would help with her loneliness (S6). When attending the group, she was able to consider workable action and choose to stay in the group despite her initial urge to leave (S7). <u>Change Interview</u>	<u>PQ scores</u> The change in Sally's PQ scores was not clinically significant in this domain as her final score was still above the clinical cut-off.

	<p>"I think the social anxiety one, I feel like that can go up and down based on kind of what I've got planned in the week. So if I'm meeting new mums, it might go up. But I think... like this week I've spoken to people that I don't normally speak to, and yet it's still quite low. So it must be changing in some way." (476-480)</p>	
Lack of self-confidence (am I a good mum, I don't feel like myself anymore, struggling to make decisions)	<p><u>Change Interview</u></p> <p>Sally utilised some self-compassion skills to help her make decisions without seeking reassurance from friends, ultimately reflecting increased confidence in her own opinions:</p> <p>"I also use "what would you say to a friend" quite a lot because I used to do a lot of, like, kind of speaking to a friend to try and get some, I guess trying to see if they say the same thing that I would. So in doing that, I'm kind of almost answering for my friends, if that makes sense. (...)</p> <p>So I think that's been helpful because I think the more I was to seek reassurance, the more I'd be thinking about the anxiety." (344-352)</p>	<p><u>PQ scores</u></p> <p>Sally's problem ratings worsened remained in the clinical range throughout the intervention (S1 score: 6 → S10 score: 7)</p> <p><u>Therapist notes:</u></p> <p>Sally attributed her difficulty engaging with the concept of self-compassion to her low self-worth (S10), suggesting that this continued to be an area of difficulty for her.</p>
Struggling to look forward to things/arrange things	<p><u>Therapist notes</u></p> <p>Sally was able to engage in some activities such as taking family photos for Christmas cards (S4), which she acknowledged that she would have found challenging in the past.</p>	<p><u>PQ scores</u></p> <p>There was no statistically reliable change in Sally's problem ratings throughout the intervention (S2 score: 7 → S10 score: 6)</p> <p><u>Therapist notes:</u></p>

Sally reported some ongoing difficulties with looking forward to things and arranging things. For instance, she struggled to look forward to Christmas because she worried that one of her children may become ill before Christmas (S8).

Change Interview

“Still lots of anxiety, quite a lot of (...) nervousness about maybe arranging things or like booking a holiday, because I think something bad will happen before that.” (54-56)

“I really struggle when there's nothing to look forward to. But I really struggle to book something and have that to look forward to.” (63-65)

When Sally was asked about what things she wanted to change that have not changed since therapy started, she responded: “Probably my ability to be able to book things and look forward to things and not feel like if I look forward to something I'll get punished for it. I still feel like that's exactly the same as it was before.” (150-152)

Fear of doing something wrong and being punished	There was no evidence suggesting that there had been a change to this problem.
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PQ scores

Sally's problem ratings worsened remained in the clinical range throughout the intervention (S7 score: 6 → S10 score: 7)

Change Interview

Sally described her problems as intertwined, suggesting that their intensity is linked:

“And I think maybe some of them go... almost go higher as another one goes higher. So what I mean by that is so the fear of doing something and then something kind of like being punished for doing that. I think as that goes up, for example, health anxiety will go up” (466-469)

Therapist notes

Throughout the sessions, Sally reflected on her fear of being punished for “mocking” anxious thoughts (i.e., practising cognitive defusion skills) or anticipating positive events (S4, S7, S8).

Change in psychological flexibility

Therapist notes

Sally reported being able to use mindfulness to refocus on the present moment more and more easily when her mind had started to wander (S2).

Sally reported that some situations had “tested her anxiety” (for instance, finding a lump on her baby’s head and being referred for a CT scan) but she found it easier to manage these using mindfulness skills. (S3) She also handled her anxiety successfully during an A&E visit with her baby (S9).

CompACT scores

Sally did not achieve statistically reliable improvement in psychological flexibility scores from pre- to post-intervention (please refer to Table 4).

Therapist notes

Sally reported finding the application of skills more difficult when feeling overwhelmed and/or anxious (S2).

Despite fluctuations in her anxiety, Sally engaged in values-congruent activities such as taking Christmas photos with her family (S4) or attending a baby group where she did not know any of the other participants (S6, S7).

Sally developed her own cognitive defusion techniques between sessions, demonstrating excellent understanding of this aspect of psychological flexibility (S5, S10).

Sally could relate to the concept of experiential acceptance and reflect on workable options using ACT-consistent language (S6).

Change Interview

“Also quite a lot of the time I, I think I've started not to become friends with my anxiety, but to kind of think of it as like it's trying to be helpful, and it's just that it's doing that too much. So I kind of, you know, thank it and just pop it in a little box. And then it's not like I'm ignoring it, but it's also not like I'm letting it just fester.” (105-109)

“I think that I'm kind of using mindfulness in my day-to-day life without maybe realising that I'm using it. So an example I used with Kinga before is

Sally spoke about finding it difficult to focus on the positive aspects of a stressful situation due to being preoccupied with the negatives and uncertainties (S3). This suggests that Sally was labelling her experiences and cognitions as positive/negative, which contradicts the contextual approach of ACT.

Sally continued to describe dichotomous thinking and an intense fear of being punished in the later stages of therapy and requested further support with this (S7). One example was her fear that her children would fall ill as punishment for her looking forward to Christmas (S8). Although she acknowledged that debating the truth of these thoughts was unhelpful, she still found herself engaging in this pattern (S9).

In the new year, Sally described feeling uncertain about what to focus on, as striving to create the "perfect Christmas" for her family had given her a sense of purpose. This suggests that she was still primarily focused on achieving goals, rather than following her values, such as family and connection (S10).

Change Interview

when I'm feeding my 6 month old in the middle of the night, I'll kind of, you know, be listening to his breathing. I'll put my finger out so that he can hold my finger and all these things. I feel like we're really connecting and those moments because I'm doing mindfulness whilst feeding him, which is really nice." (116-121)

"We did some practises on kind of accepting the anxiety and putting them in a box or putting them on leaves, and, and they they're going in a stream. So I've been practising the box one and I find that really helpful, so kind of labelling the thoughts, popping them in a box, and then I can come back to them. So it's kind of almost like I'm accepting them, I'm putting them away, but I can come back to them. So it's not like I'm saying bye. I'm kind of saying I can come back to you." (334-340)

"And I think the social anxiety one, I feel like that can go up and down based on kind of what I've got planned in the week. So if I'm meeting new mums, it might go up. But I think... like this week I've spoken to people that I don't normally speak to, and yet it's still quite low. So it must be changing in some way, but I don't know how that works." (476-480)

"It's like when you are starting to not accept anxiety, but when you start kind of just let it run through you a bit more. I think you sort of see

Sally noted that she struggled to apply the skills learned from therapy to health anxiety:

"I think maybe like health anxiety because I find that really difficult with, kind of doing the acceptance, because to me that's such like high stakes, you know, like it's, if something goes wrong there, then it could be catastrophic. So I guess I still find it really difficult to practise all these when it comes to health anxiety. (...) So if I found something on myself now, I know that the things that I've been working on probably wouldn't help, because my brain would just see it as such a huge, like, scary thing that I just don't think I'd be able to kind of just ride the anxiety out." (161-171)

"I'm concerned that if I keep just thanking the anxiety and putting them in a box, that something bad will happen because it's almost like I've not taken the anxiety seriously enough. So I do think that that's probably got a little bit worse, but I guess it would have done because I'm trying something different..." (132-136)

"So I think that feels a little bit more safer for me because I know I can come back to it, it feels more like, you know, the anxiety might not come back to get me as quickly if I can come back to it." (340-342)

more about what you're thinking about, because
you're just accepting the argument, like putting it in
a box, and you see the boxes and you see they're
getting fuller, and you realise kind of what's coming
in your head." (511-515)

Note. Line numbers from the Change Interview transcript are provided in brackets. S denotes session.

Table 33

Are Reported Changes Generally Attributable to Therapy (or Alternatively: to Client Attributes and/or Factors Outside of Therapy)?

Supporting evidence	Refutational evidence
<u>Change Interview / Change Rating Sheet</u> Sally rated all changes but one as somewhat unlikely to have happened without therapy. Sally reported that therapy had helped her incorporate new skills into her busy everyday life: “because having children is so mentally busy, isn’t it, and crazy, it’s like trying to find ways to incorporate all these practises into day-to-day life without... because I find it really hard to just kind of sit and have half an hour with myself. So it’s been really helpful to understand how to do that in like a busy lifestyle.” (42-46) When asked what brought about the observed changes, Sally answered: “I think maybe understanding anxiety a little bit more and kind of understanding what why it’s there, what it’s trying to do. I think for me, being able to understand like the physics of things, if you put it like that, is really helpful, because it helps me kind of be able to rationalise it, I guess. So I think that definitely helps. Learning more and more about anxiety kind of helps me be able to deal with my own.” (278-283) “Yeah, I think it’s both because a lot of the things we spoke about in therapy was like, you know, like being kinder to	<u>Change Interview / Change Rating Sheet</u> Sally rated one of the changes (worrying that her anxiety will come back with full force if she does not take it seriously enough) as “neither likely nor unlikely without therapy.” <i>Attribution: client attributes (this pattern of thinking has been characteristic of Sally for a long time)</i> “Also currently looking into whether I’ve got ADHD, which I think if I found out I did, it would be really positive for me. And I already feel like it’s kind of explaining a lot of my... the way I think and my symptoms and that kind of thing. So I think if I found out I had that, it would explain quite a lot, yeah.” (65-68) <i>Attribution: potential neurodiversity</i> “I’ve only ever done CBT before, and obviously this is very different. So I think it was really helpful to kind of put the two together for me. So use some bits from CBT that I’ve found really helpful and some bits from this that I find really helpful and almost like make my own toolbox out of those two.” (286-289) <i>Attribution: existing skills/CBT tools</i> “I don’t know if this is through therapy or not, but I think reach out to people a bit more.” (290-291) <i>Attribution: unsure whether change was due to therapy</i>

yourself. And I feel like me asking for help is like, a way for me to do that. It's not kind of just letting myself sit with all that pressure and all the stress. It's sort of being kinder and understanding that people do want to help." (300-304)

Sally found psychoeducation on the "emotion curve" helpful in calming herself down and reflected on this in her Change Interview:

"I think I'm able to calm myself down a bit quicker than before. I think because I know now that it's not going to be like a heightened anxiety for, you know, a prolonged period of time. It does normally come down." (101-103)

Therapist notes

Sally reported that after completing the clipboard exercise during the first session, she noticed that she had been using experiential avoidance often and was motivated to change this (S1). She also noticed how much she was missing out on when fused with her thoughts, after completing the "hands as thoughts" exercise (S4). This suggests that Sally was able to relate to ACT terms.

Sally stated after the first session that she already felt that she was developing new skills. For instance, she reported that the experiential exercises had helped her bring her mind back to the present moment, and she was able to recognise judgements in herself as part of introducing cognitive defusion (e.g., sometimes when I judge people, I think I am so rude") (S2).

"Probably the medication. It's probably been a big help."

(308) *Attribution: psychotropic medication*

Therapist notes

Sally's husband recently started a new role with an unpredictable work pattern, which often exacerbated Sally's anxiety (S2). *Attribution: changes in anxiety due to extratherapeutic events*

Sally expressed a desire to explore the potential role of neurodiversity in her presentation implying that understanding her difficulties through the lens of ADHD (rather than ACT principles) could facilitate greater self-acceptance (S7). *Attribution: potential neurodiversity*

Sally reported that her baby's CT scan results had come back as negative (S8). This provided a sense of relief, which may have brought about some positive changes. *Attribution: extratherapeutic events*

As Sally still struggled to implement some ACT principles at the end of therapy (e.g., she demonstrated some rigid, fused thinking and found self-compassion difficult to implement), this implies that changes may be attributable to factors other than therapy. *Attribution: changes due to factors other than therapy*

Sally found the leaves on a stream exercise eye-opening as it helped her realise how much she was missing out on when fused with her thoughts (S3).

As she progressed through the intervention phase, Sally started reflecting on her experiences in more and more ACT-consistent ways, as reflected by her language use and some increase in her flexibility (e.g., adapting home practice to align with her current resources) (S4).

Sally described a “breakthrough” in therapy when she learned to apply cognitive defusion skills to her metacognitive processes. She noted that when applying cognitive defusion skills to anxious thoughts, this often led to fears that she would be punished for “mocking” her thoughts. When reflecting on this issue, she found the insight that “thoughts about thoughts are still thoughts that we can defuse from” helpful (S4).

Sally engaged well with home practice throughout the intervention. Sally was able to personalise some techniques learnt in therapy, for instance, by developing her own cognitive defusion exercises, through imagining filing away thoughts in baskets but not putting lids on baskets so that it did not feel as final (S5) or imagining balloons floating away with her thoughts (S10).

In general, Sally reported being able to manage some difficulties using the skills covered in therapy (S5).

Sally started attending a baby group despite feeling anxious about not knowing other group members, as she realised that attending the group would help with her loneliness (S6). When attending the group, she was able to consider workable action and choose to stay in the group despite her initial urge to leave (S7).

Table 34

Specific Factors (Within and Outside of Therapy) That Contributed to Observed Changes

Supporting evidence (ACT-specific processes/internal factors)	Refutational evidence (ACT either hindering/ineffective or changes are due to common factors)
<u>ACT techniques</u> <i>Change Interview</i> Sally explained that therapy had helped her learn coping strategies: "And also really positive to kind of learn different ways to cope." (39-40) "the actual content [of therapy] I think has been really positive" (362-363) <i>Therapist notes</i> Sally had a good understanding of ACT processes and was able to implement various techniques in her daily life, adapting them to her current circumstances and personalising exercises when needed (please refer to Table 6 for details). Sally was able to recognise experiential avoidance and cognitive fusion in her life and identify the costs of this (e.g., missing out on things) (S1, S3, S4) <i>HAT form</i> Sally described talking about judgements greatly helpful: "Realising that judgements are fuelling my anxiety, both	<u>Therapeutic alliance</u> <i>SRS scores</i> Sally's scores on the SRS ranged between 36.3 and 39.5, indicating strong therapeutic alliance. This suggests that she was satisfied with the therapeutic relationship and the therapist's approach. <i>Change Interview</i> "I guess that there's always like, oh, it's so hard to describe, but almost like there's a friend there. Does that make sense? And it's like you can always confide in that friend. So maybe kind of like supported, I guess." (37-39) "I felt like the relationship was really good. Always really listened to." (392-393) <u>Unhelpful factors</u> <i>Change Interview</i> "I think sometimes the length of the sessions were, I guess quite long, in that they had quite a lot of information in them. But also maybe with being a new mum, quite a lot of the time I'd find it hard to kind of have an hour away from my very needy little boy. So I think if I was to say anything negative, the actual content I think has been really positive, but maybe

judging others and myself. They often cause me to then let my mind wander to worst case scenarios.” (S2) This conversation focused on being able to mindfully recognise and defuse from judgemental thoughts.

Sally rated learning mindfulness techniques as “extremely helpful” (S2), linked them to parenting, and expressed a desire to pass these skills on to her children: “It was helpful to find practical ways where I can practice these tools in a way that helps me but also allows me to be the best mum I can be.” (S3)

Sally appreciated the idea that she could use cognitive defusion skills on metacognitive beliefs too and rated this event as extremely helpful: “Using the tools on my secondary thoughts, for example what if using thought diffusion causes these things to happen” (S4)

Sally found it greatly helpful to learn about the impact of emotions, which had a normalising effect: “It allowed me to understand how I can manage my emotions better and that it is totally normal to have a huge range of emotions at any time” (S5). She also reported benefitting from our conversation related to workable options: “Discussing how reacting to emotions differently can be beneficial and looking at examples of these (...) allowed me to understand where I might be avoiding certain emotions and also being able to positively change my reaction” (S6)

the amount of content in each session, meaning they're quite long, especially if I do have ADHD, obviously that's quite difficult for me to focus for that long.” (359-365) *Attribution: participant burden*

HAT form

Sally identified a slightly hindering event in therapy: “The only negative was that the session was quite long, so although I found the information really interesting, it was quite draining and I will need to process what I have heard today to make sure I’ve understood it” (S5)

Nonspecific factors

Change Interview

“because having children is so mentally busy, isn't it, and crazy, it's like trying to find ways to incorporate all these practises into day-to-day life without... because I find it really hard to just kind of sit and have half an hour with myself. So it's been really helpful to understand how to do that in like a busy lifestyle.” (42-46) *Attribution: gaining generalisable skills, not specific to ACT*

“But when they sort of come into my head, I'm definitely trying to use all the coping mechanisms that we learnt about in this therapy. I wouldn't say that they always work, but it's good to know that I do go back to them.” (56-58) *Attribution: skills not always effective or consistently remembered*

Sally rated “Understanding the difference between working towards goals and living by your values. Also understanding what my values are” as greatly helpful. (S8)

Our continued conversation about values and committed action helped Sally “understand what areas I need to concentrate on eg making time for self care/friendships” (S9)

Sally continued to find mindfulness techniques helpful (S9)

Sally found the overall recap of the course content and making plans for the continued use of skills as extremely helpful: “It was really helpful going over each session and discussing what areas I may need to work on and some ideas on how I can make these work for me” (S10)

Therapist notes

Throughout therapy, Sally explained that some activities had helped her reflect on patterns of behaviour that she was engaging in (e.g., judgements, experiential avoidance), which facilitated motivation to change these patterns.

Attribution: client readiness

HAT form

Sally rated “learning new techniques” as extremely helpful. (S4) *Attribution: generic statement, not specific to ACT*

Sally found talking about self-care and self-compassion greatly helpful, and stated “It made me realise that being kind to myself and allowing myself time for me will make me a better parent” (S7) *Attribution: not specific to ACT*

“I really enjoyed the ‘letter to myself’ activity, as I found it really helpful and reflective and I felt really positive afterwards” (S10) *Attribution: not specific to ACT*

Note. SRS stands for Session Rating Scale. HAT refers to Helpful Aspects of Therapy.

Sally's Briefs

Affirmative Brief. The affirmative brief proposes the presence of clear links between therapy process and outcome, and requires at least two of the following pieces of evidence (Elliott, 2002):

1. Retrospective attribution (client attributes reported changes to therapy – e.g., low “likelihood without therapy” ratings)
2. Process-outcome mapping (the content of posttherapy changes correspond to specific aspects, events, or processes of therapy)
3. Change in stable client problems (e.g., longstanding, chronic difficulties)
4. Event-shift sequences (significant therapy events preceding a stable shift in client problems, especially when the nature of the therapy process and the resulting change are logically connected)

Changes Across Therapy. Sally's scores reliably improved on one of the problems (social anxiety) identified on the PQ. This indicates that her anxiety somewhat reduced throughout the intervention period, although her final score still fell in the clinical range. This reduction in anxiety may be attributable to Sally's increased PF that allowed her to tolerate uncomfortable thoughts and emotions, contact the present moment, and engage in meaningful, values-congruent action. This is supported by process notes, since throughout therapy, Sally's mindfulness skills improved considerably, and she also reported being able to attend a baby group despite feeling anxious and wanting to leave. This clearly evidences increased experiential acceptance and committed action. Moreover, Sally's ability to develop her own cognitive defusion skills suggest excellent engagement with and understanding of ACT concepts, which further supports the claim that her psychological flexibility may have increased, even if this is not supported by psychometric measures. Therefore, we can hypothesise that ACT could have caused the reported changes for Sally.

Retrospective Attribution. Retrospective attribution requires clients to attribute any observed meaningful changes to therapy in the Change Interview and

on the Change Rating Sheet. Sally rated all changes but one as “somewhat unlikely” without therapy, which demonstrates clear retrospective attribution.

Therapist Attributed These Changes to Therapy. We should consider whether the therapist attributes any client changes to therapy using their knowledge of the client, their presentation, and discussions within sessions. Sally demonstrated good engagement with home practice throughout the intervention. She spoke about using mindfulness in everyday situations such as in the shower or whilst feeding her baby, and engaged in meaningful, albeit anxiety-inducing activities. Additionally, she showed greater flexibility in responding to distressing events, such as having to take her baby to A&E following a viral infection, or attending a CT scan with him.

Process-Outcome Mapping. Process-outcome mapping refers to information about significant events corresponding with aspects or processes within therapy. Sally stated that specific aspects of therapy, such as mindfulness and acceptance, resonated with her, and were integrated into her daily life. A key change she experienced (reduced social anxiety and increased confidence to attend a baby group) may be linked to her ability to mindfully observe and open up to her emotions while engaging in committed action – all of which are core ACT processes. In the Change Interview, she explicitly linked this change to our conversations focused on defusing from judgements: “I think, I think there's different things that have made it better. So one is definitely talking about judgement in the therapy” (555-556). However, more robust conclusions could be drawn if PF scores had changed between pre- and post-intervention and/or had been monitored at regular intervals throughout the intervention phase.

Changes in Stable Problems. Although baseline scores were not obtained, Sally rated most of her problems on the PQ as chronic and long-standing (Table 1). Sally has struggled with anxiety and depression for over 15 years, and in the Change Interview, she described herself as a “worrier” (82). However, her

newfound ability to attend a baby group and meet other mothers for coffee suggests a change in this stable problem. Given the stable, chronic nature of her difficulties, it is reasonable to attribute this improvement to the ACT intervention.

Changes Not Due To Relational Artefacts. Arguably, it is unlikely that the observed changes were due to relational artefacts (i.e., the client emphasising change to please the therapist), as the Change Interview was conducted by a researcher independent of the research team to decrease demand characteristics. Additionally, Sally's scores on sessional measures fluctuated, and Sally felt able to provide higher problem ratings on the PQ compared to previous weeks, suggesting no deliberate attempt to overemphasise improvements. However, the consistently high SRS scores indicate a strong therapeutic alliance from the start, rather than a gradual increase over time. Sally also mentioned the positive nature of the therapeutic relationship in her Change Interview. However, it remains unclear whether in-person sessions would have influenced this dynamic differently, as face-to-face delivery may have required greater effort and been associated with a higher participant burden compared to remote appointments – which was something that Sally had noted regardless in her Change Interview. Nonetheless, relational factors between the therapist and Sally are unlikely to fully account for the improvements identified over the course of the therapy.

Changes Not Due To Expectancy Artefacts. Expectancy artefacts refer to changes resulting from client expectations (therapy “scripts”) or wishful thinking. Sally reported being somewhat or very surprised by three out of five of the observed changes and used idiosyncratic language to describe the importance and personal meaning of each change (e.g., when reflecting on changes to her mindfulness practice as a result of therapy). She also contrasted her experience of ACT with previous CBT, noting that she was able to integrate these approaches to create her own “toolbox.” While prior therapy experience may have shaped her expectations, her session 1 discussion of hopes and fears suggests otherwise; she stated that her main hope was simply to find the skills covered helpful – a very

generic statement. This indicates that Sally did not have particular hopes or expectations from therapy, making it unlikely that expectancy artefacts played a significant role in the changes observed.

Statistical Artefacts. Clinical cut-off scores were either obtained from literature (e.g., Elliott et al., 2016) or calculated using reference data from other research papers investigating clinical and/or non-clinical samples. However, this means that cut-off values for reliable change are approximate as their calculation was based on data from various authors. Therefore, we cannot exclude the possibility that Type II errors could be responsible for the lack of significant change in some measures.

Conclusion

This affirmative case proposes that

- There was substantial change in Sally's difficulties
- Sally attributed these changes to therapy
- The therapist attributed most of these changes to therapy
- This evidence contradicts sceptic non-therapy reasons for change and/or lack of change.

This evidence provides a basis for you to support the case that Sally changed substantially during therapy and infer that this change was caused by the ACT intervention.

Sceptic Brief. The sceptic case aims to counter the argument that Sally changed substantially during therapy and/or that this change was due to the ACT intervention. It also aims to highlight nontherapy processes that may explain observed changes (Elliott, 2002). Relevant pieces of evidence for Sally will be explored below.

Trivial/negative changes (illusory or artefactual changes). Baseline scores for Sally's difficulties were not obtained. Consequently, her pre-therapy scores alone are insufficient to determine whether her symptoms and distress would have remained stable over time or improved without therapy, as some clients experience spontaneous remission over time. She did not demonstrate reliable changes on any of the validated psychometric measures, suggesting that the effectiveness of ACT may have been limited. Her lack of reliable change on the CompACT, despite her apparent engagement with ACT skills (e.g., cognitive defusion), suggests that while she may have cognitively understood the skills, she did not consistently apply them in practice. This indicates that meaningful change may not have occurred or may have been trivial. Additionally, some of Sally's problem ratings on the PQ were higher at the end of therapy than at the initial time point when the problem was first rated, or even if they decreased, they remained in the clinical range (Table 1). This suggests that ACT may not have resulted in idiographic changes either. Interestingly, Sally rated some of the observed changes as "moderately" (rather than "very" or "extremely") important, which implies that some of these changes may have been trivial. This is further supported by Sally's use of ambiguous language when describing changes, such as "I guess" or "I suppose."

Statistical Artefacts. As statistical analysis relied on reference data reported in previous studies, statistical errors cannot be ruled out. Therefore, the reliable change in Sally's social anxiety ratings on the PQ may be partially attributed to statistical inaccuracy. Also, since participants completed the pre- and post-intervention questionnaires remotely, it was not possible to verify whether they understood each item and completed the questionnaires independently, rather than seeking insight from others such as family members. This may have been particularly important in Sally's case, given her potential neurodiversity that often led her to interpret statements very literally. Neurodiverse individuals often interpret language literally, which can affect the accuracy of their responses on psychometric measures (Royal College of Psychiatrists, 2011; Vicente et al.,

2023). Furthermore, the reliability and validity of distress and wellbeing measures may be questionable. When individuals are asked to report on their past emotions or overall well-being, they frequently rely on their current affective state rather than providing a balanced evaluation of recent events (Robinson & Clore, 2002). This implies that responses on instruments such as the CORE or WEMWBS may be influenced by the respondents' mood at the moment of completion, even if instructions ask them to consider a longer time frame.

Relational Artefacts. Elliott (2002) suggests specific changes reported by Sally must be assessed carefully, since they may reflect a desire to please or impress the therapist/researcher. The strong therapeutic alliance, as demonstrated by Sally's SRS scores, might have played a role in her reported outcomes. Notably, the first thing she mentioned in the Change Interview when asked about her experience of therapy also highlighted a relational aspect: "It's almost felt like (...) there's a friend there. (...) And it's like you can always confide in that friend." (37-39) Yet, Sally was able to provide an honest account of unhelpful events in therapy (e.g., the length of sessions and the amount of information covered).

Expectancy Artefacts. Sally was quite psychologically minded and motivated to engage in therapy. Having previously completed CBT, she may have held expectations regarding the process and effectiveness of therapy. She explicitly stated that she hoped to gain helpful skills from therapy, indicating a clear expectation. Moreover, in session 1, when discussing Sally's hopes from therapy, as well as when reflecting on her experiences during the Change Interview, her narratives and language use reflect some shared cultural schemas about therapy, such as "learning different ways to cope" or "opening up may feel vulnerable." These descriptions also feel somewhat vague and intellectualised.

The remaining nontherapy explanations suggest that "change has occurred but that factors other than therapy are responsible" (Elliott, 2002, p. 13), such as:

self-correction, life events, psychobiological factors, or reactive effects of research participation.

Self-correction and Other Factors. This potential explanation proposes that improvements are caused by self-help outside of therapy. Sally explained that she was able to integrate new ACT concepts with previously acquired CBT skills, suggesting that she was utilising some self-correction strategies. In session 2, she also stated that she had talked to her husband about therapy, which may have facilitated change by deepening her understanding of key concepts covered in sessions. This also implies that existing social support that may have contributed to outcomes. Furthermore, in the Change Interview, Sally reported that mindfulness had become integral to her life, and she was practising it automatically. However, a key characteristic of mindfulness is "consciously bringing awareness to your here-and-now experience with openness, interest and receptiveness" (Harris, 2006, p. 2). While Sally's approach may not align with ACT's understanding of mindfulness, it gave her an effective coping strategy and must be mentioned as a self-correction tool. However, Sally's description of mindfulness as an "automatic" skill could have benefitted from further exploration in the Change Interview, as without this, definitive claims cannot be made.

Life Events. Sally's husband started a new job, with varying shift patterns, at the start of the intervention. This may have facilitated therapeutic change by necessitating that Sally overcome and manage her anxiety to meet situational demands. Additionally, her daughter recently started school, which Sally mentioned in the Change Interview, noting that this transition required her to interact with others more. This suggests that exposure in itself may have improved her social anxiety.

Psychobiological Factors. Although not explicitly explored with Sally, hormonal changes in the perinatal period are common and may contribute to fluctuations in mood and anxiety. In addition, Sally's medication was increased

approximately a month before the Change Interview, which may have impacted her perception of therapy and her progress. When asked about the attribution of changes, Sally explicitly mentioned medication. Her attitude toward medication also shifted, as she reflected in the Change Interview: “I think what has happened before is I've gone on medication, and like six months later thought, oh, I'm feeling better, I'm going to come off it now. Whereas this time I've been like, no, I'm staying on it because if I have to take it forever and feel a little bit better, then that's better than kind of trying to come off it too quickly. So I think that's been maybe something that's changed is that I've stayed on it and it's kind of kept me level.” (312-317) This change in perspective may be associated with greater adherence to treatment, potentially enhancing any observed benefits.

Reactive Effects of Research Participation. Sally demonstrated an interest in research participation; however, she noted during the final session that she would not like to receive a summary of the findings once they had been written up. Additionally, she identified some limitations of the protocol (e.g., the length of sessions and the amount of information covered) as unhelpful aspects and provided some suggestions for improving the therapy. This suggests that she was engaging with the study from a research-oriented perspective.

Lack of Event-Shift Sequences. Sally's scores on weekly measures of distress and wellbeing fluctuated throughout the intervention. We would expect significant events in therapy to cause significant changes in difficulties, but in Sally's case, there was no evidence for this, despite Sally's reports of helpful within-session events as indicated on the HAT form.

Conclusion

This sceptic case proposes that

- There was no substantial change in Sally's difficulties
- Sally did not attribute these changes to therapy
- Any observed changes were attributable to extra-therapeutic factors

- This evidence contradicts evidence presented by the affirmative case.

This evidence provides a basis for you to reject the case that Sally changed substantially during therapy and infer that any changes were caused by extra-therapeutic factors.

Extended Discussion

This study aimed to investigate the effectiveness and change mechanisms of ACT for perinatal women experiencing psychological distress, answering three research questions:

1. Does an ACT intervention lead to reliable changes in participants' psychological flexibility, wellbeing, and bonding with their babies?
2. Do personally meaningful changes occur for participants over the course of the intervention?
3. What factors are these changes attributable to?

Study Findings and Their Relationship to Existing Literature

Effectiveness

Did Meaningful Changes Occur? The effectiveness of ACT for mood and anxiety disorders is supported by meta-analyses (Bai et al., 2020; Ferreira et al., 2022; Gloster et al., 2020). Favourable effects on wellbeing, quality of life, and PF have also been documented (Fang et al., 2023; Van Agteren et al., 2021; Zhang et al., 2023).

Despite a strong rationale for its use in the perinatal period (Bonacquisti et al., 2017; Fonseca et al., 2018), ACT remains under-researched in this context. Some studies have reported promising outcomes from ACT-based interventions in perinatal samples, including improved symptomatology and PF (Hosseini et al., 2020; Hosseinian et al., 2021; Howard et al., 2023; Tunnell et al., 2019; Vakilian et al., 2019; Waters et al., 2020). Yet, many studies lacked follow-up assessments (Hosseinian et al., 2021), had low intervention uptake (Howard et al., 2023), or failed to demonstrate sustained treatment effects (Vakilian et al., 2019). Additionally, several interventions integrated ACT with components from other third-wave approaches, limiting clarity around ACT's unique contribution (Grunberg et al., 2022).

The active ingredients of ACT in the perinatal population also remain unclear. For example, Bonacquisti et al. (2024) found that women reporting greater awareness, acceptance, and defusion experienced better wellbeing, while higher levels of acceptance and defusion were associated with reduced distress, regardless of different covariates (e.g., income, relationship status, parity, and engagement in psychiatric treatment). Similarly, although change processes were not formally evaluated, Tunnell et al. (2019) highlighted the potential role of non-specific factors, such as the therapeutic alliance, in the observed outcomes, besides ACT processes. However, most existing studies focused on a limited number of ACT processes, primarily acceptance and defusion (Bonacquisti et al., 2024), leaving other components underexplored.

Nevertheless, findings from the present study are largely in line with existing literature. In this study, wellbeing and PF reliably increased and symptomatology decreased for two out of three participants. Adjudication results indicated that two clients improved (one of whom recovered) whilst one did not change. Based on psychometric scores and qualitative narratives, participants generally reported that higher PF was accompanied by lower distress and symptomatology and higher wellbeing post-intervention. This is consistent with literature suggesting that although ACT does not directly target disorder-specific symptoms, increased PF often corresponds with lower symptomatology and higher wellbeing (Hayes et al., 2012) as PF is thought to mediate the impact of ACT on symptomatology and/or acts as a buffer against psychological distress (Fledderus et al., 2013; Leonidou et al., 2019; Østergaard et al., 2020; Trindade et al., 2020). The significant increase in participants' PF scores also supports the validity of the intervention, since this is the key treatment target in ACT (Hayes et al., 1999).

The third client, Sally, did not change, and it was hypothesised that her potential neurodiversity may have played a role in this. Research demonstrates that the six core ACT processes can help individuals with ADHD respond to internal experiences of shame and failure better (Kiraz & Sertçelik, 2021), reduce the urge to mask or camouflage ADHD traits (Mylett, 2022), and replace maladaptive emotion regulation strategies (Soler-Gutiérrez et al., 2023).

Additionally, the behavioural interventions in ACT have been linked to improvements in executive functioning (Mitchell et al., 2017) and increased intrinsic motivation (Boot et al., 2020; Sedgwick et al., 2019). Moreover, Carroll et al. (2023) found that a group ACT intervention targeting emotional regulation helped improve PF, depression and anxiety symptomatology, and quality of life in adults with ADHD. Therefore, Sally's outcomes seem to contradict prior research.

However, emerging evidence suggests that certain ACT components, such as mindfulness and defusion, may be particularly abstract and thus more difficult for some neurodivergent individuals to engage with effectively. For instance, Janssen et al. (2020) evaluated a mindfulness-based cognitive therapy intervention for adults with ADHD and found no post-intervention increase in mindfulness skills. The authors proposed that these abstract skills may need longer to develop in this population, which could explain why Sally did not show significant changes over the 10-week intervention. Moreover, those who disengaged from the aforementioned study generally reported greater executive and general dysfunction, and poorer physical and mental health (Janssen et al., 2020). Therefore, Sally's chronic mental health difficulties may partly explain her non-improvement. This is corroborated by feedback by one of the judges who hypothesised that Sally's internal sense of punishment and criticism remained high, demonstrating a lack of inner psychological change despite some surface-level behavioural change. Lastly, as Sally was still awaiting formal ADHD assessment, her level of executive dysfunction was unknown, yet this may have served as a potential barrier to meaningful change.

What specific factors were changes attributable to? In the current study, adjudicators predominantly attributed observed changes to specific ACT processes. In Molly's case, judges estimated that 60-85% of the observed change was due to ACT-specific factors, while for Rachel, this range was 40-60%, and for Sally, it was 20-40% (although she was classified as having achieved no change overall). These figures exceed typical estimates for the influence of specific factors in psychotherapy research, which have been reported to account for approximately

30% of change (Wampold, 2015). Therefore, it is possible that additional elements, such as the therapist's allegiance to ACT and modelling of PF, delivery, or relational factors such as warmth and empathy, amplified the impact of ACT-specific elements.

The most influential ACT processes identified were mindfulness, cognitive defusion, and acceptance. These components are well supported in the literature as mediators in treatment outcomes (Ashton, 2024; Bonacquisti et al., 2024; Hämäläinen et al., 2025; Macri & Rogge, 2024; Stockton et al., 2019; Vasiliou et al., 2022; Villate et al., 2016). However, a recent meta-analysis found no significant mediational effects for cognitive defusion (Ren et al., 2019), and the authors attributed this to the potential overlap between ACT and second-wave CBT used in the control condition. Additionally, Ren et al. (2019) noted limited data on committed action and self-as-context, as each was only formally explored in a single study – reflecting a broader pattern of imbalanced focus on PF components in research (Macri & Rogge, 2024; Stockton et al., 2019). Moreover, recent findings indicate that although experiential avoidance appears to be a key change process in ACT, its impact on outcomes might become more pronounced following initial mood improvements, facilitating further therapeutic change (Van Eeden, 2024). The present study could not evaluate this claim since none of the participants presented with pronounced mood-related difficulties.

Moreover, while mindfulness emerged as an important vehicle for therapeutic change, it is not unique to ACT. Therefore, other approaches with an explicit focus on mindfulness might have produced similar outcomes. For instance, one judge noted that for Rachel, change was less clearly linked to the behavioural components of ACT (values and committed action), suggesting that an approach like mindfulness-based cognitive therapy might have been equally effective. Nevertheless, prioritising treatment mechanisms over specific therapeutic models may be a more efficient and cost-effective way to improve perinatal mental health outcomes (Bonacquisti et al., 2024).

Beyond ACT-specific factors, adjudicators highlighted influential common and extra-therapeutic factors. These included client expectations, self-correction

efforts, life events, supportive interpersonal relationships, time passing, medication, and safety and trust in the therapeutic relationship (Mulder et al., 2017).

For instance, some clients entered the study with previous experiences of therapy, which may have created expectations regarding intervention effectiveness and perhaps impacted motivation for engagement, thus acting as an extra-therapeutic influence. Moreover, some clients expressed feeling particularly vulnerable when the intervention was offered, meaning that they felt compelled to take any opportunity that may help them with their distress.

Furthermore, the timing of the intervention likely mirrored challenges in real-life clinical practice. Rachel noted that she was offered the therapy almost a year after experiencing a traumatic birth – which was her original concern that prompted the psychology referral. It could be argued that the intervention may have made a bigger difference had it been offered sooner, since Rachel noted in the CI that she would have benefitted from this sooner, and that the time passing since the trauma may have already had a positive impact on outcomes.

Individual traits that seemed to shape outcomes included client openness, motivation, readiness for change, established coping strategies (e.g., using mindfulness independently), and support from family members/friends (e.g., help with childcare to facilitate attendance at sessions).

The therapeutic relationship was another important mechanism of change. According to the contextual model of common factors (Wampold, 2001, 2015; Wampold & Imel, 2015), a basic bond between therapist and client is seen as a prerequisite to successful and effective therapeutic work (Meier & Feeley, 2022). This operates through three pathways. The first involves the authenticity and genuineness between therapist and client (Gelso, 2014), providing clients – especially those with unsatisfactory social relationships – a healing connection to caring, empathetic other. The second pathway entails the therapist's ability to instill hope by providing a coherent formulation of the client's difficulties and tools to manage them, enhancing the client's sense of self-efficacy and belief in change (Finsrud et al., 2021). The third pathway involves the specific ingredients of the therapy, which activate the second pathway by building expectations and directly

facilitating change (Wampold, 2015). The interrelatedness of these pathways suggests that specific and common factors are inextricably linked, which corresponds with present findings.

Overall, the current study demonstrates some evidence of the transferability of the effectiveness of ACT regardless of client presentation. Two of the three clients demonstrated reliable change in some areas of symptomatology, distress, wellbeing, and PF, as well as on idiographic problem ratings, with ACT-specific processes, common factors, and extra-therapeutic influences identified as having a role in change.

Acceptability

Sekhon et al. (2017) defined acceptability as a “multi-faceted construct that reflects the extent to which people delivering or receiving a healthcare intervention consider it to be appropriate, based on anticipated or experiential cognitive and emotional responses to the intervention” (p. 4). According to their Theoretical Framework of Acceptability (TFA; Sekhon et al., 2017), acceptability encompasses seven component constructs: affective attitude, burden, ethicality, intervention coherence, opportunity costs, and perceived effectiveness. Although these concepts were not explicitly explored in the present study, participants’ CI narratives implicitly reflected some of these dimensions, therefore these are presented below.

Affective Attitude. Affective attitude refers to how clients feel about the intervention.

Participant responses reflected generally positive affective attitudes towards the ACT intervention. For example, Molly described ACT as a “massive blessing,” explaining that although she was initially unsure about participating, she was keen to receive support and therefore decided to try the therapy. She was unfamiliar with ACT, but she eventually concluded that “it turned out being such an amazing thing for me”, providing a sense of freedom she had previously considered unattainable.

Participants also reported positive feelings toward the therapist, which contributed to a sense of safety and support. The therapist's flexibility, normalising/validating stance, and therapeutic self-disclosure facilitated honesty and openness. Rachel also appreciated that the intervention had allowed her to take some time and focus solely on herself despite being a busy mother. She also found the therapist easy to talk to and understanding of the challenges of working with new parents. Moreover, while some sessions elicited difficult emotions, she noted that this still felt helpful and manageable. Similarly, Sally described feeling supported by the therapist throughout the intervention and almost saw her as a "friend." Participants also appreciated the experiential nature of the intervention, particularly the opportunity to complete exercises collaboratively with the facilitator. This suggests that the therapeutic relationship itself was a catalyst for PF, modelling acceptance and thus allowing for the expression of difficult thoughts and emotions.

These experiences indicate that a strong therapeutic alliance, combined with a flexible and compassionate approach, can contribute to increased acceptability through participants' positive affective attitude. These findings align with previous research demonstrating that the therapeutic relationship partly influenced outcomes in other populations (Macleod & Elliott, 2014; Robinson et al., 2023; Stephen et al., 2011) and enhanced acceptability in third-wave approaches in the perinatal period (Simko et al., 2023).

Burden. Burden refers to the effort associated with taking part in the intervention, including time, expense, cognitive load and emotional effort, or practical demands.

Cognitive effort was mentioned by two participants. Molly described some sessions as an "information overload" and stated, "when you're having a video call, you're trying to concentrate... you're trying to not waste the other person's time." Therefore, she found home practice particularly helpful as this allowed her to deepen her understanding of ACT at her own pace. Similarly, Sally found the sessions cognitively demanding, requiring sustained focus and the ability to take in

lots of information. This was particularly difficult to her considering her potential ADHD diagnosis. She suggested that shorter, more segmented sessions might have been more appropriate. Both Rachel and Sally highlighted logistical challenges, such finding time to attend sessions. Rachel also reflected on the fact that sessions sometimes felt emotionally effortful. Nonetheless, all three participants reported that they found incorporating mindfulness into daily routines helpful and sustainable. These reflections suggest that burden can be reduced by tailoring the intervention to participants' life contexts, for instance, through placing emphasis on simple, flexible home practice tasks that align with clients' needs.

Ethicality. Ethicality refers to the extent to which the intervention aligns with clients' values and belief systems.

Participants reported that ACT fitted with their personal values, particularly their desire to be good parents. More generally, Molly explained "I was receptive towards the type of therapy because of the type of person that I am," which suggests a strong alignment between her and the approach. She reflected that many experiential exercises (especially those involving mindfulness) "sat well with her," and recognised some similarity between the concept of values in ACT and some of her pre-existing religious beliefs.

However, ethicality is often reflected in narratives that explain how the intervention challenged participants' existing worldviews. For example, Molly reportedly struggled with the idea of not having control, but therapy helped her realise that letting go of control was acceptable. She also felt able to challenge some of her thoughts related to parenthood, such as the belief that as a parent, one should not feel anger or sadness. ACT taught her that these emotions were acceptable. Similarly, Rachel explained, "I wouldn't have done this before... I wouldn't have stopped and thought about why am I reacting this way or why am I thinking this and what's really going on. I don't think I would have given myself that little bit of time." She also shared an example of adopting a self-as-context perspective, as opposed to her previous view on emotions: "And we did a bit, quite a lot of work on the idea of emotion not being... that it's not you, essentially, you

are not those things. They're just passing through when they're happening. (...) So I think that's also been helpful because that's definitely something I would have done in the past because (...) the anxious parts of my brain will just convince me that everything that I'm hearing in my head is true, when it's not."

Together, these accounts suggest that ACT aligned with participants' values, while also encouraging them to consider alternative perspectives. It is important to consider clients' prior experiences in therapy, as these may shape their views on ethicality. For instance, whilst CBT focuses on challenging the content of beliefs and changing maladaptive cognitions or "thinking errors" (Beck, 1976; Ellis, 1962), ACT targets one's relationship to those beliefs, without debating their accuracy. Therefore, engagement in ACT may require participant openness to different, often counterintuitive, ways of relating to their inner experiences.

Intervention Coherence. Intervention coherence refers to the extent to which the intervention (its intended aim, mechanisms of change, and the fit between its components) is understandable to clients.

The first session included an explanation of ACT and the six PF components. Rachel reflected on this experience in the CI, noting that the "hexaflex" initially felt alien to her but made sense quickly due to its structured presentation. Moreover, she appreciated that the intervention was specifically tailored to the perinatal period, rather than taking a general approach. She also explained that the techniques made sense to her, were memorable, and applicable to her life and difficulties: "I felt like I came away from each session feeling like I'd definitely learnt something and there was something that I could try and practise, even if it was just one thing out of quite a few different things that we talked about." This suggests a strong understanding of the intervention's rationale and components.

Molly and Sally also recalled specific techniques that they were able to utilise between sessions, as well as post-intervention. Notably, Sally developed her own cognitive defusion techniques, which reflects a strong understanding of the underlying principles. A quote from Molly during the CI also represents a good

understanding of acceptance and defusion: “There are no negative thoughts, just let the thoughts come and let them go. They have no bearing on how you need to live your life.”

However, some elements of the intervention were perhaps less well understood. For example, Molly explained in the CI that she would have preferred to focus more on her specific compulsions, which were still present after the intervention. This may reflect a misconception regarding the aims of ACT, and an expectation to eliminate symptoms. Similarly, despite her excellent engagement with cognitive defusion, Sally reflected in her CI, “I guess I’m concerned that if I keep just thanking the anxiety and putting them in a box, that something bad will happen because it’s almost like I’ve not taken the anxiety seriously enough.” This may suggest that although she understood the technique intellectually, she still saw her anxiety as threatening and perhaps had some uncertainty about whether defusion was a safe or appropriate strategy to manage this.

Overall, all three participants engaged well with the intervention and found ways to incorporate specific strategies into their lives, indicating generally high intervention coherence. However, potential misunderstandings highlight the importance of revisiting and clarifying key concepts throughout the intervention.

Opportunity Costs. Opportunity costs reflect how much individuals must give up other benefits, profits, or values to participate in the intervention.

In this study, opportunity costs were primarily related to time, relational factors, or emotional investment. For example, Rachel had just returned to work from maternity leave and found it challenging to balance therapy alongside other commitments such as work and childcare, especially since sessions were limited to the therapist’s availability on study days. Therefore, Rachel had to choose between various priorities to attend the intervention.

While none of the participants reported significant practical or financial costs (perhaps because the intervention was delivered remotely), childcare was an ongoing consideration, and some participants occasionally attended sessions with their babies present. When sessions had to be cancelled, this was usually due to

issues around childcare or illness (apart from pre-booked holidays in some cases). Moreover, Sally explicitly stated in the CI, “quite a lot of the time I'd find it hard to kind of have an hour away from my very needy little boy”, suggesting that attending the sessions meant that she had to sacrifice valuable time with her baby.

Rachel also spoke about relational opportunity costs. She noted that although she had gained insight through therapy, interactions with others who had not shared this experience often felt difficult or alienating. This highlights that sometimes, when an intervention impacts participants' self-awareness or values in ways that conflict with the participant's surrounding context, this can be experienced as an opportunity cost.

Perceived Effectiveness. Perceived effectiveness refers to the extent to which clients believe that the intervention is likely to achieve its intended purpose.

In this study, all three participants reported finding the ACT intervention helpful or useful and described a general sense of feeling “better” or “calmer.” Although these outcomes would be classified as emotional, rather than behavioural goals (Harris, 2019), they are nonetheless meaningful to clients. Two participants also reported symptom reduction, which, although not the primary aim of ACT, is a common phenomenon. For example, Molly noted that while her compulsions were still present, they had become less intense. Similarly, Rachel described a reduction in the intensity and frequency of her trauma symptoms such as nightmares, flashbacks, and episodes of derealisation, and importantly, when these symptoms did occur, she felt better equipped to cope with them. Additionally, all three participants largely attributed meaningful changes to therapy in their CI.

In terms of specific ACT processes, Rachel reflected on the effectiveness of present moment awareness. She noticed that she had become more aware of her reactions, which made her able to pause and think about what is happening in each moment. Sally expressed some reservations about the intervention's effectiveness, as she was still seeking an explanation for her difficulties and awaiting an ADHD assessment. Yet, there is some evidence that she became able

to calm herself down more quickly and began to view anxiety as a form of “unhelpful help,” suggesting a shift in her relationship with her private experiences.

Self-Efficacy. Self-efficacy refers to clients’ confidence in their ability to perform the behaviours required to engage in the intervention.

In this study, participants generally demonstrated high self-efficacy, as evidenced by their good engagement with home practice and their ability to recall and apply specific skills post-intervention. Practising experiential exercises with the therapist during sessions appeared to enhance their confidence, and participants consistently reported feeling able to practise techniques between sessions. This sometimes contrasted their experiences with previous therapies, where specific skills or techniques were not retained or not practised post-intervention. For instance, Molly stated “My only thing that I would want out of this is that I would learn tips or skills that I could keep using, because everything I've learned before I forget about it, or it just doesn't seem to help me as much as it did when I was in the intensive therapy. Whereas this, I can definitely say it's provided me with lasting skills and skills that genuinely help me and that I find very easy to use.”

During the CI, participants often provided specific examples illustrating their ability to apply the skills in real-life contexts. For instance, Molly described using the thoughts on the cloud technique and thought distortion whilst feeding her baby. She also noted that she needed less reassurance from others due to adopting a more self-compassionate inner dialogue. Sally also explained that mindfulness had become “embedded” in her routine and that she regularly practised during feeding times, whereas more generally, Rachel noticed that her ability to “stop and think” had increased.

Overall, these findings evidence high self-efficacy among participants, maybe unsurprisingly, given the experiential nature of ACT and its emphasis on broadly applicable, practical skills. This aligns with previous research showing that, for approximately 40% of participants, improvements, including behavioural changes such as increased physical activity, were maintained one year post-

intervention (Casey et al., 2020). Therefore, ACT's hands-on, experiential components may support lasting change.

Clinical Implications

This study presents initial idiographic evidence for the efficacy and process mechanisms of ACT in the perinatal population – thus contributing to an important early stage of developing and evaluating complex interventions (Skivington et al., 2021).

Using the HSCED, specific components of ACT – notably, mindfulness, cognitive defusion, and acceptance – were identified as putative change mechanisms. However, the protocol introduced values and committed action only in Sessions 8 and 9, potentially limiting participants' opportunities to consolidate and reinforce behavioural changes. Since ACT aims to promote behavioural change (Hayes et al., 2012c), integrating these elements sooner may enhance outcomes by maximising clinical gains and supporting meaningful change. This is crucial in the perinatal context, where clients often experience low self-efficacy (Brazeau et al., 2018) and role and identity changes (Duncan & Irwin, 2004; Javadifar et al., 2016), making it difficult to connect to their agency and individuality (Bonacquisti et al., 2017). Clarifying values and promoting committed action can help clients engage in value-consistent behaviours and integrate their new role as a parent into their identity (Bonacquisti et al., 2017).

Findings also offer tentative insights into adapting ACT for neurodivergent clients, since understanding their experiences is crucial for creating feasible and acceptable neurodiversity-friendly interventions (Chapman & Botha, 2023). Sally, the participant with suspected ADHD, showed no change. In her CI, she reflected on difficulties with sustaining attention during long appointments: “the actual content I think has been really positive, but maybe the amount of content in each session, meaning they're quite long, especially if I do have ADHD, obviously that's quite difficult for me to focus for that long.” This aligns with previous research suggesting that longer interventions with shorter, less content-heavy sessions, and allowing more time for repetition, consolidation, and skills practice, may be

particularly beneficial in this population (Janssen et al., 2020; Moëll et al., 2015; Seery et al., 2023). Moreover, neurodivergent participants often report burden associated with homework, therefore, reducing or making these voluntary may also increase adherence (Janssen et al., 2020; Seery et al., 2023). Lastly, neurodiversity may pose difficulties to implementing skills in real life due to executive difficulties such as “wandering minds” and competing priorities (Nordby et al., 2025). Therefore, greater clarity of communication and structure, with a stronger emphasis on concrete processes like values (rather than abstract concepts like acceptance or defusion), may offer additional benefits. However, individual preferences must be taken into account when considering adaptations. For instance, Sally advised that revisiting the previous session’s material each week felt excessive, and she would have preferred moving directly into new content. This may contradict other neurodivergent clients’ preferences.

Evaluation methods also warrant consideration. Whilst the completion of additional outcome measures and CIs may introduce client burden and require resources (e.g., access to independent interviewers), these can help illuminate change mechanisms in real-life clinical settings. Nevertheless, measures should be carefully selected as self-report instruments are prone to various forms of bias (Paulhus & Vazire, 2007; Podsakoff et al., 2003). Supplementing them with other assessment methods, such as clinical interviews, and behavioural and observational measures, may offer a more comprehensive and ecologically valid understanding of client progress. Regardless, the HSCED remains highly applicable to clinical practice where routine outcome measurement is increasingly emphasised, helping clinician-researchers evaluate interventions locally before embarking on larger scale research.

Overall, while findings remain tentative, they inform how ACT might be adapted for perinatal settings, especially by highlighting process mechanisms and considerations for neurodiversity.

Remote Delivery

The NHS Long Term Plan (NHS, 2019) emphasises the importance of digitalising healthcare through enhanced data sharing for better care coordination, expanded telehealth provision, and the integration of artificial intelligence into primary care (Alderwick & Dixon, 2019). The COVID-19 pandemic further underscored the need for remote psychological interventions (Békés & Aafjes van Doorn, 2020; Shore et al., 2020). Remote mental healthcare promotes shared decision-making and patient engagement, and enables the earlier detection of difficulties, using more objective assessment and monitoring tools, ultimately facilitating timely adjustments to treatment when necessary (Hollis et al., 2015).

In the perinatal period – rife with practical barriers such as the lack of specialist services, the costs of services and transportation, childcare duties, and time constraints – remote interventions can offer flexibility, convenience, and cost-effectiveness, thus promoting equitable access to services (Evans et al., 2022; Vigod & Dennis, 2020). Moreover, as people often perceive themselves as less identifiable when accessing remote support (Evans et al., 2022), online delivery can alleviate fear of stigmatisation – another common barrier to help-seeking (Stentzel et al., 2023). However, remote delivery may increase inequalities where digital access is limited by participants' age, educational or socio-economic background, lower user confidence, or poor infrastructure (Azzopardi-Muscat & Sørensen, 2019; Ennis et al., 2012).

Web-delivered, ACT-based interventions have yielded promising outcomes for depression and anxiety (Brown et al., 2016; Schuster et al., 2019). In chronic pain patients, a remote ACT intervention was non-inferior to face-to-face delivery in terms of effectiveness and acceptability, albeit with significantly higher dropout rates; perhaps because participants had to travel to a virtual clinic rather than join sessions from home (Herbert et al., 2017). Some have expressed concerns that group telehealth sessions may not be prioritised by patients to the extent face-to-face sessions would be (Simon et al., 2023). However, the low attrition and participants' excellent engagement in this study contradict this claim. This contrast may be due to the individual format (since the original claim referred to group therapy), or participants' high digital literacy in the present study.

Overall, in this study, remote delivery is likely to have improved accessibility by enabling participants to join sessions from any confidential setting, eliminating travel and logistical issues. Nonetheless, the advantages and limitations of face-to-face and online therapy are yet to be explored. As Rachel noted: "It's quite different doing it entirely online. (...) It's not that it's not effective, because I've definitely still felt the benefits. That's the only thing that felt different is (...) not seeing the person and being in a room, and you pick up on maybe different things." This highlights the need for future research to explore whether and how virtual delivery impacts patient experience and clinical outcomes.

Theoretical Implications

Two clients demonstrated reliable improvements in symptomatology, PF, wellbeing, and distress. Adjudication results suggested that these outcomes were largely attributable to a combination of ACT-specific and common factors (i.e., the therapeutic relationship). Although Sally did not show statistically reliable improvement on quantitative measures, her qualitative accounts implied increased valued action (e.g., attending a baby group despite high anxiety). This may reflect the desynchrony effect commonly observed in ACT, whereby clients become able to engage in distressing tasks without a marked decrease in distress (Hayes et al., 2013). This indicates a reduction in the influence of internal experiences on overt behaviour, suggesting increased PF despite the lack of reliable improvement on the CompACT. This discrepancy may partly be explained by Sally's neurodiversity, due to the abstract nature of both the CompACT and the mere concept of PF. However, this would benefit from further exploration.

Another consideration concerns the sequencing of the intervention content. The protocol did not introduce values and committed action until Session 8. In contrast, Harris (2019) and Hayes et al. (2012c) recommend identifying clients' values early on, even without immediately linking these to committed action, to create a foundation for subsequent metaphors and experiential exercises. Since ACT is a predominantly behavioural approach, in a sense, concepts such as acceptance and defusion are secondary (Hayes et al., 2012c), as they aim to

support clients' pursuit of valued directions. Experimental evidence supports this sequencing. Participants who had been socialised to the concept of values and acceptance showed significantly better persistence in painful tasks than those who had received psychoeducation on acceptance only, or neither of these concepts (Branstetter-Rost et al., 2009; Páez-Blarrina et al., 2008). Therefore, earlier integration of behavioural elements may enhance outcomes.

Findings also suggest that the compassionate, collaborative, and non-pathological therapeutic stance characterising contextual behavioural approaches can scaffold the six PF processes. ACT posits that both the client and therapist experience the same challenges inherent in the human condition (Harris, 2019; Hayes et al., 2012c), therefore, the therapist has an important role in normalising the client's suffering. Hayes et al. (2012) also argue that PF skills are learned through contingency shaped learning – a process wherein the therapist's actions and reactions reinforce the acquisition of skills. Through modelling PF and acknowledging their own moments of inflexibility, the therapist creates a safe space for clients to practise relating to their private experiences in new ways. This also reflects the idea that psychotherapy works not only through specific techniques, but through shared common factors that create a healing context, such as a positive therapeutic relationship, an understandable and coherent explanation for the client's distress, and rituals/procedures that both client and therapist believe will lead to change (Finsrud et al., 2021; Frank & Frank, 1991).

Lastly, participants reflected on the helpfulness of acceptance, although primarily through psychoeducation (e.g., the normalisation and validation of their experiences) rather than specific experiential exercises. Discussing the function of emotions and their role in the human psyche is not unique to ACT; therefore, it is difficult to disentangle the effects of ACT-specific acceptance work from the therapeutic benefits associated with psychoeducation. It remains unclear whether it was the concept of experiential acceptance or the broader discussions around emotions that participants found most helpful.

Research Implications

This study offers preliminary support for the use of ACT with perinatal clients experiencing self-reported distress and contributes to the evidence base by examining individual-level changes using the HSCED, providing clinically relevant findings that extend beyond what standardised outcome measures alone can capture. This process-oriented approach is key to understanding the specific change mechanisms that make ACT work in this population. However, to refine our understanding of these mechanisms, further research may benefit from utilising measures capturing certain elements of PF, such as the Brief Experiential Avoidance Questionnaire (Gámez et al., 2014), the Cognitive Fusion Questionnaire (Gillanders et al., 2014) or the Valued Living Questionnaire (Wilson et al., 2010). These could supplement broader PF instruments such as the CompACT, providing greater nuance.

The role of behavioural components such as values and committed action also warrants further investigation. Hayes et al. (2013) argue that ACT research should treat valued action as a primary outcome instead of symptomatology or distress related to specific disorders. Therefore, subsequent studies could consider incorporating simple behavioural measures, such as monitoring attendance at mother-baby groups or tracking the frequency of one's engagement in self-care. These metrics may capture changes in PF in clients who report meaningful action despite little to no shift on validated psychometric measures. As such, engagement in valued action and increased functional wellbeing may offer a more accurate indicator of ACT effectiveness than reduced symptomatology.

The current study also supports the notion that differentiating between therapy-specific and common factors is a key question in psychotherapy effectiveness research. While ACT explicitly addresses experiential and behavioural processes, findings imply that the therapeutic relationship may function as a scaffolding mechanism that promotes PF. Future research should investigate the interaction between common factors and ACT-specific mechanisms to help better understand their respective impact.

Moreover, to develop and evaluate complex interventions in real-life practice, researchers must look beyond effectiveness and consider acceptability, feasibility, cost-effectiveness, and transferability across contexts (Skivington et al., 2021). Acceptability and feasibility were not explicitly assessed in the current study (although tentative insights regarding acceptability were presented), therefore this remains an important focus for future research.

Trialling the intervention in various settings (e.g., online vs face-to-face, inpatient vs community) is also a reasonable next step. Comparing recruitment, retention, and adherence between various settings, as proposed by Simon et al. (2023), could help illuminate which variables (e.g., intervention format, therapist factors, digital access) facilitate or hinder engagement. Finally, further replications are needed in the context of perinatal mental health to strengthen the evidence base, since systematic case studies play a vital role in the initial stages of applying, adapting, and evaluating underrepresented or emerging therapeutic approaches (Stiles et al., 2015). To be recognised as an efficacious empirically supported treatment, effectiveness must be established in either two independent RCTs or at least nine SCED studies conducted by three independent research teams (Chambless & Hollon, 1998). This highlights the longer-term need for larger scale, more controlled evaluations.

Limitations

Design

The current study considered various types of data from diverse sources to investigate change for three postnatal clients experiencing self-reported mental health difficulties. The HSCED design provided nuanced insight into the change processes of ACT in this population, offering valuable clinical, theoretical, and research implications. The inclusion of independent psychotherapy judges added a level of objectivity and rigour to the analysis.

However, the HSCED is not without limitations. First, it remains a rarely used design, possibly due to its complex and resource-heavy nature (Benelli et al., 2015). The adjudication process, while extremely valuable, is also susceptible to

bias. Although judges reviewed the same rich case records, their interpretations were likely influenced by their own clinical experience, preferred therapeutic models, and conceptualisations of client change (Elliott et al., 2021). Regardless, the fact that judges approached the same data from different angles was immensely helpful. Furthermore, some of the terminology and key questions used in the HSCED (e.g., “outcome”, “substantial change”, or “Was the intervention responsible for the observed change?”) are blunt or ambiguous, making definitive conclusions difficult (Elliott et al., 2009; Elliott et al., 2021).

Lastly, many of the measures used in the HSCED, such as the CI, are cognitively demanding and require high reflective functioning from participants, to consider what changes occurred, how meaningful they were, and what they could be attributed to. This may be particularly challenging in the postpartum period, when sleep deprivation and neurobiological changes can affect cognitive and emotional processing. For instance, Hoekzema et al. (2017) identified reductions in grey matter in brain regions responsible for self-reflection and executive functioning in postpartum women, while Zheng et al. (2018) found decreased neural activity in areas linked to decision-making, concentration, reflection, and emotion regulation. Additionally, sleep deprivation has been linked to worse neurobehavioural performance and daytime functioning in perinatal women (Insana et al., 2013). These factors may limit participants’ ability to reflect on therapeutic change, which may limit the utility of the HSCED method in this population.

Measurement

The measures used in this study were selected based on their psychometric properties, clinical utility, and sometimes because they were already used by the service as part of routine clinical practice. However, the use of psychometric measures with the perinatal population comes with challenges. Self-report measures are efficient and quick to use, and cut-off scores help determine clinical caseness. However, when used in isolation, they risk oversimplifying complex experiences and provide only a momentary snapshot of mental health (Harrison & Alderdice, 2020). As stated above, in the perinatal period, various factors, such as

sleep deprivation and hormonal changes, can impact symptom presentation and reflective functioning, which is key to accurate self-report. For instance, in a study, new mothers showed electroencephalography (EEG) activity akin to neural correlates of sleep – which signals potential sleep deprivation and correlates with reduced reflective functioning and mentalisation (Ngoh et al., 2022). Similarly, evidence suggests that pregnant and postpartum women experience selective impairments on aspects of memory closely linked to executive functioning (Henry & Rendell, 2007), further challenging the validity of self-report during this period.

Besides, in the present study, no baseline data were collected. This makes it difficult to gauge the stability of participants' presentations and determine whether observed changes reflect the effects of the intervention or natural symptom improvement over time. Lastly, the study design could have been strengthened by incorporating follow-up data points, as recommended by Benelli et al. (2015).

Further limitations must also be considered regarding specific measures used in this study.

OCI. OCD measures are often lengthy, complex (Abramovitch et al., 2021), and not perinatal-specific, apart from a few examples (e.g., Lord et al., 2011). The OCI is no exception to these limitations. The 4-item Obsessive Compulsive Inventory (OCI-4; Abramovitch et al., 2021), developed from the 18-item OCI-Revised (Foa et al., 2002), may have been a viable alternative in this study. The OCI-4 demonstrates good psychometric properties, making it an effective screening tool in perinatal settings (Abramowitz et al., 2024). Given its brevity and the inclusion of items representing different OCD symptom domains, this measure appears particularly suitable for settings where time constraints and client burden are prevalent.

DASS-21. Antony et al. (1998) reported that the DASS-21 shows substantial cross-loading of items and high correlations within scales, which raises concerns about the scale's ability to distinguish depression, anxiety, and stress symptoms.

Several items were found to load onto more than one factor, challenging the scale's structural validity. These issues have been demonstrated in other studies, too (e.g., González-Rivera et al., 2020), which reported problems with construct, convergent, and discriminatory validity and found that the DASS-21 was unable to adequately discriminate between depression and anxiety. More recently, Zanon et al. (2025) found that DASS-21 measures a general psychological distress factor more accurately than depression, anxiety, and stress independently. Therefore, the use of additional specific and robust anxiety and depression measures may have enhanced the methodological quality of the current study, although this may have increased participant burden. Future research could utilise brief and validated instruments such as the 10-item Edinburgh Postnatal Depression Scale (Cox et al., 1987) or the 16-item Postpartum Specific Anxiety Scale Research Short-Form (Davies et al., 2021).

MIRS. The MIRS was initially validated on a clinical sample of 78 women and 86 nonclinical women (Newman-Morris et al., 2020a). Notably, nearly half of the clinical group (48%) had a diagnosis of borderline personality disorder (BPD) and were recruited from a service “for parents who are at risk of harming their children (e.g., maltreatment, neglect) in the context of mental illness and/or significant psychosocial risk” (Newman-Morris et al., 2020a, p. 46). In contrast, participants in the current study presented with lower clinical severity, and none of them reported relational disturbance above the suggested cut-off – suggesting that the MIRS may not be sensitive enough to detect mild or subclinical relational difficulties. This is important since women with BPD are more likely to experience relationship disturbances with their infants (Eyden et al., 2016). Additionally, the MIRS shows strong intercorrelations with other indicators of maternal mental health difficulties, such as anxiety, depression, and parental stress (Newman-Morris et al., 2020b), suggesting strong convergent validity. Yet, this raises questions about whether the MIRS captures a unique construct or overlaps significantly with other measures. As the MIRS is a relatively recent measure, further research is needed

to establish its validity and sensitivity, particularly in lower-risk or community samples, and to compare it with more established tools of mother-infant bonding.

Personal Questionnaire. The PQ (Elliott et al., 1999) may clash with the underlying principles of ACT. By inviting clients to track their “personal problems” weekly, the PQ can inadvertently suggest that therapy is focused on eliminating or reducing symptoms, whereas ACT emphasises responding more flexibly to difficulties, rather than eradicating them. Unsurprisingly, most problem descriptions provided by participants were related to symptomatology (e.g., “trauma symptoms” or “general anxiety”), reflecting clients’ desire to get rid of (or reduce) these symptoms. Only one participant identified an ACT-congruent problem (“rituals becoming a part of me”). Although the wording of the PQ is not inherently ACT-inconsistent (since it asks how much a problem *bothered* participants, not its frequency or severity), without explicit clarification, clients may default to thinking in terms of symptom reduction rather than distress tolerance.

Moreover, high experiential avoidance can potentially distort PQ ratings. Antunes et al. (2020) found that as emotional distress, difficulty articulating thoughts and emotions, and the avoidance of distressing thoughts and emotions can interfere with meaningful responses. These barriers were evident in this sample.

A measure that may align more closely with ACT’s emphasis on functional outcomes and valued action is the Psychological Outcome Profiles (PSYCHLOPS; Ashworth et al., 2004). By tracking not only “Problem” but also “Function” (“Choose one thing that is hard to do because of your problem (or problems).”) and “Well-being” (“How have you felt in yourself this last week?”), the PSYCHLOPS maps directly onto ACT’s goal of encouraging values-congruent action despite distress. Therefore, future HSCED studies might consider adopting the PSYCHLOPS, or similar tools with an explicit focus on functioning.

Change Interview. While the CI was conducted by an external researcher to reduce bias, participants knew that the researcher-therapist would have access

to the interview recordings. This may have influenced what they felt comfortable disclosing, and thus, bias may not have been entirely eliminated. Moreover, the timing of the interview could have been adjusted too. In her CI, Sally expressed hope that she would be able to use the skills and techniques more effectively with time passing. This may suggest that the CI was conducted too soon post-intervention, and a longer wait would have allowed for the full integration of skills from therapy. Benelli et al. (2015) suggest that the CI should be collected at least at the end of the therapy and at a further follow-up time point. They also emphasise the importance of providing interviewers with training and supervision to ensure the collection of rich, reflective data – these criteria were not met in this study. In conclusion, a delayed follow-up CI, and appropriate training and supervision for interviewers, may have enhanced the quality of data.

Sample Characteristics

Participants in this study were White, English-speaking females between the ages of 34 and 42. However, there is considerable diversity within the perinatal population (Prady et al., 2013; Thomas et al., 2014). Women from minority backgrounds are significantly more likely to experience PMHDs (National Childbirth Trust, 2015; Prady et al., 2016) and are also twice as likely to have these difficulties go undetected (Moore et al., 2019). This highlights the need for culturally sensitive approaches in perinatal mental health care (Gardner et al., 2024), which represents an area of improvement for the present study. Notably, the participant who withdrew from the intervention spoke English as a second language and reported difficulties understanding some of the terminology. This suggests that a language barrier may have contributed to disengagement. This corresponds with literature demonstrating that language barriers are associated with the underutilisation of mental health services (Ohtani et al., 2015) and that communication and language difficulties have been linked to higher dropout rates in refugee populations (Semmlinger & Ehring, 2021). Considering the cultural appropriateness and accessibility (e.g., level of language proficiency required) of

the intervention might have improved acceptability and feasibility, and potentially retention.

Formal diagnoses were not required for participation in this study. Participants were recruited based on pre-defined inclusion/exclusion criteria and clinical judgment, including likelihood of engagement and appropriateness for the ACT intervention. This introduced some heterogeneity within the sample in terms of symptom presentations, psychotropic medication use, and individual client characteristics, which may limit the validity of cross-case synthesis. Nevertheless, given the transdiagnostic nature of ACT, findings may still be relevant across diverse clinical presentations.

Potential Sources of Bias

Although several steps were taken throughout the research procedure to mitigate bias, it cannot be fully eliminated.

A key limitation was the dual role of the researcher, who also acted as the therapist in the current study – a clear conflict of interest that could have introduced bias. The facilitator of the intervention was also involved in data collection and analysis. To address this, evidence was evaluated in a structured and systematic way, using the adjudication process involving independent judges from various theoretical orientations. Still, this potential influence must be acknowledged.

Another implication of the dual role may have been the additional effort made to retain participants; for instance, by offering flexibility in rearranging sessions to accommodate participants' schedules when needed. However, discontinuation rules were pre-defined and adhered to (i.e., three consecutive cancellations would have prompted a conversation with the participant about their ongoing interest in participation). Flexibility is also essential requirement in clinical practice when working with perinatal women, who often face competing demands. This aligns with the naturalistic ethos of the HSCED, which does not aim to eliminate bias through strict control but instead aims to construct probabilistic knowledge claims rooted in subjective interpretation, rather than absolute truths (Elliott, 2015).

Furthermore, to minimise missing data, participants completed some self-report measures (the CORE-10, WEMWBS, and SRS) in the presence of the therapist. Whilst this approach ensured completion, it may have increased the risk of social desirability or self-presentational bias. To mitigate this risk, participants were encouraged to respond openly and honestly, and it was clearly communicated that the purpose of the measures was simply to monitor specific variables throughout the intervention.

Another limitation is the potential for selection bias. Participants who engaged in the study may represent a particular subgroup of the perinatal population – perhaps women with altruistic motives, positive beliefs about research and wanting to contribute to science, higher trust in services, personal interest in understanding their difficulties, or expectations of greater benefit (Andrighetti et al., 2017; Ayoub et al., 2018; Daniels et al., 2006; Goldstein et al., 2021; Tooher et al., 2008). Research also suggests that women who participate in such studies are often those who perceive themselves as needing the most support with their mental health (Andrighetti et al., 2017; Baggett et al., 2020; Lara et al., 2010). To minimise or better understand the extent of selection bias, future studies may wish to compare the characteristics of those who enrolled with those who did not (Saiepour et al., 2019).

Finally, while efforts were made to ensure adjudicators' independence, this could not be fully guaranteed. One judge had briefly acted as a field supervisor during the early planning stages of the study before going on maternity leave, although this involvement ended before obtaining ethical approval, and the protocol subsequently underwent several revisions. Another judge was the researcher's personal tutor during the first two years of doctoral training but did not supervise the research in this capacity. These existing relationships may have introduced a level of bias, although judges were encouraged to adopt a critical and reflective stance throughout the adjudication process. However, Elliott et al. (2009) acknowledged that adjudicators typically agree to participate in HSCED studies because they generally believe in the effectiveness of psychotherapy, and

outcomes may differ if conclusions were drawn by laypersons, critics of psychotherapy, or those who oppose integrative approaches.

Critical reflection

Interests and Rationale Behind Intervention and Design

My interest in perinatal mental health started during my undergraduate studies, when I encountered a research poster suggesting that, during the altered state of consciousness characterising childbirth, what the birthing person hears can act as a hypnotic suggestion, which often profoundly impacts the birth experience. This powerful mind-body connection fascinated me and made me think about the role of hypnosis-based interventions in childbirth – an area now better supported by research (Catsaros & Wendland, 2020). Simultaneously, a niggling thought arose in my mind: we must do better. Countless women experience avoidable birth trauma due to poor communication with healthcare professionals, and this has lasting effects on the mother-infant dyad. This shaped my research interests throughout my MSc in Applied Child Psychology. My thesis investigated the effects of birth satisfaction, postpartum depression, and maternal PTSD on mother-infant bonding. Unsurprisingly, I found that lower birth satisfaction was associated with higher levels of postpartum psychopathology and bonding difficulties, and negative birth experiences, depression, and PTSD significantly predicted impaired bonding (Simko, 2021). Although I had not worked clinically with the perinatal population before this research, the process deepened my understanding of the complex psychological needs of new mothers and strengthened my commitment to improving care during this critical period.

Before embarking on doctoral training, I had not come across the HSCED, but I was immediately drawn to its nuanced, holistic evaluation of therapeutic outcomes. Its emphasis on integrating various sources and types of data aligned with my passion for critical and comprehensive evaluation.

I was introduced to ACT during my first placement, and found it to be a flexible, pragmatic approach that resonated with clients across a range of presentations. Clients also reported to find the experiential nature and validating stance acceptable and engaging. Personally, I also appreciated the underlying idea of ACT: rather than attempting to alter or eliminate distressing private experiences,

we can focus on shifting our relationship with them. This felt especially applicable to the perinatal period, where “mum guilt” is often prominent. Therefore, I was drawn to the idea of offering new mothers a validating, non-pathologising approach that, instead of framing their thinking as flawed, helped them relate to their experiences differently. ACT’s emphasis on values also seemed highly appropriate, as the transition to parenthood often makes people reevaluate their priorities and identity, and pre-parenthood control strategies may not be workable anymore. Finally, I believed that ACT’s flexible approach to home practice (such as brief mindfulness practices, rather than lengthy worksheets) would suit the demands of early parenthood. This was reflected in participants’ feedback: reportedly, they found the exercises manageable and meaningful, with one participant (Molly) even incorporating mindfulness into playtime with her children.

Although ACT had already demonstrated promising evidence in populations such as body image and chronic health challenges, its application to the perinatal period was still unexplored. Given the unique challenges of this period, I was curious to explore its potential in this population through a critical lens.

Dual Role of Researcher and Therapist

The HSCED method recognises that the high control characterising research is rarely achievable in clinical practice and aims to enhance ecological validity by examining therapy in real-world contexts (Elliott, 2002). In clinical settings, it is not uncommon for practitioners to evaluate their own work. While studying someone else’s clients (and thus separating the researcher and therapist roles) can offer greater objectivity, conducting formal evaluations of one’s own practice is crucial to practice-based research (Elliott & Zucconi, 2006). Transparency and acknowledging the potential biases associated with this dual role were vital in this process.

Delivering the intervention myself was effortful and time-consuming. My study days were dedicated to preparing for and delivering the sessions, as well as data collection and entry, over several months. I also undertook additional training beforehand to familiarise myself with the intervention protocol, which required

flexibility from my placement supervisors, as the training was offered across two placement days. On reflection, having another clinician deliver the intervention might have alleviated some of my workload and stress. However, my dual role enabled greater control over data collection – minimising the risk of missing data – and provided deeper, contextually rich insight into the therapeutic process which would have been difficult to obtain through second-hand reports. My session notes also captured insights that the CI failed to identify (e.g., participants' responses to specific techniques and general attitudes towards the intervention). This discrepancy may reflect the limitations the CI itself or may be attributable to the constraints of memory and recall. Equally, it may represent a misattribution of importance from my perspective as the therapist. Interestingly, although these notes were made available to adjudicators, they were not referenced in justifications for judicial conclusions.

Reflecting on the overwhelming nature of the research process, I also considered my own relationship with control. Ironically, Harris (2006) notes that “control is the problem, not the solution” (p. 6), which resonated with my experience. My reluctance to delegate aspects of the study, driven by my desire to oversee the process, created considerable stress and workload. However, this was underpinned by a strong sense of responsibility for the project and an awareness that no one else would be as invested in its quality as I was.

This research also supported my personal engagement with ACT. For example, I completed home practice exercises myself and shared my experienced with participants, aiming to replicate the meaningful conversations typically facilitated in group settings, which can be lost in individual delivery. This highlighted my own cognitive fusion with thoughts such as “I am an incompetent therapist” or “the pressure is too much” as my mind questioned my ability to complete this doctoral project from time to time. Gradually, I learned to make room for such internal experiences; to the extent where on one occasion I found myself singing my thoughts to the tune of a familiar song and realised that I was practising cognitive defusion. In this way, ACT skills slowly but surely became integrated into my everyday life – whether through adopting a more self-compassionate stance or

practising mindful breathing (Bennett & Oliver, 2019). Finally, holding in mind my values and passion that inspired this project has helped me persevere during the most challenging times.

Overall, whilst the dual role inevitably introduced some bias, I believe this was managed appropriately through regular research and ACT supervision, ongoing reflection, and transparent, critical data analysis, supported by the adjudication process. Although I had anticipated that developing sceptic briefs and critically evaluating my own therapeutic skills would be challenging, I found this aspect of the process surprisingly rewarding and interesting. I also appreciated the opportunity this dual role provided in enhancing both my research and clinical skills.

Recruitment

Recruitment for the study took longer than anticipated. Although ethical approval was obtained in April 2024, the first participant did not start the intervention until July. This delay was worrying given the constraints of the research timeline. While my original timeline anticipated recruitment beginning in March 2024, the unexpectedly lengthy ethical approval process did not make this possible. However, the timing of the delay suggests potential issues beyond ethics clearance.

One likely contributing factor was the complexity of the consent procedure. My field supervisor, while able to share basic information about the study, was not authorised to take informed consent. The consent process also involved several steps, which may have felt lengthy or impersonal to participants. Additionally, the lack of direct contact with the researcher-therapist at the very first stage may have reduced trust or engagement, potentially affecting willingness to participate. These observations mirror findings from Goldstein et al. (2021), who identified on-site screening and consent administration, as well as direct recruitment by healthcare providers, as effective strategies in perinatal mental health research. Nevertheless, challenges with engagement are generally common in perinatal mental health

settings (Fisher et al., 2024), therefore, it is equally possible that the difficulties encountered were unrelated to the study and consent procedure.

Eventually, recruitment was opened up to the Trauma and Bereavement service, which yielded an additional participant. As this service operates within the perinatal community mental health team, this expansion did not require an ethics amendment. Additional strategies, such as sending regular reminders to clinicians to consider eligibility criteria during routine appointments with clients (Monk et al., 2013) may have also improved recruitment.

These reflections align with findings from existing literature. For instance, Tooher et al. (2008) identified several barriers to recruitment in perinatal RCTs, which often necessitate the extension of recruitment timelines or expansion across sites. Some barriers the authors noted were perceived risks associated with the trial, recruitment processes that feel coercive, competing commitments, and participants' limited understanding of the research process. Organisational and practical factors were also highlighted, such as time pressures and procedural complexity. Moreover, clinicians may make assumptions about potential participants' intelligence or willingness to engage in research, potentially leading to unnecessary gatekeeping.

Overall, these experiences illustrate that recruitment can be hampered by logistical, procedural, and organisational factors. Nevertheless, there is no single correct approach to recruitment, since the present study implemented several strategies previously proven effective. For example, Ayoub et al. (2018) recommend that participants first receive a general introduction to the study from a healthcare professional, before formal contact with a researcher. Similarly, Morton et al. (2014) recommend collecting contact information during this initial contact, followed by a follow-up call to address questions and obtain consent. These strategies were utilised in the present study; still, recruitment remained challenging. Ongoing discussions with the service where the research is conducted may identify potential issues with the feasibility of the recruitment process and embed the recruitment strategy into the service context – aligning well with HSCED's emphasis on ecological validity and real-world applicability.

Manualised ACT intervention

A manualised ACT intervention was used to support treatment fidelity and enhance replicability across participants. Given that elements of PF are conceptually interconnected and therefore often targeted simultaneously within the same session (Hart, 2015), the protocol also helped ensure that the core ACT processes were introduced in the same order across participants, thus providing an effective structure.

The use of manualised psychological treatments is recommended by the NICE (2022) for various common mental health conditions. Manuals are valuable tools that can help guide treatment by outlining a clear theoretical framework, session structure and sequence, session goals and content, and the procedures needed to achieve therapeutic objectives (Marshall, 2009). However, they have been criticised for not considering individual client characteristics (Garfield, 1996) and potentially undermining the therapeutic relationship by distracting both the therapist and client and promoting rigid, prescriptive use of techniques (Aarons, 2005; Castonguay et al., 1996). Furthermore, they may not apply to the realities of clinical practice, where comorbidity is common and clinicians are unlikely to fully master various presentation-specific manuals (Addis, 1997; Addis et al., 1999). These limitations have contributed to the rise of transdiagnostic protocols (Kazdin, 2015). While manualised treatments remain compelling in research contexts, they are generally not more effective than non-manualised approaches in clinical practice, and findings are inconclusive on whether manual adherence is associated with better clinical outcomes (Truijens et al., 2019).

Balancing treatment fidelity and flexibility was an important consideration throughout. I reviewed the slides before each session to ensure I was familiar with the content so that I could present the material in a natural, conversational way. I also adapted my communication style and language to suit each participant. This felt important since ACT can be fairly technical and jargonistic, which risks an overly didactic rather than experiential – thus, ACT-inconsistent – delivery. To further personalise sessions, check understanding, and enhance participants'

understanding and consolidation of skills, I would consider incorporating a regular closing question such as “What are you taking away from today’s session?”

Overall, delivering the protocol helped me develop important meta-competencies: I became more skilled at flexibly applying techniques, reflecting on how they landed with individuals, and tailoring delivery to the perinatal context. Although the manual provided valuable structure, I did not find it too restrictive. In fact, in some cases, it enhanced the therapeutic relationship. For example, Rachel reported that she found the structured approach particularly helpful and different from approaches she had tried before. However, most sessions exceeded the estimated duration and the session length typically seen in clinical practice. This suggests that while the protocol was valuable for research purposes, it may not be fully feasible in real-world settings.

Ethical considerations

Consent is a key consideration in perinatal research. Studies highlight that women may agree to participate in research without being fully aware of the risks and benefits of this (Andrighetti et al., 2017; Baggett et al., 2020; Barrera et al., 2016), particularly when recruitment is through self-referral. Moreover, pregnant women are often excluded from research due to being classified as a vulnerable group (Bracken-Roche et al., 2016). This is compounded when mental health difficulties are also present, since those with mental health conditions are also often labelled as vulnerable (Decker et al., 2011). For instance, it has been argued that certain mental health conditions can affect one’s decision-making ability (Bracken-Roche et al., 2016; Weissinger & Ulrich, 2019). Whilst this may be true in cases of acute and severe mental illness, moderate presentations typically do not impact one’s capacity to consent (Appelbaum et al., 1999; Weissinger & Ulrich, 2019). Still, assumptions around vulnerability may lead to stigma and stereotyping, influencing researchers’ attitudes (Bracken-Roche et al., 2016). This encouraged me to reflect on my views and assumptions regarding vulnerability throughout the research process. Future research should explore consent procedures in perinatal mental health research (such as how pregnant women with mental health

difficulties understand consent forms and what factors affect valid consent) to inform standards that support informed and autonomous participation (de Wet et al., 2023).

Another consideration is the role of trust and rapport in recruitment and retention (de Wet et al., 2023). This raises questions around whether researchers can maintain the interpersonal distance traditionally inherent in research while still upholding the ethical principle of care; and what obligations researchers have towards participants during and after the study (de Wet et al., 2023). In my dual role, I occasionally felt pulled between my therapist and researcher identities – for instance, I recognised that some participants may have benefited from the integration of psychodynamic elements into our work but needed to maintain fidelity to the ACT protocol. This was discussed in field supervision, and in each case, I ensured appropriate follow-up by referring participants on to other services or confirming their place on waiting lists.

Moreover, participants can develop a sense of personal obligation to help the researcher (Andrighetti et al., 2017) which can stem from altruism, a sense of morality, trust, and respect, or even the researcher's perceived authority. I was mindful of this and regularly used supervision to reflect on how to minimise any sense of persuasion or coercion (Hem et al., 2018) and ensure that participants felt free to make autonomous decisions, including the right to withdraw. When one participant discontinued the study, I initially felt concerned about "leaving her without support," but I reminded myself that this individual was still open to the perinatal team, therefore stepping away from therapy and focusing on working with other professionals may have been the most appropriate decision for her at that time. This experience highlighted the importance of ongoing reflection on power and the duty of care.

Patient and Public Involvement

Patient and public involvement (PPI) refers to engaging patients and members of the public in designing, implementing, and managing research activities to ensure research is "carried out 'with' or 'by' members of the public or

patients, rather than ‘to’, ‘about’ or ‘for’ them” (Aiyegbusi et al., 2023, p. 1923). This is essential for designing research that aligns with the needs and lived experiences of the population being studied. PPI is particularly important in perinatal mental health, where collaborative approaches between women, families, and care providers are essential for creating effective, accessible, and acceptable interventions (de Mooij et al., 2018; Fontein-Kuipers et al., 2018; Franck & O'Brien, 2019; Nelson & Holschuh, 2021), and have been shown to improve quality of care (van den Heuvel et al., 2018).

In this study, a member of the Service User and Carer Advisory Panel (SUCAP) with relevant lived experience was involved during the early stages of the project. They provided feedback on proposed outcome measures to ensure these were relevant and feasible (i.e., not too burdensome and distress-provoking). They also reviewed participant-facing documents, including the PIS, consent form, and the individual format of the client manual.

However, throughout my doctoral training, I developed a deeper understanding of the importance of embedding PPI across all stages of research. While this involvement was valuable, co-producing materials with service users (rather than simply reviewing them) would have added greater value. In the future, I would aim to establish a small advisory group of individuals with lived experience to provide ongoing input throughout the study. However, I recognise that this was not feasible within the current project due to SUCAP capacity and availability. Additionally, I would consider gathering explicit feedback on the PPI process itself, to better understand what works and build a learning culture around involvement (Attal et al., 2025). Furthermore, while the PIS was reviewed with a SUCAP colleague, more attention could have been given to how information is presented (e.g., timing, format, completion/reading time), to reduce potential overwhelm, particularly related to the consent procedure (Tooher et al., 2008). Overall, going forward, involving potential participants and staff in co-developing consent procedures and study materials could help ensure that they are accessible, relevant, and feasible.

Personal Reflections

Conducting this research has had its ups and down, characterised by emotions ranging from frustration and worry over recruitment challenges to the thrill of completing the intervention stage and writing the final words of this portfolio. This experience brought the “observer self” metaphor to life by making me realise: “emotions are like the weather, I am like the sky.” Reflecting on this stance allowed me to view my challenges with greater flexibility and acceptance. Furthermore, staying connected to my reasons for pursuing this project and grounding myself in my values as a researcher and clinician helped me carry on when I doubted my ability to continue.

Although I had prior research experience, the complexity and rigour of this doctoral study inevitably demanded new skills at every stage. Navigating the process of ethical approval, learning new approaches to data analysis, and balancing various academic and clinical responsibilities required continuous learning, trial and error, and regular supervision. When I chose my topic, I was warned that intervention studies are time-intensive, but the practical reality exceeded my expectations. I relied heavily on my organisational skills, breaking the overwhelming process into manageable steps to maintain progress.

Although initially daunting, the dual researcher-therapist role proved invaluable. It deepened my understanding of psychotherapy processes and the critical, analytical thinking central to the HSCED method (and, in my opinion, being a Clinical Psychologist in general). It also illuminated the value of practice-based evidence and small-N designs and reinforced my enthusiasm for conducting further research in my qualified role. Moreover, delivering ACT online to perinatal clients allowed me to further develop my clinical skills in a new setting, which has significantly benefitted my practice.

Mostly, I hope that my participants continue to benefit from the skills we practised together, and that my enthusiasm for ACT’s philosophy came across during my sessions. Working with these women has been a privilege, and I am truly grateful for the experience on both a personal and a professional level.

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Extended Paper word count: 37,914

Full portfolio word count: 43,451

Appendices

Appendix A: Judicial questions

Preliminary questions

Please rate your preference for using Acceptance and Commitment Therapy (ACT) in your clinical practice in comparison to other therapeutic models.

- a. Strong preference for other (non-ACT) approaches
- b. Moderate preference for other (non-ACT) approaches
- c. No preference
- d. Moderate preference for ACT
- e. Strong preference for ACT

Please name your preferred therapeutic approaches that you rely on in your clinical practice.

Please briefly summarise any clinical experience you have using ACT.

Please briefly summarise any clinical experience you have working with the perinatal population.

Adjudication questions

How would you rate the outcome for this participant?

- a. Deteriorated
- b. No change has occurred
- c. Improved
- d. Recovered (i.e., achieved clinically significant improvement)

How certain are you of this decision? (0-100%)

What evidence presented in the rich case record led you to this conclusion and why?

How much do you think the client has changed over the course of the intervention?

- a. No change (0%)
- b. Slight change (20%)
- c. Moderate change (40%)
- d. Considerable change (60%)
- e. Substantial change (80%)
- f. Completely (100%)

How certain are you of this decision? (0-100%)

What evidence presented in the rich case record led you to this conclusion and why?

If you think no change has occurred, why do you think that is?

Change mechanisms

To what extent do you think that the change is attributable to the intervention?

- a. No change has occurred
- b. Slightly (20%)
- c. Moderately (40%)
- d. Considerably (60%)
- e. Substantially (80%)
- f. Completely (100%)

How certain are you of this decision? (0-100%)

What evidence presented in the rich case record led you to this conclusion and why?

How strong is your belief that factors specific to Acceptance and Commitment Therapy (ACT) contributed to change for the client? (0-100%)

What factors specific to ACT do you think contributed to change?

How strong is your belief that generic/non-specific factors contributed change for the client? (0-100%)

What generic/non-specific processes do you think contributed to change?

How strong is your belief that extra-therapeutic factors contributed change for the client? (0-100%)

What extra-therapeutic factors do you think contributed to change?

Overall, what percentage of the change experienced by the client was attributable to factors specific to ACT in your opinion?

Overall, what percentage of the change experienced by the client was attributable to generic/non-specific factors in your opinion?

Overall, what percentage of the change experienced by the client was attributable to extra-therapeutic factors in your opinion?

Appendix B: Ethical approval letter



Dr Danielle De Boos
Programme Co-Director, Trent Doctorate in Clinical
Psychology
University of Nottingham
Trent Doctorate in Clinical Psychology, Division of
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24 April 2024

HRA approval re-issued on 30/04/2024 to update the 'List of documents'.

Dear Dr Danielle De Boos

**HRA and Health and Care
Research Wales (HCRW)
Approval Letter**

Study title:	Acceptance and Commitment Therapy for the management of postpartum psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series
IRAS project ID:	335788
Protocol number:	23069
REC reference:	24/EM/0053
Sponsor	University of Nottingham

I am pleased to confirm that [HRA and Health and Care Research Wales \(HCRW\) Approval](#) has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?

HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Please see [IRAS Help](#) for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

How should I work with participating non-NHS organisations?

HRA and HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to [obtain local agreement](#) in accordance with their procedures.

What are my notification responsibilities during the study?

The standard conditions document "[After Ethical Review – guidance for sponsors and investigators](#)", issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The [HRA website](#) also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

Who should I contact for further information?

Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is 335788. Please quote this on all correspondence.

Yours sincerely,

Abitha Paimpillichalil

Approvals Specialist

Email: approvals@hra.nhs.uk

Copy to: *Mr Ali Alshukry*

List of Documents

The final document set assessed and approved by HRA and HCRW Approval is listed below.

Document	Version	Date
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Liability insurance]		27 June 2023
HRA Schedule of Events [IRAS_schedule-events-excel-template_AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version 1.0 date 16.02.2024_v1]		16 February 2024
Interview schedules or topic guides for participants [Client Change Interview Schedule_Acceptance and Commitment Therapy after childbirth: A case series]	1.0	16 February 2024
IRAS Application Form [IRAS_Form_09022024]		09 February 2024
Letters of invitation to participant [Letter of Invitation]	4	14 March 2024
Non-validated questionnaire [PARTICIPANT DEMOGRAPHIC SHEET AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version v2.0 date 23.04.2024]	2.0	23 April 2024
Organisation Information Document [Organisation_Information_Document_NonCommercial AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version v1.0 date 16.02.2024]	1.0	16 February 2024
Other [Intervention manual (client)]	2.0	28 March 2024
Other [Staff Manual - ACT-FOR-PNMH v1 date 16.02.2024]	1	16 February 2024
Other [Client Manual ACT-for-Perinatal Mental Health group v1 date 16.02.2024]	1	16 February 2024
Other [Participant Debriefing Sheet_Acceptance and Commitment Therapy after childbirth: A case series]	3	19 January 2024
Other [Professional Indemnity]		08 August 2023
Participant consent form [Consent to Contact Form_Acceptance and Commitment Therapy after childbirth: A case series]	2.0	12 March 2024
Participant consent form [CONSENT FORM AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version v3.0 date 19.04.2024]	3.0	19 April 2024
Participant information sheet (PIS) [INFO SHEET Template (All Studies) AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version v4.0 date 23.04.2024]	4.0	23 April 2024
Protocol [PROTOCOL AcceptanceandCommitmentTherapyafterchildbirthAcaseseries Final version v3.0 date 23.04.2024]	3.0	23 April 2024
Summary CV for Chief Investigator (CI) [CV DDB_Acceptance and Commitment Therapy after childbirth: A case series]		15 November 2023
Summary CV for student [CV KS_Acceptance and Commitment Therapy after childbirth: A case series]		23 November 2023
Summary CV for supervisor (student research) [CV MB_Acceptance and Commitment Therapy after childbirth: A case series]		01 October 2023
Validated questionnaire [CompACT]		
Validated questionnaire [Maternal Attitudes Questionnaire]		
Validated questionnaire [Session Rating Scale]		
Validated questionnaire [Warwick-Edinburgh Mental Well-Being Scale]		
Validated questionnaire [Personal Questionnaire]		
Validated questionnaire [CORE-10]		

Appendix C: Participant Demographic Sheet
(Final version 1.0 Date: 02/02/2024)

Participant ID

Title of Study: Acceptance and Commitment Therapy for the management of postpartum psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series

IRAS Project ID: 335788

Name of Researcher(s):

If you wish to participate in this study, we would like to collect some demographic information from you to use in the write-up of the study. This information will **not** be shared with any third parties.

Please provide the following information as appropriate.

Date of birth

Level of education

- (1) Primary education
- (2) Secondary education
- (3) Further education
- (4) Higher education

Ethnicity

- (1) Asian, or Asian British
- (2) Black, Black British, Caribbean of African
- (3) White British, Irish, or any other white background
- (4) Mixed or multiple ethnic groups
- (5) Other (please specify)

Marital status

- (1) Single
- (2) Married
- (3) Divorced
- (4) Separated
- (5) Widowed
- (6) Other, please specify:

Employment status

- (1) Not employed
- (2) Employed, part-time
- (3) Employed, full-time
- (4) Student
- (5) Other, please specify:

Do you consider yourself to have a disability? (According to the Equality Act 2010, you are disabled if you: have a physical or mental impairment that has a substantial and long-term adverse effect on your ability to do normal day-to-day activities.)

- (1) Yes
- (2) No
- (3) Prefer not to say

Appendix D: Client Change Interview Protocol

Client Change Interview Protocol

Version 1.0 Date: 16/02/2024

Instructions

Preparation: Give client a copy of the interview schedule the week before, so that s/he can think about it beforehand.

Materials:

- This protocol, including Change Interview Record
- Consent form (for interview to be recorded and transcript to be used in data analysis)
- PQ data
- Audiotape

Label notes & tape: Please label your notes and the interview tape with the following information: Client initials and case number; date of interview; your name; whether this is a midtreatment or posttreatment interview (including how many previous sessions the client has had).

Interview Strategy: This interview works best as a relatively unstructured empathic exploration of the client's experience of therapy. Think of yourself as primarily trying to help the client tell you the story of his or her therapy so far. It is best if you adopt an attitude of curiosity about the topics raised in the interview, using the suggested open-ended questions plus empathic understanding responses to help the client elaborate on his/her experiences. Thus, for each question, start out in a relatively unstructured manner and only impose structure as needed. For each question, a number of alternative wordings have been suggested, but keep in mind that these may not be needed.

- Ask client to provide as many details as possible
- Use the "anything else" probe (e.g., "Are there any other changes that you have noticed?"): inquire in a nondemanding way until the client runs out of things to say

Introduction for Client. Do some simpler version of the introduction given at the top of the Interview Schedule to introduce the interview.

Change Interview Record

Client Initials _____

Case ID _____

Interviewer _____

Date _____

Assessment (circle one): mid post follow-up/6mo follow-up/18mo

Number of previous sessions (circle one): 10 20 30 40 other:

Psychopharmacological Medication Record (incl. herbal remedies)

<u>Medication Name</u>	<u>For what symptoms?</u>	<u>Dose/Frequency</u>	<u>How long?</u>	<u>Last Adjustment</u>

Change List

Change	Change was: 1 - expected 3 - neither 5 – surprised by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1 - not at all 2 - slightly 3 - moderately 4 - very 5 - extremely
1.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
6.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Client Change Interview Schedule

After treatment, clients are asked to come in for an hour-long semi-structured interview. The major topics of this interview are any changes you have noticed since therapy began, what you believe may have brought about these changes, and helpful and unhelpful aspects of the therapy. The main purpose of this interview is to allow you to tell us about the therapy and the research in your own words. This information will help us to understand better how the therapy works; it will also help us to improve the therapy. This interview is tape-recorded for later transcription. Please provide as much detail as possible.

1. General Questions:

- 1a. What medication on you currently on?** (record on form, including dose, how long, last adjustment, herbal remedies)
- 1b. Review consent form** (consent for the interview to be recorded – please see documents on Rio)
- 1c. What has therapy been like for you? How has it felt to be in therapy?**
- 1d. How are you doing now in general?**

2. Self-Description:

- 2a. How would you describe yourself?** (If brief/general, can you give me an example? For more: How else would you describe yourself?)
- 2b. How would others who know you well describe you?** (How else?)
- 2c. If you could change something about yourself, what would it be?**

3. Changes:

- 3a. What changes, if any, have you noticed in yourself since therapy started?** (For example, Are you doing, feeling, or thinking differently from the way you did before? What specific ideas, if any, have you gotten from therapy so far, including ideas about yourself or other people? Have any changes been brought to your attention by other people?) *[Interviewer: Jot changes down for later.]*
- 3b. Has anything changed for the worse for you since therapy started?**
- 3c. Is there anything that you wanted to change that hasn't since therapy started?**

4. Change Ratings: (Go through each change and rate it on the following three scales:)

- 4a. For each change, please rate how much you expected it vs. were surprised by it?** (Use this rating scale:)

- (1) Very much expected it
- (2) Somewhat expected it
- (3) Neither expected nor surprised by the change
- (4) Somewhat surprised by it
- (5) Very much surprised by it

- 4b. For each change, please rate how likely you think it would have been if you hadn't been in therapy? (Use this rating scale:)**

- (1) Very unlikely without therapy (clearly would not have happened)
- (2) Somewhat unlikely without therapy (probably would not have happened)

- (3) Neither likely nor unlikely (no way of telling)
- (4) Somewhat likely without therapy (probably would have happened)
- (5) Very likely without therapy (clearly would have happened anyway)

4c. How important or significant to you personally do you consider this change to be?

(Use this rating scale:)

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

5. Attributions: In general, what do you think has caused these various changes? In other words, what do you think might have brought them about? (Including things both outside of therapy and in therapy)

6. Helpful Aspects: Can you sum up what has been helpful about your therapy so far? Please give examples. (For example, general aspects, specific events)

7. Problematic Aspects:

7a. What kinds of things about the therapy have been hindering, unhelpful, negative or

disappointing for you? (For example, general aspects, specific events)

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

7c. Has anything been missing from your treatment? (What would make/have made your therapy more effective or helpful?)

8. Suggestions. Do you have any suggestions for us, regarding the research or the therapy? Do you have anything else that you want to tell me?

9. Review Personal Questionnaire (PQ)

Instructions: Compare pre-therapy (screening) and post-therapy to current PQ ratings with client, noting number of points changed for each problem. Tell client: We are trying to understand how clients use the PQ, and what their ratings mean.

9a. In general, do you think that your ratings mean the same thing now that they did before therapy? If not, how has their meaning changed? (Sometimes clients change how they use the PQ rating scale; did that happen for you?)

9b. Identify each problem that has changed 2+ points:

- (1) Compare each PQ problem change (2+ points) to the changes listed earlier in the interview.
- (2) If the PQ problem change is not covered on the change list, ask: **Do you want to add this change to the list that you gave me earlier?**
 - If yes → go back to question 5 and obtain change ratings for this change.

- If no → go on:
- (3) For each PQ problem change (2+ points), ask: **Tell me about this change: What do you think it means? Do you feel that this change in PQ ratings is accurate?**

10. Review Pretherapy Self-description (only if pre-treatment self-description has been obtained; may not be applicable)

- Show client self-description summary from screening; ask:
- **How does this compare with how you see yourself now?** (What is similar? What is different? How do you understand these similarities and differences?)

Appendix E: Helpful Aspects of Therapy form

HELPFUL ASPECTS OF THERAPY FORM (H.A.T.) (10/93)

1. Of the events which occurred in this session, which one do you feel was the most **helpful** or **important** for you personally? (By "event" we mean something that happened in the session. It might be something you said or did, or something your therapist said or did.)

2. Please describe what made this event helpful/important and what you got out of it.

3. How helpful was this particular event? Rate it on the following scale. (Put an "X" at the appropriate point; half-point ratings are OK; e.g., 7.5.)

HINDERING <-----				Neutral	-----> HELPFUL			
1	2	3	4	5	6	7	8	9
-----	-----	-----	-----	-----	-----	-----	-----	
E	G	M	S		S	M	G	E
X	R	O	L		L	O	R	X
T	E	D	I		I	D	E	T
R	A	E	G		G	E	A	R
E	T	R	H		H	R	T	E
M	L	A	T		T	A	L	M
E	Y	T	L		L	T	Y	E
L		E	Y		Y	E		L
Y		L				L		Y
		Y				Y		

4. About where in the session did this event occur?

5. About how long did the event last?

6. Did anything else particularly **helpful** happen during this session?

YES NO

(a. If yes, please rate how helpful this event was: _____ 6. Slightly helpful
_____ 7. Moderately helpful
_____ 8. Greatly helpful
_____ 9. Extremely helpful

(b. Please describe the event briefly:

7. Did anything happen during the session which might have been **hindering**?

YES NO

(a. If yes, please rate how hindering the event was: _____ 1. Extremely hindering
_____ 2. Greatly hindering
_____ 3. Moderately hindering
_____ 4. Slightly hindering

(b. Please describe this event briefly:

Appendix F: ACT-FM

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: _____		
<input type="checkbox"/> Direct observation	<input type="checkbox"/> Audio recording	<input type="checkbox"/> 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) =

Appendix G: Mother-Infant Relationship Scale

Feelings about being a parent (MIRS)

The following section contains 19 statements about your feelings as a parent. Read and indicate how often you have had these feelings over the last two weeks.

	Never	Sometimes	Often	Always
1. I feel that I make my baby feel safe and secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel frustrated being a parent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel that I can work out what my baby is communicating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel sad when I think about my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I feel worried about my baby's future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel that my baby likes me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I feel I can't connect with my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I feel that my baby is too demanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I find I have angry feelings towards my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I feel my baby wants too much from me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I feel rejected by my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I feel that my baby should give a lot back to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I feel that my baby is manipulative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I feel worried that I will repeat bad relationship patterns with my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I feel that my baby wants to upset or hurt me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I feel that my baby has had inherited some good characteristics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I feel I need to withdraw from my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I feel that I am getting to know my baby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I feel it is hard to cut off when my baby is upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix H: CompACT




Name:

Date:

Please rate the following 23 statements using the scale below:

	0 Strongly disagree	1 Moderately disagree	2 Slightly disagree	3 Neither agree nor disagree	4 Slightly agree	5 Moderately agree	6 Strongly agree
1. I can identify the things that really matter to me in life and pursue them	0	1	2	3	4	5	6
2. One of my big goals is to be free from painful emotions	0	1	2	3	4	5	6
3. I rush through meaningful activities without being really attentive to them	0	1	2	3	4	5	6
4. I try to stay busy to keep thoughts or feelings from coming	0	1	2	3	4	5	6
5. I act in ways that are consistent with how I wish to live my life	0	1	2	3	4	5	6
6. I get so caught up in my thoughts that I am unable to do the things that I most want to do	0	1	2	3	4	5	6
7. I make choices based on what is important to me, even if it is stressful	0	1	2	3	4	5	6
8. I tell myself that I shouldn't have certain thoughts	0	1	2	3	4	5	6
9. I find it difficult to stay focused on what's happening in the present	0	1	2	3	4	5	6
10. I behave in line with my personal values	0	1	2	3	4	5	6
11. I go out of my way to avoid situations that might bring difficult thoughts, feelings, or sensations	0	1	2	3	4	5	6
12. Even when doing the things that matter to me, I find myself doing them without paying attention	0	1	2	3	4	5	6
13. I am willing to fully experience whatever thoughts, feelings and sensations come up for me, without trying to change or defend against them	0	1	2	3	4	5	6
14. I undertake things that are meaningful to me, even when I find it hard to do so	0	1	2	3	4	5	6
15. I work hard to keep out upsetting feelings	0	1	2	3	4	5	6
16. I do jobs or tasks automatically, without being aware of what I'm doing	0	1	2	3	4	5	6
17. I am able to follow my long terms plans including times when progress is slow	0	1	2	3	4	5	6
18. Even when something is important to me, I'll rarely do it if there is a chance it will upset me	0	1	2	3	4	5	6
19. It seems I am "running on automatic" without much awareness of what I'm doing	0	1	2	3	4	5	6
20. Thoughts are just thoughts – they don't control what I do	0	1	2	3	4	5	6
21. My values are really reflected in my behaviour	0	1	2	3	4	5	6
22. I can take thoughts and feelings as they come, without attempting to control or avoid them	0	1	2	3	4	5	6
23. I can keep going with something when it's important to me	0	1	2	3	4	5	6

Appendix I: CORE-10

 <p>CORE-10</p>	Client ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Age <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Date form completed <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> M <input type="checkbox"/> F
	Therapist ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Stage S Screening H Referral V Assessment F First therapy session P Pre-therapy (unspecified) U During therapy A Last therapy session X Follow-up 1 Y Follow-up 2
	Service ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Episode <input type="text"/> <input type="text"/> Session <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	

IMPORTANT - PLEASE READ THIS FIRST

This form has 10 statements about how you have been OVER THE LAST WEEK.
 Please read each statement and think how often you felt that way last week.
 Then tick the box which is closest to this.

Over the last week...

	Not at all	Only occasionally	Sometimes	Often	Most or all of the time	Other use only
1 I have felt tense, anxious or nervous	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
2 I have felt I have someone to turn to for support when needed	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>
3 I have felt able to cope when things go wrong	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	<input type="checkbox"/>
4 Talking to people has felt too much for me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
5 I have felt panic or terror	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
6 I made plans to end my life	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
7 I have had difficulty getting to sleep or staying asleep	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
8 I have felt despairing or hopeless	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
9 I have felt unhappy	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>
10 Unwanted images or memories have been distressing me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/>

Total (Clinical Score*)

*Quick scoring if all items completed: add together the item scores to get the Clinical Score.

It is not recommended to compute a score if more than one item was omitted but if nine were completed:

add together the item scores, divide by nine to get the mean score, then multiply by 10 to get the Clinical Score.

THANK YOU FOR YOUR TIME IN COMPLETING THIS QUESTIONNAIRE

Appendix J: WEMWBS

The Warwick-Edinburgh

Mental Well-being Scale

(WEMWBS)

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of
each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

"Warwick Edinburgh Mental Well-Being Scale (WEMWBS)
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Appendix K: Personal Questionnaire

Client ID

Today's date:

Instructions: Please complete before each session. Rate each of the following problems according to how much it has bothered you during the past seven days, including today.

	Not At All	Very Little	Little	Moderately	Considerably	Very Considerably	Maximum Possible
1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7
4.	1	2	3	4	5	6	7
5.	1	2	3	4	5	6	7
6.	1	2	3	4	5	6	7
7.	1	2	3	4	5	6	7
8.	1	2	3	4	5	6	7
9.	1	2	3	4	5	6	7
10.	1	2	3	4	5	6	7
Additional Problems:	1	2	3	4	5	6	7
11.							
12.	1	2	3	4	5	6	7

Personal Questionnaire Duration Form

Client ID

Today's date:

Instructions: Please rate how long each of your problems has bothered you at roughly the same level (or higher) as it does now.

	less than 1 month	1 - 5 months	6 - 11 months	1 - 2 years	3 - 5 years	6 - 10 years	more than 10 years
1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7
4.	1	2	3	4	5	6	7
5.	1	2	3	4	5	6	7
6.	1	2	3	4	5	6	7
7.	1	2	3	4	5	6	7
8.	1	2	3	4	5	6	7
9.	1	2	3	4	5	6	7
10.	1	2	3	4	5	6	7
11.	1	2	3	4	5	6	7
12.	1	2	3	4	5	6	7

Appendix L: Session Rating Scale

Session Rating Scale (SRS V.3.0)

Name: _____ Age (Years): _____
ID#: _____
Session # _____ Date: _____

Please rate today's session by placing a mark on the line nearest to the description that best fits your experience.

Relationship

I did not feel heard,
understood, and
respected.

I-----I

I felt heard,
understood, and
respected.

Goals and Topics

We did *not* work on or
talk about what I
wanted to work on and
talk about.

I-----I

We worked on and
talked about what I
wanted to work on and
talk about.

Approach or Method

The therapist's
approach is not a good
fit for me.

I-----I

The therapist's
approach is a good fit
for me.

Overall

There was something
missing in the session
today.

I-----I

Overall, today's
session was right for
me.

Institute for the Study of Therapeutic Change

www.talkingcure.com

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Appendix M: DASS-21



DASS 21 NAME _____ DATE _____

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

- 0 Did not apply to me at all - NEVER
- 1 Applied to me to some degree, or some of the time - SOMETIMES
- 2 Applied to me to a considerable degree, or a good part of time - OFTEN
- 3 Applied to me very much, or most of the time - ALMOST ALWAYS

FOR OFFICE USE

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

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Appendix N: City Birth Trauma Scale



City Birth Trauma Scale

This questionnaire asks about your experience during the birth of your most recent baby. It asks about potential traumatic events during (or immediately after) the labour and birth, and whether you are experiencing symptoms that are reported by some women after birth. Please tick the responses closest to your experience.

What date was your baby born?

During the labour, birth and immediately afterwards:		
Did you believe you or your baby would be seriously injured?	Yes	No
Did you believe you or your baby would die?	Yes	No

The next questions ask about symptoms that you might have experienced. Please indicate how often you have experienced the following symptoms in the last week:

Symptoms about the birth*	NOT AT ALL	ONCE	2 - 4 TIMES	5 OR MORE TIMES
Recurrent unwanted memories of the birth (or parts of the birth) that you can't control				
Bad dreams or nightmares about the birth (or related to the birth)				
Flashbacks to the birth and/or reliving the experience				
Getting upset when reminded of the birth				
Feeling tense or anxious when reminded of the birth				
Trying to avoid thinking about the birth				
Trying to avoid things that remind me of the birth (e.g. people, places, TV programs)				
Not able to remember details of the birth				
Blaming myself or others for what happened during the birth				
Feeling strong negative emotions about the birth (e.g. fear, anger, shame)				

* Although these questions refer to the birth, many women have symptoms about events that happened just before or after birth. If this is the case for you, and the events were related to pregnancy, birth or the baby then please answer for these events.

Symptoms that began or got worse since the birth	NOT AT ALL	ONCE	2 - 4 TIMES	5 OR MORE TIMES
Feeling negative about myself or thinking something awful will happen				
Lost interest in activities that were important to me				
Feeling detached from other people				
Not able to feel positive emotions (e.g. happy, excited)				
Feeling irritable or aggressive				
Feeling self-destructive or acting recklessly				
Feeling tense and on edge				
Feeling jumpy or easily startled				
Problems concentrating				
Not sleeping well because of things that are not due to the baby's sleep pattern				
Feeling detached or as if you are in a dream				
Feeling things are distorted or not real				

If you have any of these symptoms:

When did these symptoms start?	
Before the birth	
In the first 6 months after birth	
More than 6 months after birth	
Not applicable (I have no symptoms)	

How long have these symptoms lasted?	
Less than 1 month	
1 to 3 months	
3 months or more	
Not applicable (I have no symptoms)	

Do these symptoms cause you a lot of distress?	Yes	No	Sometimes
Do they prevent you doing things you usually do (e.g. socialising, daily activities)?	Yes	No	Sometimes
Could any of these symptoms be due to medication, alcohol, drugs, or physical illness?	Yes	No	Maybe

Thank you for completing this questionnaire

Appendix O: Obsessive-Compulsive Inventory

OCI

Name..... Date.....

The following statements refer to experiences which many people have in their everyday lives. In the column labelled DISTRESS, please CIRCLE the number that best describes HOW MUCH this experience has DISTRESSED or BOTHERED YOU DURING THE PAST MONTH. The numbers in this column refer to the following labels: 0 = Not at all 1 = A little 2 = Moderately 3 = Quite a bit 4 = Extremely

	DISTRESS				
1. Unpleasant thoughts come into my mind against my will and I cannot get rid of them	0	1	2	3	4
2. I think contact with bodily secretions (perspiration, saliva, blood, urine, etc) may contaminate my clothes or somehow harm me.	0	1	2	3	4
3. I ask people to repeat things to me several times, even though I understood them the first time.	0	1	2	3	4
4. I wash and clean obsessively.	0	1	2	3	4
5. I have to review mentally past events, conversations and actions to make sure that I didn't do something wrong.	0	1	2	3	4
6. I have saved up so many things that they get in the way.	0	1	2	3	4
7. I check things more often than necessary	0	1	2	3	4
8. I avoid using public toilets because I am afraid of disease or contamination.	0	1	2	3	4
9. I repeatedly check doors, windows, drawers etc.	0	1	2	3	4
10. I repeatedly check gas and water taps and light switches after turning them off.	0	1	2	3	4
11. I collect things I don't need.	0	1	2	3	4
12. I have thoughts of having hurt someone without knowing it.	0	1	2	3	4
13. I have thoughts that I might want to harm myself or others.	0	1	2	3	4
14. I get upset if objects are not arranged properly.	0	1	2	3	4
15. I feel obliged to follow a particular order in dressing, undressing and washing myself.	0	1	2	3	4
16. I feel compelled to count while I am doing things	0	1	2	3	4
17. I am afraid of impulsively doing embarrassing or harmful things.	0	1	2	3	4
18. I need to pray to cancel bad thoughts or feelings.	0	1	2	3	4
19. I keep on checking forms or other things I have written.	0	1	2	3	4
20. I get upset at the sight of knives, scissors and other sharp objects in case I lose control with them.	0	1	2	3	4
21. I am excessively concerned about cleanliness.	0	1	2	3	4
22. I find it difficult to touch an object when I know it has been touched by strangers or certain people.	0	1	2	3	4
23. I need things to be arranged in a particular order	0	1	2	3	4

		DISTRESS				
		0	1	2	3	4
24.	I get behind in my work because I repeat things over and over again.	0	1	2	3	4
25.	I feel I have to repeat certain numbers.	0	1	2	3	4
26.	After doing something carefully, I still have the impression I have not finished it.	0	1	2	3	4
27.	I find it difficult to touch garbage or dirty things.	0	1	2	3	4
28.	I find it difficult to control my own thoughts.	0	1	2	3	4
29.	I have to do things over and over again until it feels right.	0	1	2	3	4
30.	I am upset by unpleasant thoughts that come into my mind against my will.	0	1	2	3	4
31.	Before going to sleep I have to do certain things in a certain way.	0	1	2	3	4
32.	I go back to places to make sure that I have not harmed anyone.	0	1	2	3	4
33.	I frequently get nasty thoughts and have difficulty in getting rid of them.	0	1	2	3	4
34.	I avoid throwing things away because I am afraid I might need them later.	0	1	2	3	4
35.	I get upset if others change the way I have arranged my things.	0	1	2	3	4
36.	I feel that I must repeat certain words or phrases in my mind in order to wipe out bad thoughts, feelings or actions.	0	1	2	3	4
37.	After I have done things, I have persistent doubts about whether I really did them.	0	1	2	3	4
38.	I sometimes have to wash or clean myself simply because I feel contaminated.	0	1	2	3	4
39.	I feel that there are good and bad numbers.	0	1	2	3	4
40.	I repeatedly check anything which might cause a fire.	0	1	2	3	4
41.	Even when I do something very carefully I feel that it is not quite right.	0	1	2	3	4
42.	I wash my hands more often or longer than necessary.	0	1	2	3	4

Appendix P: Invitation to participate in research study



University of
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Invitation to participate in research study (Version 4.0 date: 14/03/2024)

IRAS Project ID: 335788

Mental health difficulties around childbirth are common, with serious health consequences. It has been suggested that Acceptance and Commitment Therapy, which is a form of talking therapy, might help manage mental health difficulties around childbirth, because it has been used in other populations successfully. So far, only group Acceptance and Commitment Therapy interventions have been developed, and researchers have been unable to fully determine if and how these interventions work.

At the University of Nottingham, we are conducting research to better understand whether and how Acceptance and Commitment Therapy can help people cope with their mental health better after childbirth. For this research study, we are looking for participants who:

- speak English fluent enough to enable participation;
- gave birth in the last 12 months;
- are aged 18 or over;
- have full capacity and are able to consent to take part in the research;
- report struggling with their mental health after birth; and
- have access to the Internet.

As part of the study, we will ask participants to fill out some online questionnaires to start with. Then, we will invite participants to take part in a one-to-one, ten-week therapy process, delivered online. We will ask participants to complete some short questionnaires each session, and after the final session, we will also ask them to complete the initial questionnaires again. A week later, we will invite participants to participate in a 45-minute interview about their experience of therapy. All sessions and interviews will be audio or video recorded to allow for analysis.

This study is important because if our intervention proves to be effective, it might be tested further and eventually become an evidence-based tool used in clinical practice.

If you think you meet the criteria above and are interested in taking part in this therapy, please tell the member of staff who gave you this information sheet, so that they can link you with the researcher.

Appendix Q: Consent to contact form



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Nottinghamshire Healthcare
NHS Foundation Trust

Consent to contact form (Final version 2.0 Date: 12/03/2024)

Title of Study: Acceptance and Commitment Therapy for the management of postpartum psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series

IRAS Project ID: 335788

Name of Researcher(s): Kinga Simko

We would like to inform you of a research project being carried out by researchers at the University of Nottingham that is funded by the University of Nottingham.

An Acceptance and Commitment Therapy intervention is being developed to support individuals with their mental health after childbirth. The aim of the study is to see whether and how this Acceptance and Commitment Therapy, which is a form of talking therapy, helps people cope better with their mental health after giving birth. This study is carried out as part of an educational project.

We need to test this intervention and would like to contact you to tell you more about the study and to see if you would like to take part in the research study.

If you would like to be contacted by the research team about this, please complete and sign the form below and give it back to the member of staff who gave this to you.

Completing this form does not commit you to taking part in the study.

Thank you for your time.

I agree that I may be contacted by a member of the University of Nottingham about the above research study.

_____	_____	_____
Print name	Date	Signature

Telephone: _____

E-mail: _____

3 copies: 1 for contactee, 1 for the project notes and 1 for the medical notes

Appendix R: Participant Information Sheet



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NHS
Nottinghamshire Healthcare
NHS Foundation Trust

Participant Information Sheet

(Final Version 4.0: date: 23/04/2024)

IRAS Project ID: 335788

Title of Study: [Acceptance and Commitment Therapy for perinatal women: A Hermeneutic Single-Case Efficacy Design Series](#)

Name of Chief Investigator: [Dr Danielle De Boos](#)

Local Researcher(s): [Kinga Mercedesz Simko](#); [Dr Michael Baliouis](#)

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

The purpose of the present study is to see whether an Acceptance and Commitment Therapy (ACT) intervention can help people cope better after childbirth. We would also like to find out how exactly ACT might help following childbirth.

What is ACT?

ACT is a form of talking therapy which aims to increase clients' psychological flexibility, that is, their ability to engage in a meaningful life, despite life's inevitable challenges. ACT uses a variety of techniques to achieve this: you will sometimes be given some tasks to do between sessions, and you will also learn some skills that you can use in your everyday life.

This study will help us explore whether conducting further, large-scale research on ACT in the perinatal period would be feasible, so that eventually ACT can be used to support clients after childbirth. If ACT proves to be a feasible and successful approach for this population, this will mean that mental health professionals will be able to rely on another tool besides already existing ones to support their clients. Overall, it is hoped that findings from this study will inform current clinical practice in perinatal mental health and inspire further studies.

The study will also form part of a submission towards the Trent Doctorate programme in Clinical Psychology.

Why have I been invited?

You are being invited to take part because

- you have reported that you are struggling with your mental health after the birth of your baby,
- you have expressed an interest in participating in the study when someone from your care team gave you some information about this research, and
- you are on the waiting list for talking therapy.

We are inviting up to six participants like you to take part.

Do I have to take part?

No, it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign an electronic 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?

First, we will assign you a study identity code number using your initials and year of birth. This identifier will be used on all study documents to ensure that you cannot be identified. To protect your anonymity, we will also use a pseudonym (fake name) when writing up the results of the study.

You will be invited to fill out a set of questionnaires online (you will receive the link to them via email). With these questionnaires, we aim to gather more information about your mental health, wellbeing, and your relationship with your baby. The questionnaires should take about 30-45 minutes to complete. We will select some of the appropriate questionnaires based on your medical notes. Therefore, we will ask you for your permission to look at your medical records as part of the study.

After this, you will be invited to take part in 10 weeks of one-to-one therapy. Each session will take up to 120 minutes and will be delivered remotely, via Microsoft Teams. You will be asked to practise some skills learned in therapy at home, too – this might take up to 30 minutes a day. In these sessions, we will talk through your personal experiences around parenthood and any difficulties you might be struggling with. Sessions will take place once a week, and you will be asked to attend every session, although we do offer flexibility in cases where a session might need to be rearranged. However, we will ask you to let us know in advance if you cannot attend a session, whenever possible.

At each session, you will be asked to fill out some brief questionnaires so that we can monitor your wellbeing and progress throughout the intervention period. You will also be asked to provide feedback on therapy every week. You will be sent the link to these questionnaires via the chat function in Microsoft Teams. Overall, these questionnaires will take you about 10-15 minutes to complete.

Therapy will be delivered by the researcher, Kinga Simko (Trainee Clinical Psychologist), via Microsoft Teams. Sessions will be video recorded to ensure that the intervention is being delivered correctly. The recordings may also be helpful for the researcher to watch

back to when she writes up the study. All recordings will be kept strictly confidential. The recordings will also be transcribed using a secure automated transcription service provided by the University of Nottingham. All recordings will be deleted after transcription. Only authorised members of the research team will be able to access video recordings, and only for the purposes of supervision and writeup.

At the end of the 10-week intervention period, you will be asked to complete the questionnaires that you filled out at the beginning of the therapy process again.

About a week after the last session, you will be invited to take part in a 45-minute interview, which will be conducted by an external researcher (another Trainee Clinical Psychologist) via Microsoft Teams. In this interview, we will ask you about your impression of therapy, and whether you have experienced any changes in your life during the course of your intervention. The aim of this interview is to help us develop the intervention further for future use in clinical practice. These interviews will be video or audio recorded, so that they can be transcribed and analysed. The University of Nottingham's transcription service will help transcribe the interviews. Transcripts will not contain any identifiable information. All recordings will be kept strictly confidential and will only be used for the purpose of the present study. The recordings will be deleted from the laptop at the end of the study and stored securely on a University of Nottingham system.

Altogether, you will be involved in the study for about 14 weeks, and you will be asked to devote up to 5.5 hours of your time weekly to attend the sessions and complete homework tasks.

Expenses and payments

Participants will not be paid to participate in the study. However, you will be offered a £10 Amazon voucher in order to compensate for your time. Should you choose to withdraw from the study, you will still receive this voucher if you have participated in some of the therapy sessions.

What are the possible disadvantages and risks of taking part?

If you choose to take part, this will mean that you will be asked to devote some of your time to the intervention and homework tasks each week for the duration of the study.

During the intervention, your personal experiences will be discussed, some of which might be distressing to talk about. As a result, this therapy might be anxiety-provoking and upsetting. However, to help with this, regular breaks will be offered throughout your sessions, should you require them. Also, it is expected that the researcher, who is a trainee clinical psychologist, will be able to support you through difficult topics. You can withdraw from the study at any point if you no longer wish to take part. The researcher will also work under supervision to ensure that if she identifies any issues that are beyond her current level of knowledge and experience, you can be signposted or referred to the appropriate services.

What are the possible benefits of taking part?

We cannot promise the study will help you but the information we get from this study may help us expand our knowledge about what interventions might help support people after childbirth. This will hopefully impact clinical practice and help others receive better postpartum care.

What happens when the research study stops?

After the study, we will analyse the data collected from you and use it in the write-up of the study. During the write-up of the study, we might use some anonymised direct quotes that you have said. Throughout the write-up of the study, we will refer to participants using their pseudonyms (fake names), to ensure that you will not be identified from the study.

We will ask you if you would like us to provide you with an information sheet summarising the research findings. If you would like us to do this, then we will ask for your consent to keep your contact details for this purpose, and we will send out information sheets once we have got the final results.

After the study stops, you will still be under the perinatal mental health team for your care and support needs, and the usual members of your care team (e.g., your care coordinator) will still be involved in your care. However, if it is agreed with you that you do not need any more support from a psychologist after completing ACT therapy, you will be removed from the psychology waiting list. In the future, if you need psychological support again, you can be re-referred to psychology and you can go back on the psychology waiting list.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers' contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you can do this by contacting the Patient Advice and Liaison Service (PALS) by telephone on 0115 993 4542, email PALSandComplaints@nottshc.nhs.uk or postal address PALS and Complaints, Highbury Hospital, Highbury Road, Nottingham NG6 9DR.

In the event that something does go wrong and you are harmed during the research and this is due to someone's negligence then you may have grounds for a legal action for compensation against the University of Nottingham but you may have to pay your legal costs. The normal National Health Service complaints mechanisms will still be available to you.

How will we use information about you?

The University of Nottingham are the sponsor of this study. This means we are responsible for looking after your information and using it properly.

We will need to use information from you and your medical records for this research project.

This information will include your name and initials, patient identifier, year of birth, and contact details. People will use this information to do the research or to check your records to make sure that the research is being done properly.

If you agree we will also keep your contact details to send you the findings of the study and to contact you about participating in future research studies.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead.

We will keep all information about you safe and secure.

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

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 shared in this way will be anonymised.

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.

What are your choices about how your information is used?

- You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have.
- We need to manage your records in specific ways for the research to be reliable. This means that we won't be able to let you see or change the data we hold about you.

Where can you find out more about how your information is used?

You can find out more about how we use your information

- reading our privacy statement <https://www.nottingham.ac.uk/utilities/privacy/privacy-information-for-research-participants.aspx>
- at www.hra.nhs.uk/information-about-patients/
- our leaflet available from www.hra.nhs.uk/patientdataandresearch
- by asking one of the research team,
- by contacting the Sponsor's Data Protection Officer on sponsor@nottingham.ac.uk, or
- by sending an email to [one of the email addresses provided below](#).

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. This means that if you withdraw after your post-therapy interview has been transcribed (approximately one week after your interview), it might not be possible for your data to be completely removed from the study. To safeguard your rights, we will use the minimum personally-identifiable information possible. Please note that the study may also be stopped by the researcher if you do not attend regularly or if there are any concerns about your safety, but this would be discussed with you beforehand.

What will happen to the results of the research study?

This study will be submitted in partial fulfilment of the requirements for the Trent Doctorate in Clinical Psychology in February 2025. Moreover, the study will be prepared for publication in an appropriate peer-reviewed journal and presented at relevant conferences if possible.

Participants will be offered an information sheet summarising the main findings from the study following the final analyses. To allow for this information to be sent out, we will seek permission to hold your contact details for this purpose.

Who is organising and funding the research?

This research is being organised by the University of Nottingham as part of the Trent Doctorate in Clinical Psychology (DClinPsy) and is being funded by Health Education England.

Who has reviewed the study?

All research in healthcare is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given

favourable opinion by the Integrated Research Application System Research Ethics Committee.

Further information and contact details

Researcher:

Kinga Mercedesz Simko

Email: kinga.simko@nottingham.ac.uk

Primary supervisor/Chief Investigator:

Dr Danielle De Boos

Phone: 0115 846 6696

Email: danielle.deboos@nottingham.ac.uk

Secondary supervisor:

Dr Michael Baliouis

Phone: 01522 886 972

Email: mbaliouis@lincoln.ac.uk

Field supervisor:

Dr Fiammetta Rocca

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Appendix S: Consent form



CONSENT FORM (Final version 3.0: 19/04/2024)

Title of Study: Acceptance and Commitment Therapy for the management of postpartum psychological difficulties: A Hermeneutic Single-Case Efficacy Design Series

IRAS Project ID: 335788

Name of Researcher: Kinga Mercedesz Simko

Name of Participant:

Please initial box

1. I confirm that I have read and understand the information sheet version number 4.0 dated 23/04/2024 for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without my medical care or legal rights being affected. I understand that should I withdraw then the information collected so far cannot be erased and that this information may still be used in the project analysis. My participation may also be stopped by the researcher in case of regular non-attendance or concerns about my safety. ☐
3. I understand that relevant sections of my medical notes and data collected in the study may be looked at by authorised individuals from the University of Nottingham, the research group and regulatory authorities where it is relevant to my taking part in this study. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential. ☐
4. I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. (Optional)

Yes
☐

No
☐
5. I understand that my therapy sessions and post-therapy interview will be recorded and that anonymous direct quotes from me may be used in the write-up of the study. ☐

6. In 2025, when the study has been written up, I would like to receive an information sheet with a summary of the study's main findings. I consent to my contact details being kept until then. (Optional)

Yes

☐

No

☐

7. I agree to take part in the above study.

☐

Name of Participant

Date

Signature

Name of Person taking consent

Date

Signature

3 copies: 1 for participant, 1 for the project notes and 1 for the medical notes

Appendix T: Molly's full Change Interview record

A. Change Interview transcript

Interviewer: Right, it looks like it started. Yes, it has. So after treatment, clients are asked to come in for an hour-long semi-structured interview. The major topics of the interview are any changes you've noticed since starting therapy, what you believe may have brought about these changes, and helpful and unhelpful aspects of therapy. The main purpose of the interview is to allow you to tell us about the therapy and the research in your own words. This information will help us to understand better how the therapy works. It will also help us to improve the therapy. As you know, this therapy is recorded, sorry, this interview is recorded for later transcription. Please provide as much detail as possible. So, the first question is what medications are you currently on please?

Molly: I'm on citalopram, which has just recently, literally as of last week, been increased to 30 milligrams.

Interviewer: 30, yeah. For what symptoms is that for?

Molly: That is for my compulsions related to my OCD,

Interviewer: Yeah. And you've said the dose. How long have you been on it please?

Molly: Citalopram? Since May, so six months, but I've been on antidepressants since February. I was on sertraline initially. That didn't sit well with my body. Moved on to citalopram, and so yes, for six months on citalopram. I was always on... I think I was on 10 and then 20 and now I've been increased to 30.

Interviewer: Yeah. When... Sorry, when specifically was it that you were... It was last adjusted to 30?

Molly: Last week Tuesday, so... I'm trying to think whether it was the last Tuesday or... let me check it.

Interviewer: The 20th will that have been?

Molly: Yes, yeah. Is it?

Interviewer: I'm checking now as well, 19th.

Molly: Right. Yes. So 19th of November, I started taking 30 milligrams.

Interviewer: And are you on any other medication?

Molly: No.

Interviewer: Thank you. Can I just confirm that we have your consent to be interviewed and to be recorded?

Molly: Yes.

Interviewer: Fab, thank you. So what has therapy been like for you? How has it felt to be in therapy?

Molly: So this, this particular form, Acceptance and Commitment Therapy, was a massive blessing for me. I've never heard of ACT before. So when I was called up about it and about the study, I had no idea what it was. And I was like, oh, I don't even know. But I was in a very vulnerable position, and I just knew that I needed some kind of help. So I was open to it. You know, I did a little bit of research and I'm like, you know what, I might as well try. And it turned out being such an amazing thing for me. There were so many aspects of it, I'm actually getting emotional thinking about it right now, but there were so many aspects of it that [sighs] gave me such a sense of freedom that I didn't know I could have. And also, I felt understood, and I felt that the techniques specifically the really centring on mindfulness, and a few of the exercises like thought distortion and that kind of stuff, that really sat well with me. And it was... for me, a big thing was I struggled with not having control. I needed control, yet ACT taught me that it's OK not to have control and it also taught me how to let go of that need for control and the thoughts that would surround the control that I wanted. So yeah, it was, I really enjoyed it, and I'm still today, even I'm only 2-3 weeks out of since having my last session, I'm still everyday practising what I learned. And that is a big thing because that's when I came into it and I spoke to Kinga, and I told her of all the things that I've learned before. My only thing that I would want out of this is that I would learn tips or skills that I could keep using, because everything I've learned before I forget about it, or it just doesn't seem to help me as much as it did when I was in the intensive therapy. Whereas this I can definitely say it's provided me with lasting skills and skills that genuinely help me and that I find very easy to use. They come naturally to me, so ACT as a whole has been so good for me.

Interviewer: Yeah. Thank you. It sounds like it's been a very positive experience.

Molly: Yes, yes.

Interviewer: And how are you doing now in general in yourself?

Molly: I'm, I'm doing fine. I suppose you know, the anticlimax that comes after finishing therapy, you know, you think it's going to be all OK and you're all better now. But so, I've had some trouble realising that the physical... ACT helps me with my thoughts and how to control my thoughts. And I was having very, very sad negative thoughts and ACT has helped me to like, you know, stop labelling them as that. There are no negative thoughts, just let the thoughts come and let them go. They have no bearing on how you need to live your life. However, my physical symptoms are still very much there, the compulsions related to the OCD. So that is one thing I will say, ACT helped them to be less intense, my need to carry them out less intense, but they are still there. And so now that is now next step. So all in all, I feel fine. I've had a few anxious full days in this last week let me say. But my skills with ACT has helped me too. I do a 5-minute mindfulness and a thought distortion technique, and I feel 100 times better than what I did going into it. So they are, I'm doing fine within myself and a lot of that is owed to the skills that I've learnt.

Interviewer: Brill. Thank you very much. How would you describe yourself?

Molly: I would say that I am a shy, introverted person, but on the other end I do like to be social and interact with people. Yeah, and I'm soft spoken and I would say I'm very... and I'm an emotional person.

Interviewer: Thank you. And how would others who know you well describe you?

Molly: I think they would... very similar, that I'm soft spoken, quiet, maybe a little bit... I don't know if shy is the right word. I feel like shy is something you refer to a child about. But yeah. And then probably the ones who know me very well would say that I'm a joker. I'm always trying to pull pranks and tell jokes, but yeah, yeah.

Interviewer: Thank you. And if you could change something about yourself, what would it be?

Molly: I think sometimes I can be a little bit critical of myself, but also of others. I'd probably want to change that.

Interviewer: Yeah. Anything else you'd want to change about yourself?

Molly: No.

Interviewer: Yeah, thank you. The next section is about changes. So what changes is, if any, have you noticed in yourself since therapy started?

Molly: OK, so as I said, I like to be sociable with a small group of people that I never had that before therapy started. I was shy about that. So I've gotten that part of myself back. I've got it... that fear that I had around socialising has also, it's not fully gone, but it's a good chunk gone. And yes, I found the joy in living again, in not in living, but in life and doing things. I'm not just scared all the time and able to look past the fear and experience the joy, yeah.

Interviewer: Yeah. So more socialising, feeling more sociable and that joy in life, feeling less scared. Any other changes you've noticed since starting therapy?

Molly: Definitely my relationship, like with my children and with my husband has improved. I'm not... I'm not constantly looking for issues or ways in which they're not doing things the way I would want it to be done. And yes, I'm feeling a sense of like accomplishment almost, because I have 3 young children, and one thing I was always so scared about is that my own struggles would be hindering them and how they experience the world. However, now we've, I don't think, I don't think they would know what I was struggling with when we're outside. Yeah, that's how well I have been able to cope.

Interviewer: Yeah. Are they separate changes do you think, one, the relationship with your husband and children, and then two, you feeling accomplished and coping?

Molly: Yes.

Interviewer: Yes. So separate as opposed to the same.

Molly: Yeah.

Interviewer: Yeah. Any other changes?

Molly: I think that's it in a nutshell. Obviously, I could go much deeper into that, but that is really that is it. That was the biggest of my problems coming into it. And those are the two things that are definitely so much better now.

Interviewer: Yeah, I'll come back to those four changes in a sec, but has anything changed for the worse for you since starting therapy?

Molly: No, no, if anything I have, if I have to, like, no, nothing for the worse. The only thing is I have gained so much more, what's the word, like, understanding. And so if anything, I'm now a little bit more, like I said just now, I would like to change that critical part of myself. So now I'm criticising myself a little bit because I'm like, you could do so much better. You don't have to let this, kind of, run your life. You don't have to be scared of the fact that you can't remember if you washed your hands or not. So that's the only thing is, it's made me more self-aware, that's it.

Interviewer: More self-aware.

Molly: ...which could be a good thing, it could also be a bad thing, depends on which way you're looking at it.

Interviewer: Yeah, like you said both ways. On that, would you like me to put that as another change, positive change to the fact you've gained understanding and more self-awareness?

Molly: Yes, exactly.

Interviewer: Yeah. And then kind of linked to that, what you've just said, is there anything that you wanted to change that hasn't since therapy started?

Molly: Yeah, I mean, as I said, the physical symptoms of OCD are still very much there. I... I don't know, I suppose along the way I hoped that they would stop. But I've also since learned that tackling your OCD is a years-long process. It's not just a month long. So I'm now, I do have a little bit more, like clearer idea of what to expect with that, not to think it's going to be gone after 12 weeks. So as I said, going into ACT, I didn't know what to expect. So I suppose it was a little part of me that was like, OK, well, maybe I won't have to struggle so much with my OCD at the end of this. And yeah, OCD is still there and the compulsions are still there, but they're not as intense. So yeah.

Interviewer: Yeah. You mentioned being more kind of self-critical as a result of the therapy. Is it that that is something you wanted to change before therapy, or is that something you've kind of learnt since the therapy's happened, if that makes sense?

Molly: No, that's something that's I've become aware of since.

Interviewer: Yeah, that's kind of resulted from the therapy.

Molly: Yeah, yeah.

Interviewer: So that's not something you had wanted to change beforehand?

Molly: No.

Interviewer: Thank you, so I wondered if we could just go through each change in turn of the positive ones you mentioned earlier and if we could kind of rate each one. So, the changes you listed was: 1. kind of being more sociable and socialising, 2. having more joy in life, feeling less scared, 3. improved relationships with your husband and children, 4. feeling more accomplished and coping, and then 5. gaining understanding and more self-awareness.

Molly: Yeah.

Interviewer: So, for the first one, so just feeling more sociable and socialising, how much did you expect it versus were you surprised by it? So on a scale of 1 to 5, so, 1 is you very much expected that change, 2 you somewhat expected it, 3 you're neither expected nor surprised by it, 4 you're somewhat surprised by it, and 5 you're very much surprised by it.

Molly: Five, very surprised.

Interviewer: And how likely do you think it would have been if you hadn't have been in therapy? How likely do you think that change would have been to have happened? So 1 very unlikely without therapy, 2 somewhat unlikely without therapy, 3 neither likely nor unlikely or somewhat likely without therapy, and 5 very likely without therapy.

Molly: I'd say 2.

Interviewer: 2. So somewhat unlikely without the therapy.

Molly: Yeah.

Interviewer: And how important or significant do you personally, do you consider that change to be so with the sociable and socialising? So 1 not at all important, 2 slightly important, 3 moderately important, 4 very important, and 5 extremely important.

Molly: 5.

Interviewer: So extremely important. Fab. And then if we could just go through those ratings again for the having more joy in your life, feeling less scared. So how much do you expect it versus were you surprised by it? So one very much expected it to five very much surprised by it.

Molly: 4.

Interviewer: 4, so somewhat surprised by it. How likely do you think it would have been to have happened if you hadn't been in therapy? So one very unlikely to 2, to sorry, 5 very likely.

Molly: 1.

Interviewer: 1, so very unlikely without therapy.

Molly: Yeah.

Interviewer: And how important or significantly do you personally consider this change to be, from 1 not at all important to 5 extremely important?

Molly: 5.

Interviewer: So, extremely important.

Molly: [nods]

Interviewer: Next, for the improved relationships with your husband and three children. How much did you expect it versus were you surprised by it? So one very much expected, 5 very much surprised.

Molly: 4.

Interviewer: 4, so somewhat surprised.

Molly: Yeah.

Interviewer: How likely do you think it would have been if you hadn't been in therapy? So one very unlikely to five, very likely without therapy.

Molly: 4.

Interviewer: 4, so somewhat likely without.

Molly: Yeah.

Interviewer: How important or significantly do you personally consider this change to be from 1 not at all important to 5 extremely important

Molly: 5, yes.

Interviewer: Thank you. For the feeling more accomplished and coping, how would you rate... would you rate that you expected it versus you were surprised by it? So one very much expected to five very much surprised.

Molly: 5.

Interviewer: Five. How likely do you think it would have been if you hadn't have been in therapy? From 1 very unlikely without to 5 very likely without therapy.

Molly: 1.

Interviewer: 1, so very unlikely without.

Molly: Yeah.

Interviewer: Yeah.

Interviewer: And how important or significantly do you personally consider this change to be from 1 not at all important to 5 extremely important?

Molly: 5.

Interviewer: Yeah. And the last change was the gaining understanding, feeling more self-aware. So how much did you expect it versus were you surprised by it? So, 1 very much expected it to 5 very much surprised by it.

Molly: 4.

Interviewer: Four, so somewhat surprised?

Molly: Yeah.

Interviewer: How likely do you think it would have been if you hadn't have been in therapy? So 1 very unlikely without therapy to 5 very likely without therapy.

Molly: 1.

Interviewer: One, so very unlikely.

Molly: Very unlikely.

Interviewer: And how important or significant do you personally consider it to be? So 1 not at all important to 5 extremely important.

Molly: Extremely important, 5.

Interviewer: Thank you. Any other changes just before we move on from that section?

Molly: No, not that I can think of right now.

Interviewer: Thank you. So in general, what do you think has caused those changes? So in other words, what do you think might have brought them about?

Molly: Well, I have to... I have to place it solely or let me say 90% on what I learnt in therapy, 100%, yeah, 90%. The videos, the homework that was... that helped keep me really engaged. And also, it gave me that opportunity to because you know, when you're having a video call you, you're trying to concentrate, you know, you're not, you're trying to not waste other person's time. However, when I could go away and do that stuff on my own, I was able to dive a little bit deeper, look at a few more videos on YouTube that might be related and stuff. And so you really, I was really able to just take it in a little bit more and engage with it a little bit more. So, I have to say that I was on medication and so obviously that was going to help a little bit, but the most of it had to come from the therapy. Like it as I say, it was a huge blessing for me.

Interviewer: Yeah. And you kind of actually said then about 90%. What do you think the other 10% would be?

Molly: I would say it was down to the medication because as I said, I started meds in Feb, and I only started this therapy in July, and I had noticed a huge difference with the fear that I was experiencing after taking the meds. But then everything else was still there. So yes, things were not scaring me as much, but I still didn't want to go out or not wash my hands 50 times a day or whatever. So the therapy and all the things, I mean, there was so much, it was almost an information overload. And that's why I say I was thankful for the homework so I could just dissect everything a little bit. The therapy was... it taught me so much about myself and about how I can cope with my problems.

Interviewer: Do you think there was anything else at all that caused the changes? So both outside and in therapy? Sorry, apart from the therapy and the medication you'd mentioned.

Molly: I mean, of course, the, the, the support that I had from my husband and also from my extended family, like my parents, that went a long way as well, for sure. But I don't think there's anything more other than that. It was just having that

love and that support from the people around me. And then the meds and the therapy.

Interviewer: Yeah, thank you. Can you sum up what has been helpful about your therapy so far? And then please give examples. So general aspects, specific events, whatever it may be.

Molly: So my fears are around the health and the well-being of my family, sometimes about myself as well, but mostly it's about my children. Before my children it was about my husband. So I've always had this to some extent, but it just got a lot worse with when I had kids. And then my first born was 10 months old when the pandemic hit. And that is when things really took a nosedive for me. So like, for example, the sociable side of it, for the last four years, I have been social distancing and not going into people's homes and not having people in my home. And that's been for four years. And this year after, during therapy, was the first time that any of those things took place again. Sorry, can you remind me what the question was?

Interviewer: No worries. Can you sum up what has been helpful about the therapy so far?

Molly: OK, OK, OK. So, I mentioned the skills that I've learnt and one of my absolute favourites is this thought distortion and *[hesitates]* the thought defusion, it's thought defusion. And the one practice or the one skill that that I use, like I say daily, is if I'm having, so it literally happened earlier this week where I was having an anxious, a few... Oh, sorry, I have a Tesco order which was supposed to come between 12:00 and 1:00, but I've just heard a knock. I've got some frozen things. Do you mind if I just quickly pop them in the freezer and then we can...?

Interviewer: No problem, no problem.

Molly: I'll be right back.

Molly: Sorry about that. Thank you for waiting.

Interviewer: No worries.

Molly: I remember what I was saying though, so I was talking about what happened earlier in the week. I was having a few anxious thoughts and I then started to, I practise some mindfulness and then I literally just started to take my thoughts and envision myself placing them on the clouds and then just watching them fade away. And I was having some, I was worrying about my son who was, I was holding him while I was doing this. I think I was actually feeding him. And that's the thing that I've loved the most about it is I can take any quiet moment and I can practise something. And so I was feeding him. I'm still, I'm still breastfeeding him. So firstly, that is such a good, I learned that I can use that as a good mindfulness time, you know, just to take him in, look at his features, practise some breathing and, so, yeah, it was just a nice quiet moment and I was feeling a bit worried about him unnecessarily. He's fine, but you know, I was just worried for no reason. And yeah, I just started to, while I was feeding him, literally just imagining myself placing these worrying thoughts on the cloud. And also what I've loved is I would never be able to actually say the thought out loud because it would almost feel like

if I do that, it will come true. Yet with thought distortion, if I say the word, the thought out loud in a silly voice, and one thing I'd say to Kinga is, I really like to do it as Mr. Bean. And if I say these thoughts that would actually cause me so much anxiety, and I say them in this funny voice, they almost feel like not that bad anymore. And so that's what I did. And obviously he like stops thinking and he looks at me like, what are you doing? What is that voice? And yeah, that's just, you know, it brings me back into the moment and I completely forget about what it is, or it's at least I don't forget about what I was worrying about, but all of a sudden what I was worrying about doesn't seem so bad anymore. And that is... that happens a lot where I'm able to practise these things that I've learned. And also giving myself self-compassion and treating myself as I would a, if I were, if I had a compassionate friend, how would they treat me? And all of those things has just helped me, especially with the self, the critical side of things. It's really helped me to, to see that. And obviously it's still a work in progress, but I'm aware of it, and I'm trying to be less like judgmental and, and yeah, making judgments about myself.

Interviewer: Yeah. Thank you. Any other helpful aspects of the therapy? I think you've already mentioned, you have mentioned quite a few, but yeah, yeah, anything else.

Molly: I mean, it probably is, but nothing I can think of right now.

Interviewer: Yeah, no worries, thank you. What kinds of things about the therapy have been hindering, unhelpful, negative or disappointing for you? And please could you give some specific examples?

Molly: Overall, I think it was, it was very positive. I can't really say that it was hindering in any way. The only thing maybe that I felt like I would have liked a little bit more of was the ability for me to speak a little bit more in depth about what I was struggling with from a physical point, with my, with the compulsions. I think I did feel like it was very... not tailored to, I mean, I don't know if it was supposed to be or what, but I felt like it wasn't tailored to the physical side of OCD. It was more tailored to what goes on in your mind and your thoughts and stuff, which you know what the stuff that I, this is from the last question actually, but Russ Harris... learning about his videos was, oh man, it felt so validating to watch these videos and be like: "so it's OK, you know, I, I don't have to worry about those things. I don't have to feel all of these negative feelings." So, yeah, I think it was maybe just I, I, I did feel a little bit defeated at the end of it, that the physical side of my OCD is still very much there.

Interviewer: Yeah. So the less of a focus on the physical side was unhelpful.

Molly: Yeah.

Interviewer: Were there any other things that were hindering, unhelpful, negative or disappointing?

Molly: No.

Interviewer: Were there things in the therapy which were difficult or painful but still OK, or perhaps even helpful? If so, what were they?

Molly: Yes, the learning about the... there was a, a week on emotions, and obviously learning about like anger is a very necessary emotion and you know, people, society, especially learning about how society views certain emotions and that sadness or anger, you know, you shouldn't be feeling those things. So learning that fear is necessary and we should be feeling fear sometimes because, and then there's reasons why fear is good, it can help you to avoid dangers and also that reassurance that you need to feel the feelings, whatever they are, whether they are happiness and joy or whether they are fear, anger, sadness, you need to feel them and then find ways that what feeling them, find ways that feeling them will help you to process what is that you're going through. And then also finding out that, or learning about the fact that there are no negative feelings and, or negative thoughts, and they are just thoughts. You know, don't place labels on them, or judgments on them. Label them, like "thank you worried mind, you know, that was quite unhelpful, but I'll just be letting that go." So yes, I think that was a... it was a heavy week because afterwards I felt like, you know, you as a parent, you don't want to be angry, you don't want to be sad when it, when, when it comes to your children or when you're around your children. But learning that it's OK to feel those things is very helpful for me.

Interviewer: Yeah, yeah. Was there anything else that you covered that was difficult or painful but still OK or helpful?

Molly: No.

Interviewer: Thank you. Has anything been missing from your treatment?

Molly: No, I wouldn't think so. I don't think so, no.

Interviewer: What would have made it or has made it more effective or helpful?

Molly: Well, I definitely think Kinga was, she was a huge help. I felt comfortable with her. I wouldn't have been able to, I don't think I would have been able to take it in as much, you know, if I wasn't feeling comfortable with her. And that's the thing I was saying is that I am usually quite shy and introverted unless I know a person well. So yes, the fact that I was able to take it on so well as I would say is because my psychologist was good or let me say good with me. And I think it was just a very good form of therapy, especially for me, the type of person that I am: emotional, I'm usually compassionate towards other people. So all of the things that I was learning, it's like, OK, I can be those things for others. Now it's like I can be that for myself. So I think I was very, it was the type of therapy was I was receptive towards, the type of therapy because of the type of person that I am.

Interviewer: Yeah, I'm just going to clarify. So was anything missing that you can think of?

Molly: Right. No, thank you. Sorry.

Interviewer: No, no worries. No, no. It was helpful. Thank you. The next question is, do you have any suggestions for us regarding the research or the therapy or do you have anything else that you want to tell me?

Molly: No, just that I'm looking forward to finding out the results.

Interviewer: From the study?

Molly: *[nods]*

Interviewer: I wondered if we could just review your personal questionnaire. I understand that you've been doing that weekly, every session with Kinga.

Molly: Yeah.

Interviewer: So the with the same scale, the first one being the fear of the future, something bad happening. How would you rate that for yourself now?

Molly: What is the numbers again? Was it 1 to 9 or what was the right thing again?

Interviewer: I'm not sure. I'm not sure, sorry.

Molly: OK, let's say it was a 1 to 10 and 10 obviously being worst.

Interviewer: Yes.

Molly: So what was it? Fear of the future?

Interviewer: Fear of the future, something bad happening?

Molly: 4.

Interviewer: Or out of 10 with 0 being fine, 10 being the worst.

Molly: Yes.

Interviewer: Thank you. How about fear of going out and getting sick on the same scale?

Molly: 3.

Interviewer: Thank you. Rituals becoming a part of me permanently.

Molly: 6

Interviewer: 6. Yeah, and thoughts, will I be everything that my children need, for example, educational with their upbringing.

Molly: 4

Interviewer: 4. Thank you. In general, do you think that your ratings mean the same thing now that they did before therapy? If not, how is their meaning changed?

Molly: Do you mean like what I personally rated each?

Interviewer: Yes.

Molly: I mean, yeah, I think they... What do you mean? Do I think they mean the same thing?

Interviewer: So sometimes clients might change how they use the rating scale. So did that happen for you? Or did if you like, use the rating scale the same throughout?

Molly: Yeah, I would think it was... It was the same throughout.

Interviewer: Yep, so meant the same now that they did before therapy.

Molly: Yes.

Interviewer: So, the changes you gave, so fear of future, something bad happening, fear of going out and getting sick, rituals becoming a part of me permanently and thoughts will I be everything that my children need with their upbringing. And then earlier you also gave the changes of becoming more sociable, socialising, getting joy in life, feeling less scared, improved relationships with your husband and children, feeling more accomplished, coping, and gaining understanding, more self-awareness. With the four that you've we've just rated, did you want to add them to the change list as well that you gave me earlier? So did you want, sorry, did you want to add those four that you've been rating throughout to the five changes you told me earlier?

Molly: Yes.

Interviewer: Brilliant, thank you. So is it alright if we just rate each of them on the same ratings we did earlier?

Molly: Mhmm.

Interviewer: So, the fear of the future, something bad happening. So, I'm assuming... So, what is the change there from that problem? What is the change?

Molly: That I'm not, it's not, it's not, doesn't have such a huge hold on me anymore. I'm not constantly fearful of what's going to happen.

Interviewer: Yeah. So not constantly fearful of the future.

Molly: Yep.

Interviewer: So how much did you expect that to change versus were you surprised by it? So from 1 to 5, where 1 was very much expected it and to 5 very much surprised by it.

Molly: I was, I would say 4.

Interviewer: 4, so somewhat surprised by it.

Molly: Mhmm.

Interviewer: So for that change again, so not constantly being fearful of the future, how likely do you think it would have been if you hadn't been in therapy? So from 1, very unlikely without therapy to 5, very likely without therapy.

Molly: 4.

Interviewer: 4, so, somewhat likely without therapy.

Molly: Oh, no, 2.

Interviewer: 2, so somewhat unlikely without therapy?

Molly: Yeah.

Interviewer: And how important or significant do you personally consider this change to be? So from 1 not at all important to 5 extremely important.

Molly: 4.

Interviewer: 4 so very important.

Molly: Mhmm.

Interviewer: The second one was fear of going out and getting sick. What would you call the change that's come from that?

Molly: That, that I think has been probably one of the biggest changes where I used to view that going out and then getting sick as like probably the worst, one of the worst things that could happen. And I would really struggle to cope when that happened. And why this is, it's very fresh in my mind because we've just, you know, I think I told you last week, I wasn't feeling well. So my daughter got she, she caught a cold and it made its way throughout the whole family. And it was my 11-month-old's first time getting sick as well. And even in the midst of it, I wasn't stressed at all. And I mean, it's just a cold, but it's amazing. A cold used to bring me a lot of anxiety and it used to be like something bad is going to happen because of this. And I was quite surprised with how yeah, I didn't feel great, but mentally I was fine. It wasn't a massive worry for me. I was like, it's OK, this is normal. We all get sick now, and then amazingly, my 11-month-old was the least worst out of all of us. So he took it so much better than I thought that he would. But so the change here is... the fear of getting sick is... it's not really a fear now. It's more of a, "ugh, I really don't want to because it feels horrible", but it's not a fear. So that has been a huge change.

Interviewer: Yes. Would you, do you want me to call that no longer afraid of going out and getting sick or less afraid of going out and getting sick?

Molly: Less afraid.

Interviewer: Less afraid. Yeah, I'm just going to write that down. So for that change of no longer, sorry, of feeling less afraid of going out and getting sick, how would you rate it on how much you expected it versus were surprised by it? So from 1 very much expected it to 5 very much surprised by it.

Molly: 5.

Interviewer: So very much surprised.

Molly: Mhmm.

Interviewer: How unlikely do you think it would have been if you hadn't have been in therapy?

Interviewer: So from 1 very unlikely without therapy to 5 very likely without therapy.

Molly: 1.

Interviewer: So very unlikely with that therapy.

Molly: Mhmm.

Interviewer: And how important or significant do you personally consider this change to be? So less afraid of going out and getting sick.

Interviewer: So from 1 not at all important to 5 extremely important.

Molly: Extremely important.

Interviewer: Yeah. Thank you. The next problem was rituals becoming a part of me permanently. So what would you call the change to that?

Molly: [*hesitates*] I suppose that I know now that they won't be a part of me forever, but that they are currently still a part of me. That comes along with that self-awareness and understanding.

Interviewer: Yes, yes, the gaining understanding and self-awareness, yeah. Did you want to put that as a separate change, or did you want to put that as part of the gaining understanding and more self-awareness?

Molly: No, I think it still needs to be separate.

Interviewer: So knowing that you your rituals are not a part of you forever, though currently perhaps are. So for that change, how much did you expect it versus were you surprised by it? So from 1 very much expected it to 5 very much surprised by it.

Molly: 3.

Interviewer: 3. So neither expected nor surprised. How likely do you think it would have been if you hadn't have been in therapy? So from 1 very unlikely without therapy to 5 very likely without therapy.

Molly: Ermm, I think somewhat unlikely without therapy.

Interviewer: So 2, somewhat unlikely without therapy.

Molly: Yeah.

Interviewer: And how important or significant do you personally consider this change to be? So from 1, not at all important to 5 extremely important.

Molly: 4.

Interviewer: 4, so very important. And the last problem you were rating throughout your therapy was the thought, will I be, will I be everything that my children need with their upbringing, e.g., educational? What would you call that as a change? How would you word that as change?

Molly: OK, so I've been able to analyse properly and not just be like overcome with all the worries. I'm able to, what is the word, like, sit with my thoughts and then look at them properly and see, OK, what is actually, what is actually the worry here, and what is actually the truth?

Interviewer: Yeah. So able to analyse it properly and not overcome with the worries, able to sit with thoughts, look at the properly, properly sorry, and assess whether they're kind of worth worrying about or if they're truth.

Molly: Yeah.

Interviewer: So regarding that change and how much did you expect it versus were you surprised by it? So 1 very much expected it to 5 very much surprised by it.

Molly: 5.

Interviewer: So very much surprised by it.

Molly: Yeah.

Interviewer: How likely do you think it would have been if you hadn't been in therapy? So from 1 very unlikely without therapy to 5 very likely without therapy.

Molly: *[hesitates]* 2.

Interviewer: 2, so somewhat unlikely without therapy. And how important or significant personally do you consider this change to be? So from 1 not at all important to 5 extremely important.

Molly: 4.

Interviewer: 4. Thank you very much. So we've added those four onto your change list.

Molly: Great.

Interviewer: Yeah, sorry, I'm just checking something. So when you did these questionnaires, so for the first question, the fear of the future, something bad happening, you started at six and went down to three. Well, started at six before in your first session, went down to four in your last session, and then you just rated it as 3. Do you feel that this change in the ratings is accurate?

Molly: Yes.

Interviewer: For the fear of going out and getting sick. You started out with that as five. It went up to six and then down to three during therapy. Sorry, I'm sorry. Let me start again. I've read this wrong, right? For the first problem, the fear of the future, something bad happening at the start of therapy was 6 and it went down to three by the end of therapy, and then I think you rated it as four. Do you think that is accurate to the change in ratings?

Molly: Yeah.

Interviewer: The fear of going out and getting sick started at 5 during therapy and down to 3, and then you've rated it again. Do you think that's accurate to how you've felt?

Molly: Yeah.

Interviewer: The rituals becoming a part of you permanently, at the start of therapy, you rated that as 7, by the end it was 4, and then we've re rated it. Do you think that feels accurate?

Interviewer: Yep. And the last one with the thoughts. So you started that one in session 5 at 6. It went down to 2 by the end of therapy and then we've re rated it. Do you feel this change in the ratings is accurate?

Molly: Mhmm.

Interviewer: Fab, thank you very much. So just to go back to the suggestions, questions, is there anything else you want to tell me? Do you have any suggestion for us regarding the research or therapy? Is there anything else at all that you want to tell me that we haven't already discussed?

Molly: No.

Interviewer: No, fab. Thank you very much. That's the end of the interview, unless there's anything else.

Molly: No, nothing else from my side.

Interviewer: I'll just stop the recording, OK?

B. Change Rating Sheet

Client Initials: [removed]
Interviewer: Victoria Harper
Assessment (circle one): mid

Case ID _____
Date: 29/11/2024

post follow-up/6mo follow-up/18mo

Number of previous sessions (circle one): 10 20 30 40 other:
Psychopharmacological Medication Record (incl. herbal remedies)

<u>Medication Name</u>	<u>For what symptoms?</u>	<u>Dose/Frequency</u>	<u>How long?</u>	<u>Last Adjustment</u>
Citalopram	OCD compulsions	30mg	10 days	19/11/2024

Change List

Change	Change was: 1 - expected 3 - neither 5 – surprised by	Without therapy: 1 - unlikely 3 - neither 5 - likely	Importance: 1 - not at all 2 - slightly 3 - moderately 4 - very 5 - extremely
1. being more sociable and socialising	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
2. having more joy in life, feeling less scared	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
3. improved relationships with your husband and children	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
4. feeling more accomplished and coping	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5. gaining understanding and more self-awareness	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

6. not being constantly fearful of the future	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
7. less afraid of going out and getting sick	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
8. knowing that rituals won't be a part of me forever, even if they currently are	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
9. being able to analyse problems without being overcome with worries and sit with thoughts and assess whether they are worth worrying about	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Appendix U: Author guidelines

<https://www.sciencedirect.com/journal/journal-of-contextual-behavioral-science/publish/guide-for-authors>

Thesis Poster

Acceptance and Commitment Therapy (ACT) for perinatal women:

A case series



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Background

Perinatal mental health difficulties (PMHDs) affect 10-20% of perinatal women¹ and have a deleterious impact on maternal and child wellbeing, as well as the family unit².

Acceptance and Commitment Therapy (ACT)³ is a transdiagnostic psychological approach that promotes psychological flexibility (PF), helping clients engage in meaningful activities despite distress.

ACT has been proposed as a potentially feasible approach in the perinatal period⁴, since PF is linked to reduced depression, anxiety, and trauma symptomology in the perinatal population, as well as better parental adjustment, attachment, and responsiveness⁵⁻⁸.



This study aimed to explore the effectiveness and change mechanisms of a 10-week remote ACT intervention in three perinatal women with self-reported distress, using the Hermeneutic Single Case Efficacy Design (HSCED).

1

Data collection

- Quantitative outcome and process measures
- Post-intervention Client Change Interview
- Therapist process notes

2

Development of Rich Case Records

- Data were critically reviewed and affirmative and sceptic briefs developed for each participant, to explore:
 - Did participants experience meaningful changes?
 - Are changes attributable to therapy?
 - What events/processes are responsible for changes?

3

Adjudication

- Three expert judges (Clinical Psychologists) reviewed Rich Case Records and concluded on outcomes

Results

Two clients improved substantially; one remained unchanged. Where changes occurred, this was largely attributable to ACT.

Observed changes were attributable to:

ACT processes
(experiential
acceptance, cognitive
defusion,
mindfulness)

Common factors
(therapeutic
relationship, safety,
trust, working
alliance)

Extra-therapeutic
factors (readiness for
change, medication,
life events, social
support, adjustment)

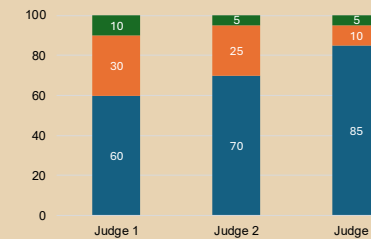
Discussion

ACT was overall effective and feasible, but changes were partly attributable to the therapeutic alliance and extra-therapeutic events. This mirrors findings from prior research.

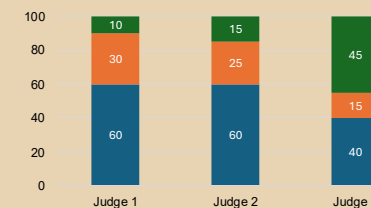
Future research and clinical practice should focus more on the behavioural components of ACT (i.e., values, committed action) and potential adaptations for neurodiverse clients.

Further replications are warranted before larger-scale research.

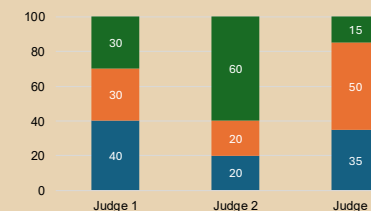
Participant 1



Participant 2



Participant 3



■ Extra-therapeutic factors (%) ■ Common factors (%) ■ ACT-specific factors (%)

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