Contents lists available at ScienceDirect



Research Paper

European Journal of Trauma & Dissociation

journal homepage: www.elsevier.com/locate/ejtd



Evaluation of an online pilot 'Complex trauma stabilisation' group intervention in an adult mental health service



Ilana Foreman^{a, b, *}, Aimee Shipp^b, Melanie Staley^b, Catherine Ford^a

^a University of East Anglia, Department of Clinical Psychology and Psychological Therapies, Norwich Medical School, Faculty of Medicine and Health Sciences, University

of East Anglia, Norwich, NR4 7TJ, United Kingdom

^b Cambridgeshire and Peterborough NHS Foundation Trust, CPFT, Elizabeth House, Fulbourn Hospital, Cambridge Road, Cambridge, CB21 5EF, United Kingdom

ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Complex PTSD Phased treatment Stabilisation Online Group	 Background: Complex-PTSD causes distressing symptoms. NICE guidelines recommend a phased treatment approach, but there are often gaps within services providing psychological treatments for CPTSD. A pilot service in East Anglia aimed to fill gaps in current service provision. An online CPTSD group intervention was developed, focusing on phase one of trauma treatment: stabilisation. Aim: This project aimed to evaluate the pilot online CPTSD stabilisation group intervention by exploring if group attendance was associated with changes in CPTSD symptoms, and to explore participant experiences. Method: Participants attended a 12-session, two-hour, weekly group programme, held online via MS Teams. Three additional individual sessions were offered before, during and after the group. Sixty-six participants completed the programme; of whom 40 completed four pre-post outcome measures (DERS, PTCI, TMQQ, ITQ), and 25 completed an anonymous feedback survey. Results: Paired t-tests comparing pre-post measure scores showed statistically significant differences across all measures, with medium effect sizes. Lower scores were seen after group completion, indicating the group was associated with reduced CPTSD symptoms. Participant feedback indicated most participants (83 %) expressed a preference for online delivery and 68 % found the intervention beneficial. Conclusions & implications: Attendance of the pilot online CPTSD stabilisation group intervention was associated with symptom reduction and positive feedback. This appears to be the first online, mixed-gender CPTSD stabilisation group evaluation. Ultimately results are promising, though suggest further research is warranted to establish if such groups would provide an effective treatment for CTPSD and help reduce NHS waitlists. Service recommendations are discussed.

Introduction

There is increasing demand on National Health Service (NHS) mental health services and pressure to develop accessible, evidence-based interventions for mental health difficulties. The number of people in contact with mental health services in England rose from 1294,865 in May 2020 to 1622,430 in May 2022 (NHS digital, 2023).

One difficulty is post-traumatic stress disorder (PTSD); which can occur after exposure to a traumatic event, such as a car accident, or exposure to violence, injury, or natural disaster (Kessler et al., 2017). PTSD consists of three symptoms clusters: (1) re-experiencing the trauma in the present in the form of intrusive memories, flashbacks, or

nightmares; (2) avoidance of event reminders; and (3) heightened sense of current threat and hypervigilance (World Health Organization, 2018). Symptoms can vary in severity and associated distress, and negatively impact upon personal, social, and occupational functioning (Lawson, 2017; Nestgaard Rød & Schmidt, 2021). Complex PTSD (CPTSD) is a response to prolonged or repetitive traumatic events (often during childhood), over the course of months or years, where little chance of escape is perceived (World Health Organization, 2018). Examples include childhood sexual, emotional, or physical abuse; prolonged exposure to domestic violence; and sex trafficking (Courtois & Ford, 2013). In addition to PTSD symptoms, individuals with CPTSD experience symptoms in three clusters reflecting 'disturbances in

E-mail address: ilana.foreman@uea.ac.uk (I. Foreman).

https://doi.org/10.1016/j.ejtd.2024.100383

Received 14 November 2023; Received in revised form 8 January 2024; Accepted 9 January 2024 Available online 10 January 2024

2468-7499/© 2024 The Author(s). Published by Elsevier Masson SAS. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

^{*} Corresponding author at: University of East Anglia, Department of Clinical Psychology and Psychological Therapies, Norwich Medical School, Faculty of Medicine and Health Sciences, University of East Anglia, Norwich, NR4 7TJ, United Kingdom.

self-organisation' (DSO), present across a range of contexts: (1) affect dysregulation, (2) negative self-concept, and (3) disturbances in relationships (Maercker et al., 2013). Whilst research has highlighted differences in the prevalence and features of CPTSD in comparison to PTSD, CPTSD has only recently entered the diagnostic lexicon and been included in the ICD-11 (World Health Organisation, 2018). Evidence indicates CPTSD is associated with increased mental health difficulties and impaired functioning (Van Der Kolk et al., 2014).

As trauma therapy can be difficult and distressing, a phased approach to treating PTSD was proposed (e.g., Herman, 1992). The 2012 'Complex Trauma Task Force' of the International Society of Traumatic Stress Studies (ISTSS) released guidelines for managing CPTSD in adults recommending a phased approach (Cloitre et al., 2011), intended to be cyclical. This consists of three phases: (1) safety and stabilisation, (2) trauma memory reprocessing and (3) reintegration. Within the stabilisation phase focus is on psychoeducation and skills teaching (including distress tolerance and mindfulness) to enable individuals to establish a sense of safety and manage symptoms and emotions (Reddemann & Piedfort-Marin, 2017). Phase two consists of individual trauma therapy focused on reprocessing, for which trauma-focused cognitive behavioural therapy (CBT) and eve movement desensitisation reprocessing (EMDR) have been found effective (Karatzias et al., 2019; Korn, 2009; Lonergan, 2014). The final phase: reintegration, has largely been neglected in the literature, however, a recent systematic review indicates reintegration interventions to be associated with improved PTSD symptoms (Purnell et al., 2021).

There remains a lack of randomised control trails (RCT) exploring the phased-treatment approach (Ehring et al., 2014; Roberts et al., 2022). There is debate regarding the necessity of a phased approach, particularly 'stabilisation', which some suggest delays later treatments (Bicanic et al., 2015) and others argue that phase two treatments are efficacious on their own (De Jongh et al., 2016). Nevertheless, a recent review supported the efficacy of a phased approach (Coventry et al., 2020). PTSD literature demonstrates high rates of therapy drop-out (Lewis et al., 2020) and given CPTSD involves multiple traumatic experiences, an immediate step into trauma-focused CBT/EMDR (phase two) may not be as efficacious or safe without prior stabilisation skill development. Cloitre et al. (2010) highlight that those who receive stabilisation (skills training) demonstrated the greatest therapeutic gains. Connor and Higgins (2008) utilised a phased treatment programme and 80 % of participants demonstrated improvements in PTSD and CPTSD symptoms. Other research highlights how stabilisation intervention alone is effective in reducing symptoms (Eichfeld et al., 2019; ter Heide et al., 2011; Mattheß et al., 2019).

Some research found greater reductions in PTSD symptoms in individual, as opposed to group interventions (Watts et al., 2013). Yet, group therapy can be an effective, cost-efficient way for individuals to receive treatment (Beck & Coffey, 2005), and growing research supports the efficacy of group PTSD treatments in reducing trauma symptoms (Barrera et al., 2013; Bisson et al., 2013). Group interventions offer benefits beyond that of individual therapy, including normalising and validating symptoms through peer support, offering empowerment from others and development of relationships (Mendelsohn et al., 2007). Findings from Willis et al. (2023) and Dorrepaal et al. (2012) suggest group stabilisation interventions help reduce trauma symptoms. Ball et al. (2013) delivered a structured pilot trauma group intervention ('Survive and Thrive': Ferguson (2008)) focusing on safety and stabilisation skills in a group of female offenders; pre-post measures indicated significant differences, with a medium-to-large effect size. A further study (Karatzias et al., 2014) explored the effectiveness of a psychoeducation group in stabilising symptoms associated with a history of childhood sexual abuse; despite high dropout rates, results showed the intervention to be useful for stabilising behavioural problems. Finally, a recent review and meta-analysis of group treatments for adults with CTPSD found trauma memory processing and psychoeducation useful for treating CPTSD symptoms (Mahoney et al., 2019).

Emerging evidence suggests internet-delivered interventions are an effective solution to reducing barriers in accessing trauma interventions (Kazlauskas, 2017) and are effective in reducing trauma symptoms (Simon et al., 2021; Simblett et al., 2017; Young & Campbel, 2018). One study delivered phase two treatments online for trauma associated with the pandemic and found these to be effective in reducing trauma symptoms (Perri et al., 2021). An online CPTSD mindfulness intervention reduced CPTSD DSO symptoms, but no differences in PTSD symptoms were observed pre-post intervention (Dumarkaite et al., 2022). A recent pilot study found internet-based imagery rescripting (a phase two approach) to be effective in reducing trauma symptoms (Wagner et al., 2022). Ultimately there remains a gap exploring online CPTSD stabilisation interventions.

Service context

The importance of providing interventions to address psychological trauma is recognised by the World Health Organisation (WHO, 2018) and the Five Year Forward View for Mental Health, which supports access to National Institute for Health and Care Excellence (NICE) recommended psychological therapies (NHS England, 2016). Failure to provide suitable interventions can incur social and economic costs, placing strain on other NHS services (Knapp, 2003).

An NHS Trust in East Anglia developed a community transformation pilot, to improve access to care, service efficiency, patient experience, and outcomes. The pilot aimed to address gaps in current primary and secondary care service provision, through creation of new mental health services. The new multidisciplinary service offers specialist group programmes, and structured, short-term, individual CBT-based interventions (brief psychological interventions (BPIs)), based on NICE guidelines. The pilot was implemented in a location with high levels of deprivation and mental health need, which has seen increased migration in recent decades, resulting in an increasingly diverse population (ONS, 2023).

The service was established in March 2020, coinciding with the Covid-19 Pandemic; as a result, intervention delivery was delayed and launched remotely. Considering the population and aim of addressing gaps in current provision, it was hoped online delivery would increase service accessibility by reducing need for travel, parking, and childcare costs, and providing flexibility around employment.

The service model aimed to address a gap in provision for individuals with CPTSD. There was no dedicated trauma intervention pathway in the locality and the needs of service users with CPTSD were largely unmet. As research suggests stabilisation (phase one) alone can be effective in reducing trauma symptoms (Eichfield et al., 2019), a trauma stabilisation group intervention was proposed as a cost-effective treatment, to reduce growing waitlists and address the gap in trauma-focused intervention. As NICE Guidelines do not provide detailed guidance on CPTSD, material was developed following PTSD guidance (NICE, 2018) and through reviewing existing research, treatment interventions and guidelines. A 12-session, two-hour, weekly, online group programme was developed and piloted, aiming to increase understanding of CPTSD through psychoeducation, and teach stabilisation skills to manage symptoms. Given the complex nature of trauma-focused interventions, drop-out rates can be high (Lewis et al., 2020; Varker et al., 2021). To reduce drop-out, participants were offered three individual sessions with a group facilitator, before, during (between session 6-7) and after the intervention. These allow space to address uncertainty about attending, identify and review goals, provide progress feedback and plan for the future (i.e., degree of readiness/need for further therapy).

To our knowledge, this is the first mixed-gender, CPTSD stabilisation group intervention delivered online. Given this is a pilot intervention and service, it was important to evaluate outcomes to understand if group attendance was associated with change in CPTSD symptoms and to highlight areas for further improvement.

Project aims

Our primary aim was to evaluate the effectiveness of the pilot CPTSD stabilisation group intervention, by exploring if group attendance was associated with changes in self-reported CPTSD measures before and after the intervention. The secondary aim of our project was to explore participant experience of group attendance. It was hypothesised there would be a difference in outcome measure scores from before to after the group intervention.

Materials and methods

Ethical approval was received from a University Research Ethics committee. Organisational authorisation was granted from the NHS Trust Quality Assurance and Clinical Effectiveness team. Participants were informed how routine clinical data would be used and stored in adherence to GDPR guidelines. By completing outcome measures, participants consented to their anonymised data being used for evaluative purposes.

Design

This was a retrospective quantitative service evaluation, utilising a within-group comparison for routinely collected, anonymised outcome data completed pre and post intervention, and post intervention feedback data. In an attempt to reduce participant time needed to complete measures, limited demographic was collected and in the current evaluation only age and gender information are reported.

Participants

One hundred and three clients accepted a place on the group programme. Ten groups were held between February 2021 and March 2023. Participants were aware the group was mixed-gender, and participants were 85 females and 18 males, who were working age adults; ages ranged from 19 to 64 (M = 35.39, SD = 13.42). Thirty-seven participants disengaged; the most common point for drop-out was session seven (N = 6; range: session 2–10). Sixty-six participants (64.1 %) completed the full programme (attending from beginning to the final session; not missing more than two sessions). Of this 66, 40 completed outcome measures before and after the intervention, and 25 completed an anonymous feedback survey. It is unknown why the other 26/66 participants did not complete post-group measures; email reminders were provided by the service, though it is possible participants forgot to complete measures or chose not to given the group was complete.

Measures

Difficulties in Emotion Regulation Scale (DERS), (Gratz & Roemer, 2004). The DERS is a 36-item, 5-point Likert scale, self-report questionnaire designed to assess multiple aspects of emotional dysregulation. The measure yields a total score as well as scores on six subscales: (1) non-acceptance of emotional responses, (2) difficulties engaging in goal-directed behaviour, (3) impulse control difficulties, (4) emotional awareness, (5) limited access to emotional regulation strategies and (6) emotional clarity. Higher scores suggest greater problems with emotion regulation. Good reliability and validity are reported (Gratz & Roemer, 2004; Hallion et al., 2018), as are good construct validity and excellent internal consistency (Fowler et al., 2014).

Trauma Memory Quality Questionnaire (TMQQ), (Meiser-Stedman et al., 2007). The TMQQ is an 11-item, 4-point Likert scale, developed as a measure of the nature and characteristics of trauma memories: including the sensory quality, verbal accessibility, and temporal context. Intrusive memory characteristics have been found to be a better predictor of later PTSD symptoms than intrusive memories alone (Michael et al., 2005). Higher scores reflect trauma memories less verbally

accessible, with greater sensory and visual content, and a sense of nowness (Reed et al., 2023). The authors report good reliability (0.82), and criterion and construct validity.

Post-traumatic Cognitions Inventory (PTCI), (Foa et al., 1999). The PTCI is a 33-item, 7-point Likert scale measure, exploring thoughts and appraisals an individual may experience following a traumatic experience. Negative posttraumatic thoughts and cognitions can lead to the presence and maintenance of PTSD symptoms. Higher scores indicate greater posttraumatic cognitions. The measure consists of three subscales: (1) Negative cognitions about the self, (2) negative cognitions about the world, and (3) self-blame. The authors report excellent internal consistency, and good reliability and validity, including test-retest reliability and convergent reliability.

International Trauma Questionnaire (ITQ), (Cloitre et al., 2018). The ITQ is an 18-item, 5-point Likert scale focusing on the core features of PTSD and CPTSD. Whilst not a diagnostic tool, the ITQ can be used as a screening tool, indicating if individuals meet threshold for a diagnosis of PTSD or CPTSD. It measures PTSD symptoms in the following clusters: (1) re-experiencing in the here and now, (2) avoidance, and (3) sense of current threat. It also measures DSO (disturbances in self-organisation in C-PTSD) symptoms which have the following clusters: (1) affective dysregulation, (2) negative self-concept and (3) disturbances in relationships. The measure can also be used to provide dimensional scoring for PTSD and DSO symptoms, which is used by the service. Scores for subscales are summed, providing total scores. The authors report good reliability and validity (Cloitre et al., 2018, 2021).

Participant feedback survey. (Appendix A). A 16-item feedback form was developed by the service and completed following the group programme. It includes a 10-item, 5-point Likert scale exploring experience of the group. Further open-ended questions capture qualitative feedback about group strengths and areas for improvement.

Procedure

Referrals to the service were screened according to two criteria:

- (1) Historical indicators of CPTSD including (a) evidence of a history of prolonged exposure to trauma that was an ongoing, regular occurrence (i.e., childhood physical, sexual, and emotional abuse, neglect, domestic violence), whereby the individual was powerless and could not escape the situation, and (b) evidence of patterns of similar trauma being replicated in adulthood.
- (2) Current symptoms related to CPTSD, including (a) intrusive flashbacks, thoughts, or images; nightmares; dissociation; hearing voices, (b) difficulties with emotion regulation, (c) interpersonal disturbances and (d) negative self-beliefs.

Our exclusion criteria were people for whom self-harm was the primary difficulty; or who presented with high suicide risk; or significant substance misuse; or whose current difficulties could be more appropriately addressed in an alternative service.

The group programme is primarily underpinned by CBT principles, informed by existing intervention manuals (e.g., McFetridge et al., 2017) and draws upon elements of dialectical behavioural therapy (DBT) (Linehan, 1993) and compassion-focused therapy (CFT) (Gilbert, 2014). Participants are oriented to the window of tolerance (Siegel, 1999), a concept used for wellbeing check-ins throughout sessions; sessions begin and end with a mindfulness exercise. Given that disclosure of traumatic experiences can be difficult (Bedard-Gilligan et al., 2012), in the aim of maintaining safety within the group, participants were not expected to share details of their experiences. Instead, a fictional case scenario is used throughout the programme.

The group programme launched during the Covid-19 Pandemic and sessions were held online each week via Microsoft Teams. Group sessions were two hours in duration (including a 15-min break). Groups consist of up to 13 participants. Table 1 details a composition of each

Table 1

Composition of group participants by gender.

Group Number	Total Number of Participants	Number of Females	Number of Males
1	11	9	2
2	10	7	3
3	13	10	3
4	11	9	2
5	13	10	3
6	11	9	2
7	10	10	0
8	8	7	1
9	7	7	0
10	9	7	2

group; two out of the ten groups consisted of all females (as a result of the waitlist at the time), all other groups were mixed gender. Sessions are facilitated by three clinicians trained in delivering the intervention. including clinical psychologists, assistant psychologists, clinical associate psychologists, and trainee clinical psychologists, all of whom received supervision from a clinical psychologist. Homework tasks were set each session, accessible to participants via a group workbook which contained session materials and worksheets. Example tasks included keeping a symptom monitoring diary, practicing skills taught in session and reflecting upon their experience of skills/exercises. Participants were also offered an individual session with a group facilitator, before, during and after the intervention. Outcome measures were completed online (via MS Forms) by participants before and after the group. Participants provided their name on measures, which were scored by group facilitators and total scores inputted into a master spreadsheet. Following group completion, names were replaced with an identifying number to ensure anonymity.

Analysis

G*Power software (Erdfelder et al., 1996) determined the minimum number of datasets needed, based upon a within-groups analysis, (calculated using power at 0.8, an error probability of 0.05 and effect size of 0.7). The results indicated that 19 datasets would be required for a two-tailed parametric test; the number of datasets employed exceeds this. Data were cleaned by checking for outliers and identifying and removing incomplete data sets (N = 69) for each measure. Assumptions of parametric tests and requirements were checked and met prior to analysis, and descriptive statistics were calculated. Statistical analysis was completed using SPSS Statistics software v28, using two-tailed analyses and a significance level of p < 0.05.

Results

Forty participants completed pre and post measures: 32 completed all measures, and eight participants completed at least one or more measures, therefore completion rates vary across measures; see Fig. 1. Attendance of additional individual sessions offered before, during and after the group was as follows: 90 participants (87 %) attended a pregroup session, 71 (68 %) attended a mid-group session, and 27 (26 %) attended a post-group individual session (41 % of 66 participants who completed the group programme). Individual session attendance was anonymised and recorded separately to outcome data; therefore it was not possible to compare measure differences between participants who utilised individual sessions with those who did not. Only results where there was pre and post data for a measure were included for statistical analysis (N = 40).

Paired samples t-tests compared pre-post intervention mean differences for four outcome measures to evaluate the intervention. Analysis indicated significant differences between pre to post intervention scores across all four outcome measures. Table 2 reports full analysis details. A near medium significant difference was found for total DERS scores and all subscales, with significantly lower scores post intervention, indicating a significant overall improvement in emotion regulation. A medium-sized significant difference was found for total TMQQ scores, with significantly lower scores post intervention, indicating a reduction in the sensory content of trauma memories, sense of nowness, and greater verbal accessibility, post intervention. A medium-sized significant difference was found for total PTCI scores and all three subscales, with significantly lower scores post intervention, indicating a reduction in posttraumatic cognitions, post intervention. Medium-sized significant differences for the PTSD and DSO subscales of the ITQ were found, indicating a reduction in symptoms of PTSD and disturbances in selforganisation, post intervention.

A one-way analysis of variance (ANOVA) was conducted to explore differences in pre-group measure scores between participants who completed the group programme compared to participants who dropped-out. Results indicate a difference in mean scores across all measures; participants who dropped-out had higher mean scores than those who completed the programme, indicating greater symptom severity. These differences were significant for the TMQQ and ITQ DSO subscale with medium effect size, but not for the DERS, PTCI or ITQ PTSD subscale. Table 3 details full analysis results.

A two-way 2 (between-subjects: gender: female or male) x 2 (within subjects: timepoint: pre or post group) mixed ANOVA with repeated measures was run to explore significant differences in measure scores by gender. Whilst ANOVA is robust to unequal samples, results should be

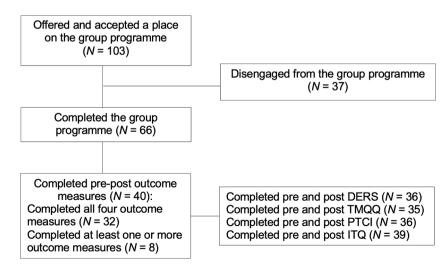


Fig. 1. Group attrition and outcome measures.

European Journal of Trauma & Dissociation 8 (2024) 100383

Table 2

Paired *t*-test results for pre and post intervention outcome measures.

		Pre intervention		Post intervention				
		M	SD	Μ	SD	t	р	Cohen's d
DERS	DERS Total Score	129.83	27.58	115.56	34.37	3.09	0.004	0.52
	1. Nonacceptance of emotional responses	22.53	6.89	18.11	8.32	3.99	< 0.001	0.67
	2. Difficulty engaging in goal-directed behaviour	21.33	4.15	19.25	5.16	2.66	0.006	0.44
	3. Impulse control difficulties	18.39	6.97	16.39	7.06	2.04	0.024	0.34
4. Lack	4. Lack of emotional awareness	21.78	5.27	19.81	5.86	2.39	0.011	0.40
	5. Limited access to emotion regulation strategies	28.94	7.81	25.72	8.72	2.46	0.010	0.41
	6. Lack of emotional clarity	16.58	4.92	15.25	5.14	2.21	0.017	0.37
TMQQ	TMQQ Total Score	33.60	5.88	30.00	7.71	3.98	< 0.001	0.67
PTCI	PTCI Total Score	176.89	30.65	148.31	47.14	4.85	< 0.001	0.81
	1. Negative cognitions about the self	5.11	1.06	4.28	1.53	4.64	< 0.001	0.77
	2. Negative cognitions about the world	6.01	0.80	5.11	1.27	4.68	< 0.001	0.78
	3. Self-blame	5.13	1.11	4.13	1.55	4.30	< 0.001	0.72
ITQ	Post Traumatic Stress Disorder (PTSD)	20.49	5.19	16.38	5.29	3.33	< 0.001	0.69
	Disturbances in Self Organisation (DSO)	20.77	4.34	16.05	5.88	4.32	< 0.001	0.83

Note. DERS = Difficulties in Emotion Regulation Scale; TMQQ = Traumatic Memory Quality Questionnaire; PTCI = Posttraumatic Cognitions Inventory; ITQ = International Trauma Questionnaire.

Table 3

One-way ANOVA for baseline differences between group completers and drop-outs.

		Ν	М	SD	F	р	Partial eta squared
DERS Total	Completed	39	130.03	27.50	2.65	.108	.035
	Drop-out	35	138.77	16.85			
TMQQ Total	Completed	39	33.41	5.73	5.12	0.27	.070
	Drop-out	31	36.13	3.88			
PTCI Total	Completed	39	176.97	30.28	.448	.506	.007
	Drop-out	29	181.59	24.85			
ITQ PTSD Total	Completed	40	20.60	5.17	3.58	.063	.049
	Drop-out	31	22.97	5.31			
ITQ DSO Total	Completed	40	20.78	4.29	6.69	.012	.088
	Drop-out	31	23.65	5.05			

Note. DERS = Difficulties in Emotion Regulation Scale; TMQQ = Traumatic Memory Quality Questionnaire; PTCI = Posttraumatic Cognitions Inventory; ITQ = International Trauma Questionnaire (PTSD = posttraumatic stress disorder subscale; DSO = disturbances in self-organisation subscale).

interpreted with caution. Mean scores differ by gender, with males scores are higher than females across all measures with the exception of the TMQQ. However, differences were not significant for any measure, suggesting males and females have similar experiences of the group. Table 4 details full results.

Twenty-five participants completed the optional, anonymous postgroup feedback survey. Due to brief responses in open-ended questions, the data lacked the richness needed for qualitative analysis but indicated that most participants (68 %) found the intervention beneficial; 80 % felt group content was appropriate; 64 % felt they had a better understanding of their difficulties; 56 % felt they developed skills; and 72 % felt they received the support and guidance expected. Written feedback indicated most participants (83 %) preferred the group being online; comments indicated participants felt safer joining a group online and some would not have attended the group in-person. Others commented they valued the flexibility and accessibility of a virtual group, space to manage symptoms and take breaks if needed. All participants indicated they found the three individual sessions with a facilitator to be a helpful addition to the group. When asked what was done well or elements participants liked about the group, responses included: the group environment feeling safe; mindfulness exercises at the beginning and end of sessions; feeling validated and understood when hearing others' experiences; knowledge, compassion and support from facilitators and participants; the regular 'check-ins', and group content. The majority of participants did not suggest areas for improvement (70 %); of those that did, suggestions included changes in pacing for some sessions, and more

Table 4

Mixed design ANOVA results for Gender pre-post outcome measure totals

	Gender	Pre intervention			Post intervention					
		N	Μ	SD	Μ	SD	F	р	Partial eta squared	
DERS Total	Female	29	128.34	29.07	114.41	37.10	.325	.573	.009	
	Male	7	136.00	20.94	120.29	20.82				
TMQQ Total	Female	29	33.76	5.96	29.34	8.19	.256	.616	.008	
	Male	6	32.83	5.95	33.17	7.71				
PTCI Total	Female	30	174.83	31.30	143.67	49.76	1.62	.212	.045	
	Male	6	187.17	27.19	171.50	20.56				
ITQ PTSD Total	Female	31	20.32	5.16	15.84	5.69	1.01	.321	.027	
	Male	8	21.13	5.62	18.50	2.56				
ITQ DSO Total	Female	31	20.77	4.37	15.42	6.40	.791	.380	.021	
	Male	8	20.75	4.52	18.50	1.77				

Note. DERS = Difficulties in Emotion Regulation Scale; TMQQ = Traumatic Memory Quality Questionnaire; PTCI = Posttraumatic Cognitions Inventory; ITQ = International Trauma Questionnaire (PTSD = posttraumatic stress disorder subscale; DSO = disturbances in self-organisation subscale.

warning around the fictional case scenario/topics that may be triggering. Participants did not raise concerns regarding groups being of mixed-gender.

Discussion

This evaluation found that attendance of an online pilot CPTSD stabilisation group intervention was associated with reduced CPTSD symptoms and was positively received by participants.

Results indicate group completion was associated with reductions in CPTSD symptoms, with significantly lower scores after intervention and medium effect sizes across all outcome measures. This suggests that attendance of the online group intervention was associated with reduced CPTSD symptoms, including: emotion regulation difficulties; characteristics of trauma memories (including sensory content, sense of nowness and greater verbal accessibility); posttraumatic cognitions (including negative cognitions about the self, the world, and self-blame); PTSD symptoms (including re-experiencing in the here and now, avoidance, and sense of current threat) and disturbances in selforganisation (affective dysregulation, negative self-concept, and disturbances in relationships). These findings are in line with existing research literature, which found trauma group interventions to be effective in reducing trauma symptoms (Barrera et al., 2013; Sloan et al., 2013). Dorrepaal et al. (2010) piloted a 20-week stabilisation group intervention for PTSD and CPTSD related to childhood abuse; they found following treatment 64 % of participants no longer met criteria for CPTSD, increasing to 78 % at 6 month follow up. The current intervention applied a 12-week time frame, shorter than many current interventions, which typically require 16-20 weeks (Cloitre et al., 2010; Dorrepaal et al., 2012; Stige, 2011). In contrast, Beldman et al. (2017) found group-based CPTSD stabilisation was not effective in reducing CPTSD symptoms, however their programme consisted only of 5 sessions, suggesting perhaps their intervention was too brief to be impactful. Findings from the current study are encouraging and suggest that a group stabilisation intervention can effectively reduce symptoms in a 12-week time frame. This can be helpful for NHS services as an opportunity to reduce growing waitlists with a briefer intervention, and a shorter commitment time may be appealing to service users.

Findings indicate participants who dropped-out had higher premeasure scores than those who completed the programme, these differences were significant for the TMQQ and ITQ (DSO subscale) measures. Whilst the group did not require participants to share personal experiences, undoubtably these experiences may have been brought to the forefront of participants minds. Some suggest trauma-focused interventions are linked with exacerbated symptoms, though this relationship is one of debate and not linear (Larsen et al., 2016). It is possible participants who dropped out experienced more symptoms and had difficulty tolerating the group, though ultimately reasons for drop-out were not explicitly captured.

Additionally, this evaluation consisted of mixed-gender groups, though the majority of participants were female. Mean scores for male participants were higher than those of females across outcome measures, this difference was not significant and suggests the intervention is acceptable to both genders. Participants also did not have concerns with groups being mixed-gender. Evidence of gender comparisons in trauma therapy remains limited (Wade et al., 2016) and group interventions are often delivered to in same gender groups; though recent literature suggests symptom changes are as evident in mixed-gender groups as in female-only groups (Philipps et al., 2022).

A novel aspect of this project is the online delivery of the intervention which participants reported to be acceptable; many commented they preferred the online format and found it more accessible. Our findings are in line with existing literature exploring internet-based trauma interventions (Simon et al., 2021; Simblett et al., 2017; Young & Campbel, 2018). To our knowledge our evaluation is the first to explore an online CTPSD stabilisation group intervention. It is important to seek participant perspectives when evaluating practice (Stige et al., 2013); it is encouraging the group was well received by participants. NHS services could adopt an online model of delivery for CPTSD group interventions.

Critical appraisal and recommendations

A number of limitations need to be considered. As a service evaluation, there was no control or comparison group or randomisation; further research is required to establish efficacy, possibly using randomisation to intervention and wait-list control groups. Our sample size was relatively small and many group members did not complete full datasets; 66 participants completed the intervention, yet only 40 completed both pre-post outcome measures. Participants who dropped out of the programme (36 %) did not have the opportunity to complete post-measures, therefore outcomes for this group are unknown. This drop-out rate is similar to levels reported in the literature (Jensen et al., 2022). Additionally, there is no longer-term follow-up, therefore it is unknown if changes are maintained. Currently no outcome measures are administered during the intervention; therefore, it is possible changes may occur before the end of the intervention. To address this, certain measures (i.e., ITQ) could be completed on a session-to-session basis, an approach utilised in other services (i.e., improving access to psychological therapies (IAPT); Clark et al., 2018). Measures could be administered at a specified follow up point (i.e., 1–3 months), to allow further evaluation of outcomes, as has been effective in existing research (Karatzias et al., 2014). It might also be of interest to collect data regarding participants 'next steps' (i.e., did they leave the service; progress onto further therapy or intervention; access other services) as this may also inform understanding of the efficacy of the intervention and cost-effectiveness. The anonymised dataset did not include detailed participant demographic information, therefore demographic outcomes were not explored. Future evaluations may wish to include characteristics such as sexual orientation, ethnicity, religion, and socioeconomic status, to explore if different groups engage and benefit equally from the intervention.

Although the use of validated measures for pre-post comparisons and examination of subscale scores is a strength of this service evaluation, these relied on self-report, and were therefore potentially open to desirability bias (Tourangeau & Yan, 2007) possibly providing a restricted understanding of participant experience. Whilst the feedback form provided opportunity for participants to share experiences anonymously, the data lacked richness. Alternative methodologies such as a focus group might allow for richer data collection and qualitative analysis.

The service currently utilises dimensional scoring of the ITQ; it would be of interest to also utilise diagnostic scoring, to explore potential changes in meeting diagnostic threshold for PTSD or CPTSD prepost intervention. Additionally, the service uses the TMQQ; whilst significant change was found pre-post intervention, this measure was designed for use with children and adolescents (Meiser-Stedman et al., 2007). The service confirmed with the author it was appropriate for use with adult populations, though, it may be helpful for future research to adopt an alternative measure targeted to adults. It could be beneficial to include a measure assessing symptoms of CPTSD not currently captured, for example, dissociation; a commonly reported experience of CPTSD. A measure such as the 'Dissociative Experiences Scale' (DES-II) (Carlson & Putnam, 1993) may be appropriate. Alternatively, other validated trauma measures such as the 'Impact of Event Scale-Revised' (IER-R), (Weiss & Marmar, 1996), or the 'PTSD checklist for the DSM-5' (PCL-5), (Weathers et al., 2013) may be of interest.

The service adapted the group for individual delivery in a BPI format, offered on a case-by-case basis to clients unable to tolerate the group intervention, though there were insufficient data for comparison of outcomes between the group and individual intervention. It is recommended this analysis be completed once sufficient data is obtained. To date, all cycles of the group intervention have been delivered online; whilst most participants identified this as their preferred format, some expressed interest in attending in person. Given the nationwide removal of Covid-19 restrictions and recommencement of in-person interventions across the NHS Trust, it may be useful to offer a face-toface group. Outcomes could then be compared to the online group, to explore if mode of delivery has an impact on outcomes.

Conclusions

To our knowledge, this evaluation of a mixed-gender, online stabilisation group intervention for CPTSD symptoms is the first of its kind. The results are therefore important in highlighting the potential benefit of remote stabilisation group interventions for CPTSD. There is limited existing literature exploring the efficacy of online trauma interventions and appears to be no literature specifically exploring online stabilisation group interventions. These findings are positive for the field and suggest a cost-effective, accessible way to offer stabilisation intervention and reduce growing NHS waitlists. The findings also support the suggestion that stabilisation alone is effective in reducing CPTSD symptoms.

Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

CRediT authorship contribution statement

Ilana Foreman: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Writing – original draft, Writing – review & editing. Aimee Shipp: Data curation, Project administration, Resources, Writing – original draft, Writing – review & editing. Melanie Staley: Conceptualization, Data curation, Investigation, Methodology, Project administration, Resources, Supervision, Visualization, Writing – original draft, Writing – review & editing. Catherine Ford: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Supervision, Validation, Writing – original draft, Writing – review & edit-

Declaration of competing interest

None. The authors report there are no competing interests to declare.

Acknowledgments

Thank you to service staff for the facilitation of the group programme and collection of outcome measures. Finally, thank you to all participants for their engagement with the group and feedback about the group programme.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ejtd.2024.100383.

References

- Ball, S., Karatzias, T., Mahoney, A., Ferguson, S., & Pate, K. (2013). Interpersonal trauma in female offenders: A new, brief, group intervention delivered in a community based setting. *Journal of Forensic Psychiatry and Psychology*, 24(6). https://doi.org/ 10.1080/14789949.2013.852233
- Barrera, T. L., Mott, J. M., Hofstein, R. F., & Teng, E. J. (2013). A meta-analytic review of exposure in group cognitive behavioral therapy for posttraumatic stress disorder. *Clinical Psychology Review*, 33(1), 24–32. https://doi.org/10.1016/J. CPR.2012.09.005
- Beck, J. G., & Coffey, S. F. (2005). Group cognitive behavioral treatment for PTSD: Treatment of motor vehicle accident survivors. *Cognitive and Behavioral Practice*, 12 (3), 267–277. https://doi.org/10.1016/S1077-7229(05)80049-5

- Bedard-Gilligan, M., Jaeger, J., Echiverri-Cohen, A., & Zoellner, L. A. (2012). Individual differences in trauma disclosure. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(2), 716–723. https://doi.org/10.1016/J.JBTEP.2011.10.005
- Beldman, G., Kessels, H. H. L. M., & De Croot, I. W. (2017). The effect of a short-term group stabilisation training in patients with complex posttraumatic stress disorder. *Tijdschrift Voor Psychiatrie*, 59(11), 672–679.
- Bicanic, I., de Jongh, A., & Ten Broeke, E. (2015). [Stabilisation in trauma treatment: Necessity or myth?]. *Tijdschrift Voor Psychiatrie*, 57(5), 332–339.
- Bisson, J. I., Roberts, N. P., Andrew, M., Cooper, R., & Lewis, C. (2013). Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. *Cochrane Database of Systematic Reviews*, 12. https://doi.org/10.1002/14651858.CD003388. pub4
- Carlson, B., & Putnam, F. W. (1993). An update on the dissociative experiences scale. Dissociation, 6(1), 16–27.
- Clark, D. M., Canvin, L., Green, J., Layard, R., Pilling, S., & Janecka, M. (2018). Transparency about the outcomes of mental health services (IAPT approach): An analysis of public data. *Lancet*, 391(10121), 679–686. https://doi.org/10.1016/ S0140-6736(17)32133-5
- Cloitre, M., Courtois, C. A., Charuvastra, A., Carapezza, R., Stolbach, B. C., & Green, B. L. (2011). Treatment of complex PTSD: Results of the ISTSS expert clinician survey on best practices. *Journal of Traumatic Stress*, 24(6). https://doi.org/10.1002/jts.20697
- Cloitre, M., Hyland, P., Prins, A., & Shevlin, M. (2021). The International Trauma Questionnaire (ITQ) measures reliable and clinically significant treatment-related change in PTSD and complex PTSD. *European Journal of Psychotraumatology*, 12(1). https://doi.org/10.1080/20008198.2021.1930961
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., et al. (2018). The international trauma questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. Acta Psychiatrica Scandinavica, 138(6). https://doi.org/10.1111/acps.12956
- Cloitre, M., Stovall-McClough, K. C., Nooner, K., Zorbas, P., Cherry, S., Jackson, C. L., et al. (2010). Treatment for PTSD related to childhood abuse: A randomized controlled trial. *American Journal of Psychiatry*, 167(8). https://doi.org/10.1176/ appi.aip.2010.09081247
- Connor, P. K., & Higgins, D. J. (2008). The 'HEALTH' model part 1: Treatment program guidelines for Complex PTSD. Sexual and Relationship Therapy, 23(4). https://doi. org/10.1080/14681990802342617
- Courtois, C. A., & Ford, J. D. (2013). Treating complex trauma. New York, NY: Guilford Press.
- Coventry, P. A., Meader, N., Melton, H., Temple, M., Dale, H., Wright, K., et al. (2020). Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: Systematic review and component network meta-analysis. *PLoS Medicine*, 17(8). https://doi.org/10.1371/JOURNAL.PMED.1003262
- De Jongh, A., Resick, P. A., Zoellner, L. A., Van Minnen, A., Lee, C. W., Monson, C. M., et al. (2016). Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and Anxiety*, 3(5). https://doi.org/10.1002/da.22469
- Dorrepaal, E., Thomaes, K., Smit, J. H., van Balkom, A. J. L. M., van Dyck, R., Veltman, D. J., et al. (2010). Stabilizing group treatment for complex posttraumatic stress disorder related to childhood abuse based on psycho-education and cognitive behavioral therapy: A pilot study. *Child Abuse and Neglect*, 34(4). https://doi.org/ 10.1016/j.chiabu.2009.07.003
- Dorrepaal, E., Thomaes, K., Smit, J. H., Van Balkom, A. J. L. M., Veltman, D. J., Hoogendoorn, A. W., et al. (2012). Stabilizing group treatment for complex posttraumatic stress disorder related to child abuse based on psychoeducation and cognitive behavioural therapy: A multisite randomized controlled trial. *Psychotherapy and Psychosomatics*, 81(4). https://doi.org/10.1159/000335044
- Dumarkaite, A., Truskauskaite-Kuneviciene, I., Andersson, G., & Kazlauskas, E. (2022). The effects of online mindfulness-based intervention on posttraumatic stress disorder and complex posttraumatic stress disorder symptoms: A randomized controlled trial with 3-month follow-up. *Frontiers in Psychiatry*, 13. https://doi.org/10.3389/ fpsyt.2022.799259
- Ehring, T., Welboren, R., Morina, N., Wicherts, J. M., Freitag, J., & Emmelkamp, P. M. G. (2014). Meta-analysis of psychological treatments for posttraumatic stress disorder in adult survivors of childhood abuse. *Clinical Psychology Review*, 34(8). https://doi. org/10.1016/j.cpr.2014.10.004
- Eichfeld, C., Farrell, D., Mattheß, M., Bumke, P., Sodemann, U., Ean, N., et al. (2019). Trauma stabilisation as a sole treatment intervention for post-traumatic stress disorder in Southeast Asia. *Psychiatric Quarterly*, 90(1). https://doi.org/10.1007/ s11126-018-9598-z
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. Behavior Research Methods, Instruments, and Computers, 28(1). https://doi. org/10.3758/BF03203630
- Ferguson, S. (2008). Survive & thrive: Treatment manual. Edinburgh, UK: NHS Lothian.
- Foa, E. B., Tolin, D. F., Ehlers, A., Clark, D. M., & Orsillo, S. M. (1999). The Posttraumatic Cognitions Inventory (PTCI): Development and validation. *Psychological Assessment*, 11(3). https://doi.org/10.1037/1040-3590.11.3.303
- Fowler, J. C., Charak, R., Elhai, J. D., Allen, J. G., Frueh, B. C., & Oldham, J. M. (2014). Construct validity and factor structure of the difficulties in Emotion Regulation Scale among adults with severe mental illness. *Journal of Psychiatric Research*, 58. https:// doi.org/10.1016/j.jpsychires.2014.07.029
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. British Journal of Clinical Psychology, 53(1). https://doi.org/10.1111/bjc.12043
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation. Journal of Psychopathology and Behavioral Assessment, 26(1), 41–54.

Hallion, L. S., Steinman, S. A., Tolin, D. F., & Diefenbach, G. J. (2018). Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) and its short forms in adults with emotional disorders. *Frontiers in Psychology*, 9. https://doi.org/ 10.3389/fpsyg.2018.00539. APR.

- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. Journal of Traumatic Stress, 5(3). https://doi.org/10.1002/jts.2490050305
- Jensen, T. K., Braathu, N., Birkeland, M. S., Ormhaug, S. M., & Skar, A. M. S. (2022). Complex PTSD and treatment outcomes in TF-CBT for youth: A naturalistic study. *European Journal of Psychotraumatology*, 13(2). https://doi.org/10.1080/ 20008066.2022.2114630
- Karatzias, T., Ferguson, S., Chouliara, Z., Gullone, A., Cosgrove, K., & Douglas, A. (2014). Effectiveness and acceptability of group psychoeducation for the management of mental health problems in survivors of child sexual abuse (CSA). *International Journal of Group Psychotherapy*, 64(4). https://doi.org/10.1521/ijgp.2014.64.4.492
- Karatzias, T., Murphy, P., Cloitre, M., Bisson, J., Roberts, N., Shevlin, M., et al. (2019). Psychological interventions for ICD-11 complex PTSD symptoms: Systematic review and meta-analysis. *Psychological Medicine*, 49(11). https://doi.org/10.1017/ S0033291719000436
- Kazlauskas, E. (2017). Challenges for providing health care in traumatized populations: Barriers for PTSD treatments and the need for new developments. *Global Health Action*, 10(1). https://doi.org/10.1080/16549716.2017.1322399
- Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., et al. (2017). Trauma and PTSD in the WHO world mental health surveys. *European Journal of Psychotraumatology*, 8. https://doi.org/10.1080/20008198.2017.1353383
- Knapp, M. (2003). Hidden costs of mental illness. British Journal of Psychiatry, 183(6). https://doi.org/10.1192/03-292
- Korn, D. L. (2009). EMDR and the treatment of complex PTSD: A review. Journal of EMDR Practice and Research, 3(4). https://doi.org/10.1891/1933-3196.3.4.264
- Larsen, S. E., Wiltsey Stirman, S., Smith, B. N., & Resick, P. A. (2016). Symptom exacerbations in trauma-focused treatments: Associations with treatment outcome and non-completion. *Behaviour Research and Therapy*, 77, 68–77. https://doi.org/ 10.1016/J.BRAT.2015.12.009
- Lawson, D. M. (2017). Treating adults with complex trauma: An evidence-based case study. Journal of Counseling and Development, 95(3). https://doi.org/10.1002/ jcad.12143
- Lewis, C., Roberts, N. P., Gibson, S., & Bisson, J. I. (2020). Dropout from psychological therapies for post-traumatic stress disorder (PTSD) in adults: Systematic review and meta-analysis. European Journal of Psychotraumatology, 11(1). https://doi.org/ 10.1080/20008198.2019.1709709
- Linehan, M. M. (1993). Skills training manual for treating borderline personality disorder. Guilford Press.
- Lonergan, M. (2014). Cognitive behavioral therapy for PTSD: The role of complex PTSD on treatment outcome. Journal of Aggression, Maltreatment and Trauma, 23(5). https://doi.org/10.1080/10926771.2014.904467
- Maercker, A., Brewin, C. R., Bryant, R. A., Cloitre, M., Van Ommeren, M., Jones, L. M., et al. (2013). Diagnosis and classification of disorders specifically associated with stress: Proposals for ICD-11. World Psychiatry: Official Journal of the World Psychiatric Association (WPA). 12(3). https://doi.org/10.1002/wps.20057
- Mahoney, A., Karatzias, T., & Hutton, P. (2019). A systematic review and meta-analysis of group treatments for adults with symptoms associated with complex posttraumatic stress disorder. *Journal of Affective Disorders*, 243, 305–321. https://doi. org/10.1016/J.JAD.2018.09.059
- Mattheß, C., Farrell, D., Mattheß, M., Bumke, P., Sodemann, U., & Mattheß, H. (2019). The therapeutic value of trauma stabilisation in the treatment of post-traumatic stress disorder – A Southeast Asian Study. Asian Journal of Psychiatry, 41, 45–49. https://doi.org/10.1016/J.AJP.2018.09.010
- McFetridge, M., Hauenstein Swan, A., Heke, S., Karatzias, T., Greenberg, N., Kitchiner, N., et al. (2017). *Guideline for the treatment and planning of services for complex post-traumatic stress disorder in adults*. Scotland: UK Psychological Trauma Society (UKPTS).
- Meiser-Stedman, R., Smith, P., Yule, W., & Dalgleish, T. (2007). The trauma memory quality questionnaire: Preliminary development and validation of a measure of trauma memory characteristics for children and adolescents. *Memory (Hove, England)*, 15(3). https://doi.org/10.1080/09658210701256498
- Mendelsohn, M., Zachary, R. S., & Harney, P. A. (2007). Group therapy as an ecological bridge to new community for trauma survivors. *Journal of Aggression, Maltreatment* and Trauma, 14(1–2). https://doi.org/10.1300/J146v14n01_12
- Michael, T., Ehlers, A., Halligan, S. L., & Clark, D. M. (2005). Unwanted memories of assault: What intrusion characteristics are associated with PTSD? *Behaviour Research* and *Therapy*, 43(5). https://doi.org/10.1016/j.brat.2004.04.006
- National Health Service Digital (2023). Mental health services monthly statistics. https://digital.nhs.uk/data-and-information/data-tools-an d-services/data-services/mental-health-data-hub/mental-health-services-month lv-statistics#mental-health-services.
- National Institute for Health and Care Excellence. (2018). Post-traumatic stress disorder [NICE Guideline No. 116]. Retrieved from: https://www.nice.org.uk/guida nce/ng116.
- Nestgaard Rød, Å., & Schmidt, C. (2021). Complex PTSD: What is the clinical utility of the diagnosis? European Journal of Psychotraumatology, 1(12). https://doi.org/ 10.1080/20008198.2021.2002028
- NHS England, Care Quality Commission, Health Education England, Monitor, Public Health England, Trust Development Authority. (2016). NHS five year forward view for mental health. London: NHS England. Available at https://www.england.nhs.uk/wpcontent/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf.

- Office for National Statistics. (2023). *Population estimates for UK*. England and Wales, Scotland, and Northern Ireland: Census, 2021. Retrieved from https://www.ons.gov. uk/visualisations/censusareachanges/E06000031/.
- Perri, R. L., Castelli, P., La Rosa, C., Zucchi, T., & Onofri, A. (2021). COVID-19, isolation, quarantine: On the efficacy of internet-based Eye Movement Desensitization and Reprocessing (EMDR) and Cognitive-Behavioral Therapy (CBT) for ongoing trauma. *Brain Sciences*, 11(5). https://doi.org/10.3390/brainsci11050579
- Philipps, A., Hepp, T., Silbermann, A., Morawa, E., Stemmler, M., & Erim, Y. (2022). Women-only versus mixed-gender groups in multimodal, day clinic treatment of trauma-related disorders. *Zeitschrift Fur Psychosomatische Medizin Und Psychotherapie*, 68(4). https://doi.org/10.13109/ZPTM.2022.68.4.378
- Purnell, L. R., Graham, A. C. J., Bloomfield, M. A. P., & Billings, J. (2021). Reintegration interventions for CPTSD: A systematic review. *European Journal of Psychotraumatology*, 12(1). https://doi.org/10.1080/20008198.2021.1934789
- Reddemann, L., & Piedfort-Marin, O. (2017). Stabilization in the treatment of complex post-traumatic stress disorders: Concepts and principles. *European Journal of Trauma* & Dissociation, 1(1), 11–17. https://doi.org/10.1016/J.EJTD.2017.01.009
- Reed, J., Taylor, J., Randall, G., Burgess, A., & Meiser-Stedman, R. (2023). Associations between the trauma memory quality questionnaire and posttraumatic stress symptoms in youth: A systematic review and meta-analysis. *Journal of Traumatic Stress*, 36(1). https://doi.org/10.1002/jts.22903
- Roberts, N. P., Lotzin, A., & Schäfer, I. (2022). A systematic review and meta-analysis of psychological interventions for comorbid post-traumatic stress disorder and substance use disorder. *European Journal of Psychotraumatology*, 13(1). https://doi. org/10.1080/20008198.2022.2041831
- Simblett, S., Birch, J., Matcham, F., Yaguez, L., & Morris, R. (2017). A systematic review and meta-analysis of e-Mental health interventions to treat symptoms of posttraumatic stress. *JMIR Mental Health*, 4(2). https://doi.org/10.2196/ mental 5558
- Simon, N., Robertson, L., Lewis, C., Roberts, N. P., Bethell, A., Dawson, S., et al. (2021). Internet-based cognitive and behavioural therapies for Post-Traumatic Stress Disorder (PTSD) in adults. *Cochrane Database of Systematic Reviews*, (5)https://doi. org/10.1002/14651858.CD011710.pub3
- Sloan, D. M., Gallagher, M. W., Feinstein, B. A., Gayle Beck, J., & Keane, T. M (2013). Efficacy of group treatment for posttraumatic stress disorder symptoms: A metaanalysis. Psychological Trauma: Theory, Research, Practice, and Policy, 5(2). https:// doi.org/10.1037/a0026291
- Siegel, D. J. (1999). The developing mind: Toward a neurobiology of interpersonal experience. Guilford Press.
- Stige, S. H. (2011). A stabilization group approach for heterogeneous populations of trauma clients. *Journal of Aggression, Maltreatment and Trauma, 20*(8). https://doi. org/10.1080/10926771.2011.627583
- Stige, S. H., Rosenvinge, J. H., & Træen, B. (2013). A meaningful struggle: Trauma clients' experiences with an inclusive stabilization group approach. *Psychotherapy Research*, 23(4). https://doi.org/10.1080/10503307.2013.778437
- ter Heide, F. J. J., Mooren, T. M., Kleijn, W., de Jongh, A., & Kleber, RolfJ. (2011). EMDR versus stabilisation in traumatised asylum seekers and refugees: Results of a pilot study. European Journal of Psychotraumatology, 2(1). https://doi.org/10.3402/ejpt. v2i0.5881
- Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. Psychological Bulletin, 133(5). https://doi.org/10.1037/0033-2909.133.5.859
- Van Der Kolk, B. A., Stone, L., West, J., Rhodes, A., Emerson, D., Suvak, M., et al. (2014). Yoga as an adjunctive treatment for posttraumatic stress disorder: A randomized controlled trial. *Journal of Clinical Psychiatry*, 75(6). https://doi.org/10.4088/ JCP.13m08561
- Varker, T., Jones, K. A., Arjmand, H. A., Hinton, M., Hiles, S. A., Freijah, I., et al. (2021). Dropout from guideline-recommended psychological treatments for posttraumatic stress disorder: A systematic review and meta-analysis. *Journal of Affective Disorders Reports*, 4. https://doi.org/10.1016/j.jadr.2021.100093
- Wade, D., Varker, T., Kartal, D., Hetrick, S., O'Donnell, M., & Forbes, D. (2016). Gender difference in outcomes following trauma-focused interventions for posttraumatic stress disorder: Systematic review and meta-analysis. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(3). https://doi.org/10.1037/tra0000110
- Wagner, B., Grafiadeli, R., Martin, T., & Böhm, M. (2022). Internet-based imagery rescripting intervention for adult survivors of institutional childhood abuse in the former German Democratic Republic-a pilot study. European Journal of Psychotraumatology, 13(2). https://doi.org/10.1080/20008066.2022.2117222
- Watts, B. V., Schnurr, P. P., Mayo, L., Young-Xu, Y., Weeks, W. B., & Friedman, M. J. (2013). Meta-analysis of the efficacy of treatments for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 74(6). https://doi.org/10.4088/JCP.12r08225
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). *The PTSD checklist for DSM-5 (PCL-5)*. Scale available from the National Center for PTSD. at www.ptsd.va.gov.
- Weiss, D. S., & Marmar, C. R (1996). The impact of event scale revised. In J. Wilson, & T. M. Keane (Eds.), Assessing psychological trauma and PTSD (pp. 399–411). Guilford.
- Willis, D. N., Dowling, A. P. C., & O'Reilly, P. G (2023). Stabilisation and phaseorientated psychological treatment for posttraumatic stress disorder: A systematic review and meta-analysis. *European Journal of Trauma & Dissociation*, 7(1), Article 100311. https://doi.org/10.1016/J.EJTD.2022.100311
- World Health Organization. (2018). "6B41 Complex post traumatic stress disorder". International classification of diseases for mortality and morbidity statistics, 11th revision. Retrieved from https://icd.who.int/browse11/l-m/en.
- Young, C., & Campbel, K. (2018). Internet-delivered cognitive behavioral therapy for post- traumatic stress disorder : A review of clinical effectiveness. Cadth Rapid Response Report: Peer-Reviewed Summary With Critical Appraisal.