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Feasibility, acceptability and clinical benefit of a trauma-focused stabilisation group for post-traumatic stress disorder patients with complex presentations on primary care waitlists

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Abstract

Background: Large numbers of people showing complex presentations of post-traumatic stress disorder (PTSD) in the NHS Talking Therapies services routinely require multi-faceted and extended one-to-one National Institute of Clinical Excellence (NICE) recommended treatment approaches. This can lead to longer waits for therapy and prolong patient suffering. We therefore evaluated whether a group stabilisation intervention delivered to patients on the waitlist for individual trauma-focused psychological treatment could help address this burden.
Aims: The study aimed to ascertain a trauma-focused stabilisation group's acceptability, feasibility, and preliminary clinical benefit.
Method and results: Fifty-eight patients with PTSD waiting for trauma-focused individual treatment were included in the study. Two therapists delivered six 5-session groups. The stabilisation group was found to be feasible and acceptable. Overall, PTSD symptom reduction was medium to large, with a Cohen's *d* of .77 for intent-to-treat and 1.05 for per protocol analyses. Additionally, for depression and anxiety, there was minimal symptom deterioration.
Conclusions: The study provided preliminary evidence for the acceptability, feasibility and clinical benefit of attending a psychoeducational group therapy whilst waiting for one-to-one trauma therapy.

Keywords: CBT; Complex PTSD (CPTSD); Group intervention; Improving Access to Psychological Therapies Programme (IAPT); PTSD

Introduction

PTSD is a stress-related disorder that may develop following exposure to a traumatic event such as a terrorist attack, car crash or being the victim of violence. The core symptoms of PTSD include re-experiencing the traumatic event, a persistent heightened sense of threat, avoidance of reminders of the traumatic event and negative alterations in cognition and mood associated with the traumatic event (*DSM-5*; American Psychiatric Association, 2013). PTSD can significantly impact a person's quality of life, functioning, and wellbeing. Therefore, it is important to provide effective and accessible treatment for people with PTSD. In England, one of the main sources of treatment for PTSD is the NHS Talking Therapies programme (formerly known as Improving Access to Psychological Therapies, IAPT). This programme was launched in 2008 and aims to

provide evidence-based psychological therapies for common mental health problems, such as depression and anxiety disorders, including PTSD. For a full review of IAPT, see Clark (2018).

Individuals with PTSD should routinely be offered 8–12 sessions of NICE-recommended evidence-based therapy, such as trauma-focused cognitive behaviour therapy (TF-CBT) or eye movement desensitisation reprocessing (EMDR) (National Institute of Clinical Excellence, 2018). These approaches have shown good effectiveness (Bisson *et al.*, 2013; Cusack *et al.*, 2016). However, standard NICE-recommended interventions may be less effective in more complex PTSD presentations (Cloitre, 2021).

There has been considerable controversy over the recent clinical distinction of complex PTSD (CPTSD) (Resick *et al.*, 2012). Although it is not a formal diagnostic category within the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*; American Psychiatric Association, 2013), the label is recognised by trauma experts (e.g. Cloitre *et al.*, 2013; Herman, 1992; van der Kolk *et al.*, 2005) and has recently been classified as a distinctive diagnosis within the 11th edition of the International Classification of Diseases (ICD-11) (World Health Organization, 2018). CPTSD is characterised by the core symptoms of PTSD, accompanied by enduring disturbances in the domains of emotion regulation, self, and interpersonal relationships (Cloitre *et al.*, 2013; ICD-11; World Health Organization, 2018).

The ICD-11 distinction has gained purchase within the psychological community (Hyland *et al.*, 2017; Nickerson *et al.*, 2016). Evidence supports the discriminative validity of PTSD and CPTSD diagnoses (Brewin *et al.*, 2017), demonstrating its clinical relevance. Although there are no specific guidelines for treatment of CPTSD in the UK, NICE acknowledges complexity and recommends extended sessions if clinically indicated (National Institute of Clinical Excellence, 2018).

Whilst in harmony with NICE and NHS core values, routinely offering additional sessions to treat this challenging presentation can significantly increase wait times for therapy. This places pressure on IAPT services to deliver therapy within a timely manner and creates burden for those waiting for individual TF-CBT or EMDR. Longer wait times have also been associated with symptom deterioration (Hoppen *et al.*, 2022; Jayawickreme *et al.*, 2017) and poorer patient outcomes (Clark, 2018). The pressure also has implications for IAPT targets. For example, 75% of IAPT service users should access treatment within 6 weeks, and 95% of people should access treatment within 18 weeks of referral (IAPT Manual; National Collaborating Centre for Mental Health, 2018); thus, systematically extended waiting times due to complexity can lead to service failures of the IAPT targets (Scott, 2018).

Not surprisingly, long waits for treatment access are a national concern. To minimise suffering, some IAPT services have taken the initiative to offer psychoeducational group-based programmes delivering stabilisation and symptom management skills to those waiting for individual trauma therapy (Cole, 2019).

Literature suggests that interventions aiming at initially stabilising patients with more complex presentations could be beneficial (Bohus *et al.*, 2013; Cloitre *et al.*, 2002; Courtois and Ford, 2012; Ford and Courtois, 2020; Herman, 1992). Courtois *et al.* (2012) argue that prior to trauma-focused therapy, individuals with CPTSD should acquire strategies to manage PTSD symptoms alongside information about the nature and effects of trauma (psychoeducation) to increase patient safety and improve emotion regulation. Evidence for better treatment outcomes of phase-based interventions that use a stabilisation phase with skills-based strategies prior to trauma-focused therapy is scarce and equivocal to date, with some evidence for its beneficial effect (Coventry *et al.*, 2020; Eichfeld *et al.*, 2019) but others challenging the need for it (Bicanic *et al.*, 2015; Melegkovits *et al.*, 2023) suggesting that TF–CBT was effective with or without a preceding stabilisation phase and warning that such interventions may delay individuals from receiving individual evidence-based interventions (De Jongh *et al.*, 2016). However, in a context of high demand and extended waiting times, attending a stabilisation group whilst waiting for individual treatment could prevent symptom deterioration, reduce burden and potentially prepare patients for the individual trauma-focused

therapies they are to receive. For example, at the time of this study, the average wait time for trauma-focused therapy at Plymouth Options was over 18 months.

The present study, therefore, investigated the feasibility and acceptability of a 5-week trauma-focused stabilisation group informed by Cloitre and colleagues (2012) for individuals with PTSD and complex presentations who were on the waitlist for individual PTSD therapy. Second, the study investigated whether the group prevented symptom deterioration and was associated with clinical benefits in PTSD, depression and anxiety symptoms.

Method

Design

The current study involved a mixed methods design exploring quantitative and qualitative data using a pre–post-case series design and summative content analysis (Berg *et al.,* 2017).

Participants

Participants were recruited from Plymouth Options IAPT service trauma waitlist via an opt-in letter. Of 120 invited participants, 58 agreed to join the group. Thirty-eight participants completed all five sessions in the group.

All participants had undergone a standard IAPT assessment, including risk assessment and fulfilling PTSD criteria with a clinically significant IES-R score (>33). At assessment, a full trauma history was taken, including an assessment for a history of symptoms of disturbances in self-organisation. Those service users who met the proposed ICD-11 criteria for CPTSD were given the label 'Complex PTSD'. Full patient characteristics can be viewed in Table 1. Participants were required to be over 18 and have sufficient knowledge of the English language to enable participation without the use of an interpreter. Participants in a state of psychological or suicide crisis, actively abusing alcohol or substances, were excluded from the programme due to the remit of IAPT service provision.

Measures

The Impact of Events Scale-Revised (IES-R; Weiss and Marmar, 1997)

The IES-R is an IAPT-recommended PTSD outcome measure. The questionnaire assesses respondents' subjective level of trauma based on the *DSM-5* diagnosis criteria using 22 items rated on a 0 (not at all) to 4 (extremely) scale concerning how distressing each item has been during the past week. The threshold for clinical significance is a score of ≥33, with a total score of 88 possible. High levels of internal consistency have been previously reported, with Cronbach's alpha ranging from .79 to .94 (Creamer *et al.,* 2003; Weiss and Marmar, 1997).

Patient Health Questionnaire-9 (PHQ-9; Kroenke and Spitzer, 2002)

The PHQ-9 measures symptoms of depression based on the *DSM-5* diagnostic criteria for depression. The questionnaire assesses how often the respondents had been disturbed by the nine listed items during the immediately preceding 2 weeks. The self-report measure is rated 0 (not at all) to 3 (nearly every day). The threshold for clinical significance is a score of ≥10, with a total score of 27 possible. The measure has been widely used within primary care and demonstrated good psychometric properties with Cronbach's alpha of 0.89 (Kroenke *et al.,* 2001) and good criterion and construct validity of the PHQ–9 as a diagnostic and severity measure (Kroenke and Spitzer, 2002).

Table 1. Participant characteristics

Characteristic	Intent-to-treat sample	Per protocol sample
Demographics		
Age, mean	42.82	43.48
Sex		
Female	40	31
Male	18	14
Race and ethnicity		
White	51	40
Mixed	2	2
Black or Black British	1	0
Asian or Asian British	1	1
Other	3	2
Employment		
Full-time	20	16
Part-time	4	3
Unemployed	15	9
Retired	6	5
Student	5	4
Full-time carer/ homemaker	6	6
Disabled	2	2
Trauma history		
• Repeated childhood sexual abuse	14	11
• Repeated adult interpersonal violence	5	4
• Repeated adult interpersonal violence and adult sexual abuse	5	5
• Trauma across the lifespan: repeated childhood sexual abuse, repeated adult sexual abuse and interpersonal violence	5	5
• Repeated military-related trauma	4	3
• Multiple single-incident traumas	7	6
• Single-incident trauma	18	11
Problem descriptor label		
PTSD	18	11
Complex PTSD	40	34
Onset of PTSD		
Less than 12 months	0	0
More than 12 months	9	5
More than 5 years	10	7
More than 10 years	39	33

Generalised Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006)

The GAD-7 questionnaire assesses the severity of anxiety based on how often the respondents had been disturbed by the seven listed items during the immediately preceding 2 weeks. The self-report measure is rated 0 (not at all) to 3 (nearly every day). The threshold for clinical significance is a score of ≥ 8, with a total score of 21 possible. This questionnaire has demonstrated good internal consistency (Cronbach's alpha = 0.84) as well as test–retest reliability (Spitzer *et al.*, 2006), criterion, construct, concurrent and convergent validity (Löwe *et al.*, 2008; Ruiz *et al.*, 2011; Spitzer *et al.*, 2006).

Patient Experience Questionnaire (PEQ)

The PEQ was internally developed, informed by the IAPT Patient Experience Questionnaire (National Collaborating Centre for Mental Health, 2018) to ascertain participants' satisfaction with the course and consisted of three distinct parts. Part 1 consisted of eight statements that measured the overall acceptability of the group on a 4-point scale from 'strongly agree' to 'strongly disagree'. Part 2 considered the acceptability of each session and its associated components in

Table 2. Overview of the treatment programme, assessment measures, and experiential practice

Event	Outcome measure	Content	Experiential practice/interventions
Opt-in letter	None	Letter outlining the group	Not applicable
Session 1	IES-R MDS	Psychoeducation of PTSD; understanding/exploring how trauma can lead to a range of distressing symptoms	• Diagrammatic breathing exercise
Session 2	MDS	Psychoeducation about symptoms of hyperarousal/hypervigilance within PTSD and management strategies	• Progressive muscle relaxation • Sleep hygiene • Nightmare protocol (Rothschild, 2000) • Planned dream intervention
Session 3	MDS	Psychoeducation about re-experiencing symptoms within PTSD and management strategies	• Flashback halting protocol (Rothschild, 2000) • Introduction of mindfulness • Mindful breathing; 10 breaths exercise • Overview of different types of sensory and cognitive grounding techniques to try for homework • 5-4-3-2-1 grounding exercise
Session 4	MDS	Psychoeducation about the nature of behavioural and emotional avoidance within PTSD and management strategies	• Emotional acceptance expansion exercise • Self-compassion exercise • Drop anchor exercise • Guidance on exposure/ reclaiming life/goal setting • Guidance on behaviour experiments
Session 5	IES-R MDS PEQ	Psychoeducation about the nature of negative thoughts and mood within PTSD. What to expect next from one-to-one therapy	• Guidance on challenging negative thoughts • Positive psychology; Three good things technique

detail via a session-by-session evaluation. Respondents were asked to rate the relevance of each component of the session on a 4-point scale from 'very relevant' to 'not relevant'. Part 3 explored idiosyncratic feedback from group attendees. Respondents could reflect personally about what had been most helpful and least helpful about attending the group, what they would like more or less of in the group, and any other feedback.

Procedure

All participants were invited to complete the IAPT minimum dataset (MDS) on a session-by-session basis before the session commenced The IES-R was administered alongside the MDS at the first and last session only. The PEQ was administered at the end of the final session.

Intervention

The group intervention consisted of five face-to-face sessions focused on psychoeducation about the effects of trauma, including single-incident trauma, early life, or cumulative trauma and how this might relate to the individual's symptoms, life course, worldview and relationships. Specific strategies taught included symptom management, emotion regulation skills, cognitive restructuring, and mindfulness. The group design was informed by ISTSS Expert Consensus Treatment Guidelines for Complex PTSD in Adults (Cloitre *et al.*, 2012). Sessions were designed and structured to last two hours with a 15-minute midpoint break. Table 2 provides a summary of the content and format of the intervention.

The group took place weekly over five weeks at the same time and day of the week. It was facilitated by two qualified CBT and EMDR therapists. Each session consisted of psychoeducational information followed by several points of interactive group discussion. Each session also included voluntary experiential practice of a relevant stabilisation intervention introduced in the session. At the end of each session, time was allocated for reflections and questions. Each session was supplemented by a handbook, summarising the information introduced in the session with content-specific home practice activities. Time was also allocated at the start of each subsequent session to feed back on the group's experiences of practising learned interventions.

Data analysis

Feasibility and acceptability were determined from group uptake, retention (percentage of participants who completed at least three sessions) and participant feedback about the group from the PEQ. Results from parts 1 and 2 of the PEQ are presented graphically.

Textual data from each question were analysed and coded to identify common patterns of responses using content analysis (Erlingsson and Brysiewicz, 2017). Content analysis is typically applied to find response patterns in brief text such as the open-ended questions in part 3 of the PEQ.

We evaluated the clinical benefit of our intervention in multiple ways. Firstly, we analysed the pre- and post-treatment scores of attendees who completed the IES-R, PHQ-9 and GAD-7 measures. Those who did not complete the measures were excluded from the analysis ($n = 15$). To determine meaningful changes at an individual level, we followed the recommendations of Morley and Dowzer (2014) by using the reliable change index (RCI) (Jacobson and Truax, 1991) and clinically significant change methodology (CSC). We utilised Morley and Dowser's (2014) Leeds RCI Excel application for RCI and CSC calculations. We calculated the cut-off scores for IES-R, PHQ-9 and GAD-7 using the method developed by Jacobson and Truax (1991) and Jacobson *et al.* (1996).

We retrieved the mean, standard deviation, and Cronbach's alpha scores from Creamer *et al.* (2003), Kroenke *et al.* (2001), and Jacobson and Truax (1991) for IES-R, PHQ-9 and GAD-7, respectively. We presented the results in a scatter plot that allows for visual analysis of pre- and post-treatment data points for each measure.

Second, we determined the effect size (Cohen's *d*) and confidence intervals of the overall intent-to-treat (ITT) and per protocol (PP) symptom change using paired sample *t*-tests. For the ITT, missing values at the last session (IES-R) or post-intervention (PHQ-9, GAD-7) were replaced by the last observation carried forward method (Last Observation Carried Forward, 2010).

Third, we identified patients' perceived benefits from the PEQ content analysis.

Results

Feasibility and acceptability

Recruitment and retention

The offer of attending the group whilst on the waitlist was taken up by nearly 50% of the patients waiting for individual therapy (58 out of 120). Reasons for not joining were declining a group format, care, and work commitments. As seen in Table 3, of the 58 assigned to the groups, six did not start for various reasons, including change of circumstances, illness and changing mind about the group. From the 52 who started the group, 45 (86%) completed at least 60% of the group (three or more sessions). Seven (14%) dropped out. Reasons for drop-out were destabilisation (no longer meeting IAPT service suitability and being referred to CMHT), offers of individual treatment, family illness and declining group format. This indicates that the stabilisation group was acceptable and feasible for around 37.5% of PTSD/CPTSD patients in this clinical service. Session attendance was high, with 38 (74%) of the completers attending all five sessions, suggesting that

Table 3. Group attrition

Group	Number of participants invited	Number of participants that started the course	Number of participants that finished the course	Reason for non-attendance during participation of group	Sessions attended by those removed from the group
1	20	7	6	Started individual therapy ($n=1$)	1
2	20	9	7	Destabilised ($n=2$)	1,2,3
					1,2,3
3	20	9	7	Pregnancy related problems ($n=1$)	1,2
				Declined group format ($n=1$)	1
4	20	11	7	Accident injury sustained ($n=1$)	1,2,3
				Unable to attend last session ($n=2$)	1,2,3,4
				Declined group format ($n=1$)	1,2,3,4
					1
5	20	10	7	Family emergency ($n=1$)	1
				Failed to attend/did not start the group ($n=2$)	0
6	20	12	4	Family emergency ($n=1$)	1,2,3
				Work commitment ($n=1$)	1,2,3
				Declined group format ($n=2$)	1
				Failed to attend/ did not start the group ($n=4$)	0

those who joined the group found it feasible and acceptable. Further quantitative ratings and qualitative feedback from the PEQ confirmed this.

Participant feedback about acceptability, feasibility and perceived benefit

As shown in Fig. 1, 97% of participants strongly agreed that they would recommend the course to other people, that the course was worthwhile and that the length and frequency of the sessions were just right; 80–90% of participants reflected that the group worked well together, and 86% indicated that the programme made them more confident in managing their trauma symptoms. Participants reflected on specific benefits of the course, such as:

'*The course has really helped me to accept the way that I am right now and given me hope for the future with the skills I've learned; thank you so much. It's been a real help.*'

'*I have gained strength and courage from attending and learning the coping mechanisms.*'

Participants also found a sense of validation of their trauma experience through attending the group:

'*Attending the group helped me to realise that I am not alone in this ... I found comfort in this.*'

'*Learning about everything with everybody and being in a room where people understand what it's like to go through this has been so helpful to me.*'

Taken together, participant feedback indicated that the group was both acceptable and feasible to the participants and conferred individual benefits through learning in a group and being validated.

Clinical benefit

PTSD symptom severity and recovery
Reliable and clinical change. As can be seen in Fig. 2a, out of the sample size of 38, 73% ($n=27$) of those patients that attended the group reliably improved, with two participants meeting the clinically
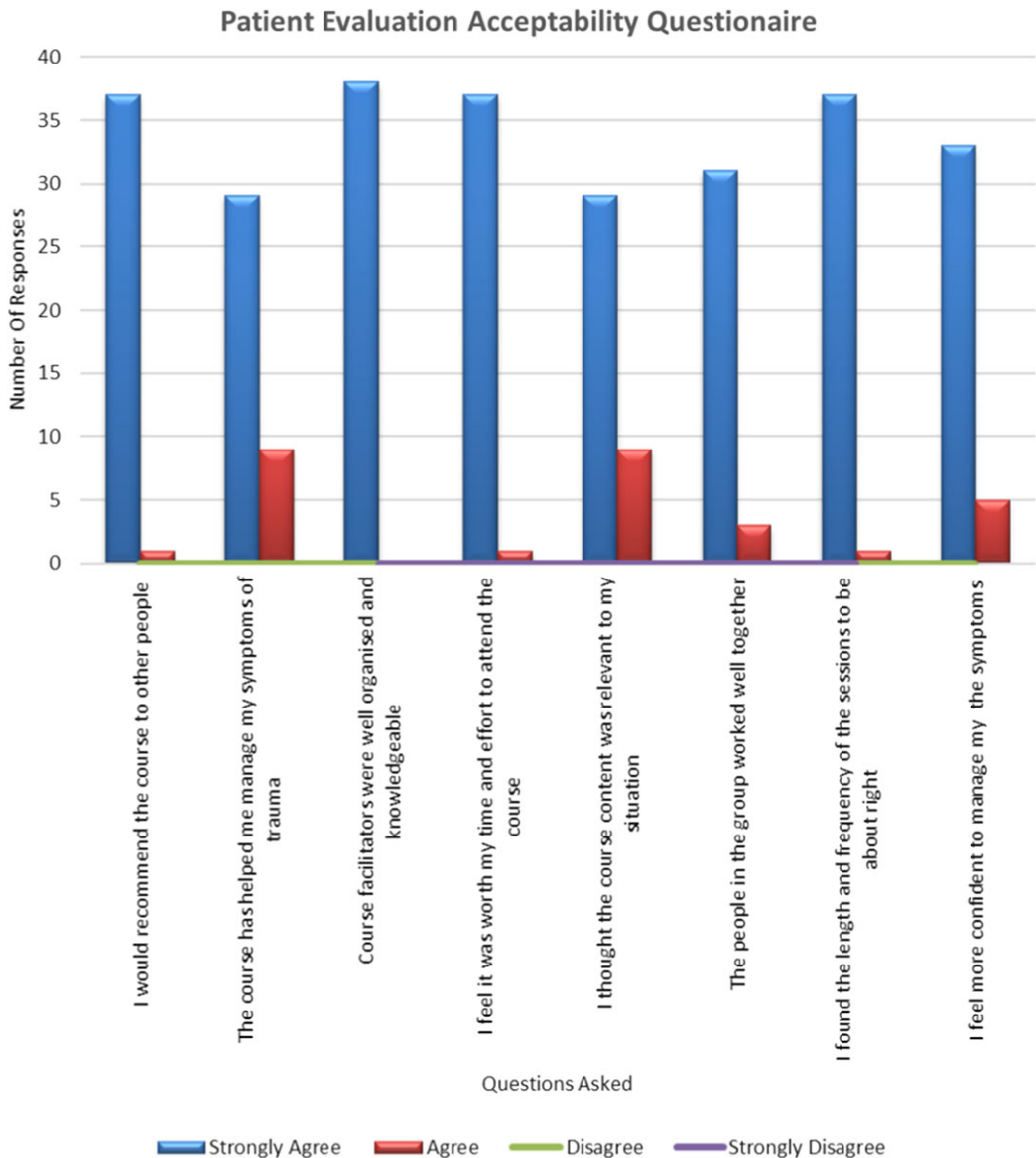
Figure 1. Bar chart illustrating patient responses to overall acceptability of trauma group.

significant change criterion indicating recovery from active symptoms of PTSD (IES-R<33). Nine participants placed within the corridor of uncertainty, indicating no significant change in rated symptoms of PTSD. Two participants deteriorated, suggesting symptoms of PTSD worsened whilst attending the group. From the results pre-test mean score of 63.5, IES-R can be compared with post-test mean IES-R score of 51.2, suggesting an average score decrease of 12.3 ($SD = 11.0$).

Effect size for per-protocol (PP) and intent-to-treat (ITT) analyses

Paired sample *t*-test revealed a significant mean pre-to-post reduction of PTSD severity, $t_{37} = 6.90$, $p<.001$, Cohen's $d = 1.05$, 95% CI [0.66, 1.45], suggesting a large treatment effect. In more conservative ITT analyses with all group starters, there was also a significant mean pre-to-post
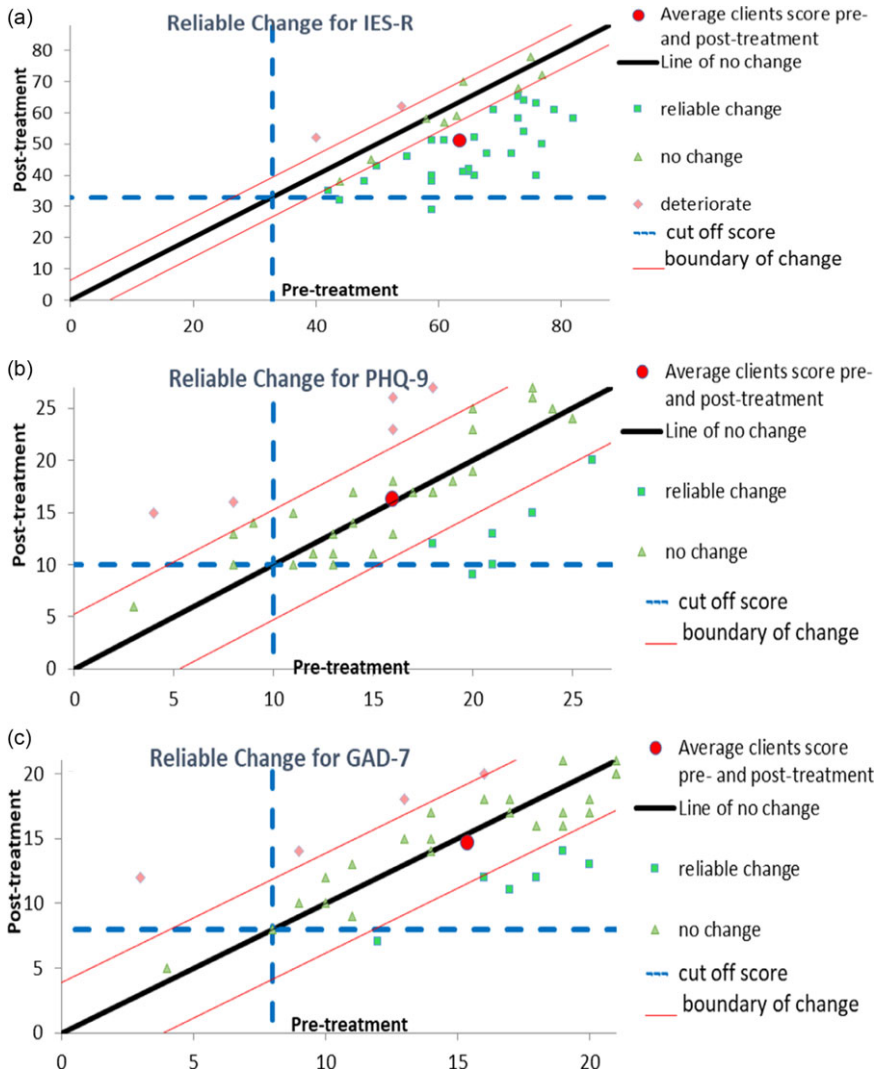
Figure 2. Scatter plots of pre-and post-intervention scores on the IES–R, PHQ-9 and GAD-7 for reliable change. The black continuous line is the line of no change, and the red lines define the boundary of reliable change boundaries: change outside these lines is considered to be significant. The cut-off score describes the clinically significant change: change below this line means that the person has recovered.

reduction of PTSD severity of 9.73 ($SD = 10.97$) on the IES-R from 63.73 to 54.00, $t_{47} = 6.15$, $p < .001$, Cohen's $d = 0.77$, 95% CI [0.47, 1.07]. This describes a medium to large treatment effect.

Follow-up PTSD Symptom Change According to the Clinician-Administered IES-R can be found in the Supplementary material.

Depression symptom severity and recovery
Reliable and clinical change. As can be seen in Fig. 2b, out of the sample size of 38, 73% ($n = 27$) of those patients that attended the group placed within the corridor of uncertainty, indicating no significant change in rated symptoms of depression. Five participants deteriorated, suggesting symptoms of depression worsened whilst attending the group. Six participants' symptoms of depression reliably improved whilst attending the group.

Effect size for PP and ITT analyses. Paired sample *t*-test revealed that there was no significant mean pre-to-post deterioration of depression severity of –0.54 ($SD = 5.32$) on the PHQ-9 from 15.88 to 16.41, $t_{40} = -0.64$, $p = .261$, Cohen's $d = -0.09$, 95% CI [–0.39, 0.20] suggesting a small treatment effect. Similarly, ITT analyses revealed no significant mean pre-to-post deterioration of depression severity of –0.43 ($SD = 4.76$) on the PHQ-9 from 16.59 to 17.02, $t_{50} = -0.64$, $p = .261$, Cohen's $d = -0.08$, 95% CI [–0.32, 0.16].

   Overall, the aim of the intervention, to prevent a deterioration of depression symptoms, was accomplished in 73% of group patients.

Anxiety symptom severity and recovery
Reliable and clinical change. Similar results were also found from the case series analysis of pre- and post-treatment scores of the GAD-7. As shown in Fig. 2c, out of the sample size of 38, 70% ($n = 25$) of patients that attended the group placed within the corridor of uncertainty indicated no significant change in rated anxiety symptoms. Four participants deteriorated, suggesting symptoms of anxiety worsened whilst attending the group and nine participants' symptoms of anxiety reliably improved whilst attending the group.

Effect size for PP and ITT analyses. Paired sample *t*-test revealed that there was no significant mean pre-to-post deterioration of anxiety severity of 0.54 ($SD = 3.46$) on the GAD-7 from 15.49 to 14.95, $t_{40} = 0.99$, $p = .163$, Cohen's $d = 0.12$, 95% CI [–0.12, 0.35] suggesting a small treatment effect. Similarly, ITT analysis revealed no significant mean pre-to-post reduction of anxiety severity of 0.43 ($SD = 3.10$) on the GAD-7 from 15.53 to 15.10, $t_{50} = 0.99$, $p = .163$, Cohen's $d = 0.10$, 95% CI [–0.10, 0.29]. This describes a small treatment effect.

   Overall, the aim of the intervention to prevent a deterioration of anxiety symptoms was accomplished in 70% of group participants.

Discussion
The primary aim of this study was to ascertain whether a psychoeducational group-based programme delivering stabilisation and symptom management skills to those waiting for individual trauma therapy was acceptable to service users expected to have a long wait for therapy. The study also sought to investigate the preliminary clinical benefit of this new group using a mixed-method design. Overall, we found the stabilisation group to be feasible and acceptable. We found evidence of marginal symptom deterioration and, interestingly, for PTSD, we found medium to large effects for symptom reductions.

Feasibility and acceptability of the group
Participants' experiences and our ability to recruit and retain them suggest good feasibility and acceptability of the stabilisation group. Most participants reported that they found the psychoeducational programme applicable, helpful, easy to understand and the right length, suggesting that participants were satisfied with the overall structure and content of the course. These findings are consistent with Dorrepaal and colleagues (Dorrepaal *et al.*, 2010), who also found the delivery of a group-based stabilisation course for PTSD clinically beneficial.

   Participants highlighted the beneficial contribution of the group format of the stabilisation intervention. For example, participants reflected that 'hearing from others' helped normalise their emotions and trauma-related symptoms. In addition, several participants reflected that the group format provided peer support and a sense of no longer feeling 'alone'. Similar findings have been demonstrated in other studies (Dorrepaal *et al.*, 2012; Krupnick *et al.*, 2008) and are consistent with high levels of patient satisfaction and perceived benefit from attending group therapy for PTSD (Mott *et al.*, 2013; Sloan *et al.*, 2013).

However, not all PTSD patients find group interventions acceptable (Kracen *et al.*, 2013), which is reflected in an uptake rate of about 50% from our waitlist individuals. This suggests that many PTSD patients we approached potentially preferred one-to-one interventions, although we have not explicitly assessed this in our study. In previous research, barriers to group format have included concerns about expressing emotions within a group setting, stigmatisation by the group, general disliking of the group composition and concerns about group participation (Kracen *et al.*, 2013)

Additionally, our study's treatment drop-out rate of 35% was higher than for average PTSD therapies (Lewis *et al.*, 2020). However, many of our participants (69%) had high symptom severity and complex presentations, which has been acknowledged as a contributor to higher drop-out (Dorrepaal *et al.*, 2012; Gene-Cos *et al.*, 2016; McDonagh *et al.*, 2005; Vogel *et al.*, 2017). Given that stabilisation is hypothesised to improve treatment drop-out (Lewis *et al.*, 2020) and given that services such as Plymouth Options deliver recovery-orientated psychological therapy, further improvement of uptake and attrition is important for this population and warrants further research. This study's participants provided suggestions on how to make the groups more accessible and inclusive. Recommendations included small group sizes and suitable timings for those in work and involving families in the psychoeducation. This feedback highlights the importance of working closely with service users to address barriers to attending our group-based course.

Preliminary clinical benefit

Our stabilisation group for waitlist individuals was aimed at reducing the burden for patients with more complex PTSD presentations by preventing symptom deterioration whilst they waited for NICE-recommended individual trauma-focused treatments.

In line with our hypotheses, there was minimal deterioration in depression (PHQ-9) and anxiety (GAD-7). This aligns with previous research where a 10-week psychoeducational programme aimed at survivors of complex sexual abuse found no changes in participants' rated symptoms of depression and anxiety (Karatzias *et al.*, 2014).

Interestingly, we found a statistically reliable reduction in PTSD symptoms with a medium effect for intent-to-treat and a large effect for per-protocol analyses. This suggests that the programme went beyond the stabilisation of post-traumatic stress for the majority of patients. This contrasts earlier research into stabilisation treatments for PTSD, which found that evidence for stabilisation treatment is weak (De Jongh *et al.*, 2016; Melegkovits *et al.*, 2023). Other research has proposed that attending stabilisation programmes facilitated increased knowledge and understanding of PTSD, which can be accompanied by a significant reduction in trauma-related symptoms (Cloitre *et al.*, 2002; Dorrepaal *et al.*, 2010).

It is important to note that the intervention was aimed at stabilisation only. Although two participants entered 'recovery' on the IES-R, it is expected that 'recovery' would usually be achieved through one-to-one trauma-focused intervention. This is congruent with findings from several meta-analyses, demonstrating that the largest reductions in trauma symptoms are achieved through individual trauma-focused interventions that include detailed trauma processing (Bisson *et al.*, 2013; Ehring *et al.*, 2014; Watts *et al.*, 2013). In addition, the findings of Bicanic *et al.* (2015) and Melegkovits *et al.* (2023) suggested that stabilisation cannot be viewed as a stand-alone intervention that replaces the core components of reprocessing the trauma memory.

Our findings of clinically beneficial symptom reduction could indicate that some trauma-focused elements of the group, such as psychoeducation, affect regulation skills, reclaiming life and the role of thought suppression in PTSD, facilitated an effect beyond stabilisation. These elements are key components of NICE-recommended PTSD treatments. Although the effect size consideration warrants some caution due to the small and self-selecting participant sample, trauma-focused symptom management, as facilitated in the group, could have enabled participants to reduce some cognitive and emotional avoidance, allowed individuals to reappraise and process aspects of their trauma memory in a more adaptive way and to start

challenging some unhelpful threat appraisals. In line with the cognitive model of PTSD (Ehlers and Clark, 2000), the group's trauma focus could have addressed some of the maintenance factors of PTSD in our sample. The results that 75% of participants who completed the programme reported that they felt more confident in their ability to manage their symptoms of PTSD by using the course interventions supports this conclusion. Whilst these results are promising, caution should be used when interpreting them, given the naturalistic nature of this study and that there is no control group for comparison.

Finally, during the intervention, we observed reliable symptom deterioration of depression, anxiety and PTSD in a small subsample. Only 36% of randomised control trials for trauma-focused treatments for PTSD reported adverse effects or specifically analyse symptom deterioration, but a recent meta-analysis revealed that trauma-focused treatments are generally safe (Hoppen *et al.*, 2022). Data for stabilisation treatments' adverse effects or symptom deterioration are even scarcer. Melegkovits *et al.*, (2023) reported 11% and 8% of patients showed deterioration in PTSD and depression, respectively, during the stabilisation phase compared with about 3% and 2% during the trauma-focused phase. Waitlist deterioration in PTSD symptoms has been described in 8–11% (Jayawickreme *et al.*, 2017; Hoppen *et al.*, 2022). Deterioration rates in our study ranged between 4% for PTSD and 9 and 11% for anxiety and depression and were thus smaller than empirically observed waitlist for PTSD and comparable to other stabilisation (Melegkovits *et al.*, 2023) or waitlist findings for depression (Jayawickreme *et al.*, 2017; Hoppen *et al.*, 2022). Although we can cautiously conclude that our group waitlist intervention is almost as safe as trauma-focused therapy and safer than previous stabilisation or waitlist for PTSD symptoms, the importance of understanding mechanisms of symptom deterioration in health interventions has recently been emphasised (Bonell *et al.*, 2015). Further research evaluating this group needs to study adverse effects, deterioration, and engagement in evidence-based treatments to establish cost–benefit analyses.

Limitations and strengths

This study had some important limitations. First, the overall sample size was small, and only limited statistical analyses were possible. It is important to note that this analysis only considered those who completed the intervention, so we must exercise caution when interpreting the results. Second, as the experimental design did not include a control group, it is impossible to say for certain that participant improvement was solely attributable to the intervention. Reports about improved PTSD symptom management support interpreting our findings but do not ecologically validate them. Similarly, no controls were established for external factors such as medication, social, employment or personal factors, which may have contributed to the patient's improvement.

Third, only those participants who completed the programme were able to fill out the PEQ, as this was administered at the final session. In addition, no other party was available to participate in the content analysis coding, highlighting potential reliability biases regarding coding themes and common responses. A qualitative semi-structured interview approach of a sample of all invited to participate in the programme may have been more effective in allowing a broad range of emerging themes to be explored relating to the acceptability of the intervention and to understanding what aspects of the treatment contributed to its beneficial effects or prevented them.

With regard to measurement tools, the International Trauma Questionnaire (Cloitre *et al.*, 2018) was not yet published when the study started. It would have been an excellent clinical measure to have used alongside the other routine outcome measures as it is the only validated measure for the assessment of ICD-11 CPTSD.

Despite these limitations, the study is the first published evaluation of group stabilisation intervention delivered within an IAPT setting to service users waiting for individual therapy. Furthermore, given the study's naturalistic design, the findings have high external validity and are applicable to NHS primary-care settings and relevant for clinical service provision.

Conclusions and recommendations for future research

The present study provides preliminary evidence for the acceptability and clinical benefit of attending a stabilisation group whilst waiting for one-to-one trauma work. This is particularly beneficial for IAPT services receiving extremely high referrals of complex presentations of PTSD where waits for treatment may be lengthy. Future research should follow up patients of the stabilisation group to explore whether they continued to benefit in their recovery journey. The group delivery also required IAPT resources in the form of therapist time. Thus, future research should include a cost–benefit analysis.

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