COMBAT STRESS
FOR VETERANS' MENTAL HEALTH

Exploring the feasibility and acceptability of using tele-therapy for UK veterans with PTSD.

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With funding from the Forces in Mind Trust

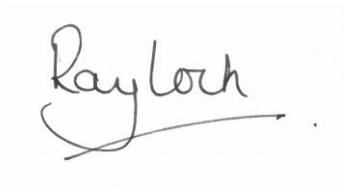
Foreword

The range of services provided by the third sector, and in our case the military charities, is broad and complex. This is nowhere more true than in mental health, where public health services are only gradually making ground on their physical health equivalent (driven in part by the 'parity of esteem' initiative and some strong public campaigning). Leading the delivery of such services since the First World War has been Combat Stress, more recently in alliance with relative newcomers such as Help for Heroes, Walking with the Wounded and the partnership known as 'Contact'.

Over nearly a century of work, Combat Stress has always shown itself willing to adapt to and adopt new techniques, but always with the aim of achieving the best possible outcome for those ex-Service personnel passing through its doors. At Forces in Mind Trust, we share the broader aspiration that all ex-Service personnel enjoy fulfilled civilian lives. So when Combat Stress asked whether we would fund a study that could remove the need to 'cross through our doors' to access its services, it was clear that such innovation and potential outcome aligned with both our needs. That the prestigious King's Centre for Military Health Research would be part of the investigative team merely added to the chances of a high-quality and successful result.

After a steady start, this trial accelerated to produce credible and insightful findings. I am particularly pleased that the breadth of the recommendations spans so many facets. Some, such as how to cope with the loss of an internet connection, seem mundane and simply a feature of modern life. In the context of delivering tele-therapy, however, it raises important issues of patient care. There are many other recommendations, and I must commend Section 6 in full, whether the reader is clinician, manager, researcher or indeed one likely to access such therapies. I should also congratulate the excellent research team, who have achieved the difficult balance of academic rigour with accessible and practical findings.

The conclusions of this well-run study are that tele-therapy for UK veterans with PTSD is both feasible and acceptable. Given that tele-therapy can offer advantages across a range or areas including access and economics, we would like now to see organizations, such as Combat Stress, including it in their range of services, with the obvious conditions that it is properly conducted, and is the right fit for the delivery organization as well as for the recipient.



Air Vice-Marshal Ray Lock CBE
Chief Executive, Forces in Mind Trust

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Combat Stress

Combat Stress is a national veterans charity in the UK that was established in 1919. It specialises in providing clinical mental health services for UK veterans with a history of trauma. Combat Stress receives approximately 2,500 new referrals per year. Clinical services are spread across the UK with 14 community teams and three residential treatment centres. Clinical services are delivered by a multi-disciplinary team of clinicians and are informed by NICE approved guidance for the treatment of PTSD. More information about Combat Stress can be found at combatstress.org.uk.

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Glossary

Posttraumatic stress disorder (PTSD)
A psychological disorder caused by experiencing or witnessing a traumatic event. Symptoms include intrusive memories, avoidance, hyper-arousal and negative alterations of mood and cognition.

Cognitive Behavioural Therapy (CBT)
A type of psychotherapy used to help a person change how they think, feel and behave.

Cognitive Processing Therapy (CPT)
A type of cognitive therapy used to treat PTSD.

Behavioural Activation
A type of therapy that helps individuals schedule in meaningful activities to help with depression and anxiety.

Eye-Movement Desensitisation and Reprocessing (EMDR)
A type of therapy commonly used for PTSD that uses bilateral stimulation to assist clients in processing traumatic memories.

Mindfulness
A psychological process of bringing one's attention to the present moment, which has been adapted for use in psychological therapies.

Psycho-education
A process of providing educational information relating to mental health and psychology.

Tele-therapy
A method of delivering therapy over telecommunications such as video-conferencing via a computer or phone.

Intensive Treatment Programme (ITP)
A six-week residential treatment programme delivered by Combat Stress for veterans with PTSD.

Narrative Exposure Therapy (NET)
A form of trauma-focused psychological therapy in which the client creates a 'timeline' of traumatic events before engaging in exposure and re-living work.

Did Not Attend (DNA)
A term used to describe an occasion whereby a client does not attend a scheduled therapy appointment without giving any prior warning.

Therapeutic alliance
Refers to the relationship between a therapist and a client. It is the means by which a therapist and a client hope to engage with each other, and effect beneficial change in the client.

Confidence interval (CI)
A range of values so defined that there is a specified probability (usually 95%) that the value of a parameter lies within it.

Beta coefficient (β)

A standardized statistic which compares the strength of the effect of each individual independent variable in a statistical analysis.

Transference

A term originating from psychodynamic psychotherapy to describe the redirection of emotions or unconscious material from the client to the therapist. Countertransference relates to the therapist's experiences resulting from this process.

Trauma re-living/processing

A process used in trauma-focused therapies whereby the client 're-lives' the trauma through speaking in detail about what occurred, usually with the aim of reducing intrusive memories of the trauma.

Executive Summary

Background

Despite there being a higher prevalence of mental health difficulties in military veterans compared to the general population, research of UK veterans has suggested that only 30-50% access services for support.

A number of reasons have been suggested for this, including issues related to stigma about experiencing mental health problems, practical issues around not being able to access services due to time constraints, or not knowing where to access support.

Given the potential barriers to accessing support, there is a need to investigate more accessible, flexible and cost-effective methods of delivering psychological therapies to veterans.

One such alternative is to use remote-access technology (e.g. video-conferencing over the internet) to deliver psychological talking therapies, often referred to as *tele-therapy*. A recent meta-analysis showed that Internet-based Cognitive Behavioural Therapy (CBT) can be effective in reducing symptoms in adults with moderate depression; and there is some evidence to suggest that tele-therapy can be effective in treating military veterans with PTSD.

Aims

Whilst there is some evidence showing that tele-therapy is acceptable for veterans with PTSD in the USA, there is a paucity of research with UK veterans. The primary aim of this project was to conduct a pilot study to explore the acceptability and feasibility of offering a novel remote access tele-therapy to UK veterans with PTSD.

A secondary aim was to measure the effectiveness of tele-therapy using pre- and post-treatment outcome measures of mental health difficulties, including PTSD.

Method

A pilot tele-therapy intervention was set up in order to assess its feasibility, with data collected regarding referrals, attendance rates and therapeutic alliance (using a self-report measure completed by both the participant and therapist). Cognitive Processing Therapy was used as an evidence-based, time-limited intervention, with therapy sessions conducted using Skype.

To investigate the acceptability of tele-therapy, a qualitative design was used with a sub-sample of participants completing semi-structured interviews post-therapy.

Quantitative analyses were used to assess the effectiveness of tele-therapy using self-report measures of PTSD, anxiety, depression, anger and alcohol use.

Results and Discussion

Feasibility

In total, 27 participants started therapy, with six dropping out before completing the full course of treatment. The overall 'DNA' rate of 12% compared favourably with other veterans' outpatient mental health services. Findings found high levels of therapeutic alliance, suggesting that this was not compromised by the use of tele-therapy.

On average, it took 14 weeks for a participant to complete 12 sessions of CPT (range 6-24 weeks), compared with the six weeks advised in the CPT manual. For those completing treatment, the clinician spent an average of 23.5 hours of clinical and administration time, including pre-therapy screening and administration; conducting sessions; session notes and supervision.

Acceptability

A sub-sample of 12 participants completed semi-structured interviews regarding their experiences of tele-therapy. Qualitative analyses revealed five key themes which revealed some of the advantages and challenges of tele-therapy as experienced by participants.

Theme one: Environment

The first theme described the advantages of participants having control over where therapy sessions were held. Not having to travel to somewhere unfamiliar appeared to alleviate anxiety and help with engagement. However, some participants reported challenges in having less support between sessions, compared to residential therapy programmes at Combat Stress. Some described a 'snap back' to reality after a session, with less time to reflect before going back to their daily routine.

Theme two: Therapeutic Alliance

The second theme described the effect of tele-therapy on the relationship between participant and therapist. Some reported that being able to see the therapist's face was important, compared to the telephone. While some described challenges in reading body language, others felt like using Skype was no different from being in the same room as the therapist.

Theme three: Practicalities

The third theme described some of the benefits of using the technology, such as increased flexibility and access for those with additional obstacles such as work, childcare, or location. Some explained that without this added flexibility they would not have been able to engage in therapy at all. Some participants reported that they would have benefited from being more prepared for using Skype for therapy, whereas others said they found it easier to use than expected.

Theme four: Personal Accountability

Personal accountability described some of the challenges of participants managing their time effectively in order to attend sessions. For example, some reported that the remote nature of sessions made it feel easier to cancel appointments. Also, the need for participants to find a suitable space for sessions required extra time and self-management.

Theme five: Measuring Change

The fifth theme described participants' experiences of changes they made following therapy. Some found that tele-therapy provided changes that past experiences of therapy had not. Many participants talked about improvements they had made, but that they still felt they had further progress to make.

Effectiveness

Mental health outcomes were collected at pre-therapy, post-therapy and 3 months follow-up. Results suggest that scores on each self-report measure had significantly improved at follow-up, albeit from a modest sample size.

Implications

Overall, findings from this pilot suggested that tele-therapy has the potential to provide a feasible, acceptable and effective alternative format for delivering evidence-based, trauma-focused therapies with UK veterans.

Throughout the process of piloting the intervention, a number of observations and recommendations about the use of tele-therapy emerged.

Firstly, consideration should be given about where a tele-therapy intervention would fit within current services and care pathways. For example, tele-therapy might be most suited to those with less severe mental health difficulties. Participants in this study required a relatively high level of functioning in order to manage their time and environment to engage in therapy. Additionally, it appeared that some had difficulties with managing distress between sessions. In some cases, participants reported that tele-therapy provided a breakthrough in treatment that they had not been able to find elsewhere. Tele-therapy could be a good alternative for clients who have previously struggled to engage, as it removes some of the traditional barriers, e.g. travel, absence from work.

Consideration should be given to the impact of tele-therapy on the therapeutic process, such as participants coping with the quick transition from a therapy session to going back to their day to day lives. This is not unique to tele-therapy, as patients in outpatients settings are required to manage this too, however, it may be that having sessions in a personal environment such as at home makes this transition more abrupt, and clients might need additional support in managing this.

In some cases, the apparent reduction in formality allowed some to feel more comfortable in engaging with tele-therapy, which might help to increase access to services. However, others reported that this perceived informality made it feel easier to cancel appointments. Consideration should be given therefore to appropriate attendance policies to manage this concern.

Tele-therapy was used in this study to help increase access to support, and participants commented on the additional flexibility it offered. Some however found it challenging to fit appointments around their schedules, particualrly those in full-time employment. Some appointments were offered outside of office hours to accommodate this, which might be a useful consideration going forward.

In a minority of cases, participants reported difficulties with internet connections being lost during a session. It was important therefore to ensure that they had an alternative form of contact, e.g. telephone, so that the therapist could still contact them should the internet connection repeatedly fail. This was a helpful consideration in managing potential distress in sessions and anxieties about using tele-therapy.

Conclusion

The findings from this study suggest that tele-therapy interventions for UK veterans with PTSD are feasible and acceptable. Significant improvements were seen in mental health outcomes following the intervention, albeit from a small sample size. The DNA and dropout rates compared favourably with other outpatient services. In terms of acceptability, participants gave useful feedback about their experiences of tele-therapy.

Overall, based on the findings of this pilot study, tele-therapy presents a viable alternative for delivering trauma-focused psychological therapies to veterans with PTSD. This was a pilot study, and as such, there were many lessons learned and recommendations which could be used to inform future tele-therapy services.

1. Introduction

1.1. Veterans' mental health and barriers to accessing services

Veterans with PTSD are at increased risk of unemployment and social exclusion (Iversen et al., 2005a; Creamer et al., 2002; Kintzle et al., 2015; Murphy et al., 2017) and it has been found that PTSD creates higher costs to society than any other mental health issue in veterans (Currier et al., 2014). Research of UK veterans suggests that only 30-50% of those who experience mental health problems go on to access services for support (Iversen et al., 2005b). A number of reasons have been suggested for this, including issues related to stigma about experiencing mental health problems (e.g. being seen as weak) and also practical issues around not being able to access services due to time constraints, or not knowing where to access support (Murphy & Busuttil, 2014). Despite this, evidence suggests that UK veterans who were deployed to Iraq and Afghanistan and are of a younger age are seeking support for PTSD more quickly than veterans from previous conflicts (Murphy et al., 2015). Nevertheless, given the potential barriers to accessing support, there is a need to investigate more accessible, flexible and cost-effective methods of delivering psychological therapies to veterans, in order to both increase access to therapies and ensure that organisations can continue to support veterans in the long-term.

One such alternative is to use remote-access technology (e.g. video-conferencing over the internet) to deliver psychological talking therapies, often referred to as *tele-therapy*. There have been numerous studies in the USA describing the use of tele-therapy with veterans with mental health difficulties, typically in order to increase access to those in remote rural areas (Hill et al., 2010; Morland et al., 2013; Musdal et al., 2014).

1.2. Evidence for tele-therapy

Evidence suggests that a wide range of interventions under the broader term of *telemedicine* have been successfully trialled, with favourable results in studies completed to date (Flodgren et al., 2015). A recent meta-analysis showed that Internet-based Cognitive Behavioural Therapy (CBT) can be effective in reducing symptoms in adults with moderate depression (Sztein et al., 2017); and there is some evidence to suggest that video-conferencing therapy can be effective in treating military veterans with PTSD (Bolton & Dorstyn, 2015). For the purpose of this study, tele-therapy will be defined as therapy conducted using video-conferencing over the internet.

1.3. Aims of current study

Whilst there is some evidence showing that tele-therapy is acceptable for veterans with PTSD in the USA, there is a paucity of research with UK veterans. The focus of this project was to conduct a pilot study to explore the acceptability and feasibility of

offering a novel remote access tele-therapy to UK veterans with PTSD. Such an intervention could potentially go on to increase the number of individuals who are able to access therapy by providing an alternative format to more traditional, face to face therapies.

Despite increasing referrals to Combat Stress, there remain some veterans who are not able to access appropriate treatments, for numerous reasons as discussed above. Tele-therapy offers an alternative format for delivering therapies that may suit some veterans better than face to face methods, so in the long-term it could increase the overall number of people able to access support. For example, it was anticipated in this study that veterans who may struggle to attend outpatient or residential treatment might benefit from tele-therapy. This might include veterans with employment and family commitments or physical health difficulties that could present barriers to their ability to engage in residential treatments or to travel to therapy centres. It is not anticipated however, that tele-therapy would serve as a replacement intervention for cases where face to face treatment would be preferred.

Given the potential increase in demand for veterans services, it is important to consider viable alternatives that are cost-effective, to ensure that services are able to meet this demand in the face of possible future challenges in terms of funding. This study therefore contributes important evidence for how best to provide novel and cost-effective treatments to improve UK veterans' mental health.

The primary aims of this study were to explore the feasibility of delivering tele-therapy to veterans with PTSD, to investigate the acceptability of this approach using feedback from veterans, and to investigate the clinician's perspectives of feasibility and impact on therapeutic alliance. Secondary aims included measuring the effectiveness of tele-therapy using pre- and post-treatment outcome measures, as well as calculating the average cost in terms of clinical hours per case for a full course of tele-therapy treatment, so that this could be used going forward if tele-therapy were to be rolled out across the organisation.

2. Background review of tele-therapy for veterans

In order to understand the advantages and challenges of using tele-therapy for delivering trauma-focused psychological therapy with veterans, a systematic review was conducted to assess what lessons have been learned so far from its use. A literature search was performed using CINAHL, PubMed and PsycINFO databases with no limit set on publication date. The key findings from this review are summarised below.

In total, 41 papers met the final inclusion criteria and were included in the review. Except for one Canadian paper, all studies were conducted in the USA. Studies reported on a variety of interventions, although exposure therapies were the most commonly used, as well as Cognitive Behavioural Therapy (CBT), Cognitive Processing Therapy (CPT), Behavioural Activation, Eye-Movement Desensitisation and Reprocessing (EMDR), anger management, Mindfulness, and general psycho-education interventions.

Eighteen studies looked at the clinical effectiveness of tele-therapy interventions. All of these studies reported that tele-therapy was associated with significant reductions in PTSD symptoms, regardless of the type of intervention used. All but one study found that improvements were still present at three or six-month follow-up. Of these 18 studies, 12 reported comparisons between tele-therapy and in-person interventions, with nine concluding that tele-therapy was as effective as in-person therapy. Two studies suggested that participants receiving in-person interventions had significantly greater reductions in PTSD symptoms, although one study found the opposite – that tele-therapy was more effective than usual care, suggesting that individual differences in PTSD symptoms or the therapy offered might influence the effectiveness of the intervention.

Similarly, there were few differences in most process outcomes, such as dropout rates, with tele-therapy helping to increase uptake and engagement in four studies. Veterans using tele-therapy reported high levels of acceptability and satisfaction with the intervention. Five of six studies investigating therapeutic alliance in one-to-one tele-therapy reported equivalence between in-person therapy and tele-therapy, with one study suggesting that that those receiving in-person treatments reported feeling more comfortable in talking with the therapist. Several studies suggested it was harder for clinicians to read the non-verbal communication in tele-therapy, but this did not affect their ability to build rapport. Some technological issues were encountered, but these were not found to impede therapy processes or outcomes.

Overall, it was evident from this systematic review of 41 studies that tele-therapy was a viable therapeutic alternative to in-person interventions.

While there were different challenges reported in the use of tele-therapy, none of these appeared to seriously affect treatment or process outcomes. It was concluded, therefore, that it would be beneficial to investigate the feasibility of using tele-therapy with veterans from a wide selection of countries (i.e. as mentioned above, all but one of the 41 papers in this systematic review were conducted in the USA).

The systematic review summarising these findings was published in the peer-reviewed *Journal of Telemedicine and Telecare* in September 2017 (see Table 1 for full citation).

Table 1 Key findings from systematic review of delivering tele-therapy to veterans[1]

- Tele-therapy was found to be effective in reducing symptoms of PTSD.
- In most cases, tele-therapy was as effective as in-person therapies.
- There were few differences in process outcomes such as dropout rates and therapeutic alliance.
- Veterans using tele-therapy reported high levels of acceptability and satisfaction.
- Some clinicians found it harder to read non-verbal communication in tele-therapy, but this did not affect their ability to build rapport.
- Some technological issues were encountered, but these were not found to impede therapy processes or outcomes.

1 Turgoose, D.P., Ashwick, R., & Murphy, D. (2017). Systematic review of lessons learned from delivering tele-therapy to veterans with post-traumatic stress disorder. *Journal of Telemedicine and Telecare*, *Online First*.

3. Method

3.1. Study Overview

This study used an observational design to explore the impact of tele-therapy on the mental health of UK help-seeking veterans diagnosed with PTSD. A pilot tele-therapy intervention was set up in order to assess its feasibility, collecting data about referrals, attendance and DNA rates. Quantitative analyses were used to assess the effectiveness of tele-therapy using a range of mental health measures (see below), using a quasi-experimental design with pre-therapy, post-therapy and three-month follow-up measures collected. To investigate the acceptability of tele-therapy, a qualitative design was used with a sample of 16 participants completing semi-structured interviews post-therapy.

3.2. Feasibility and effectiveness

3.2.1. Setting

The study was conducted from Tyrwhitt House, headquarters of Combat Stress in Surrey, UK. As per below, participants were recruited from across the UK, and therapy sessions were conducted remotely by the lead clinician at Tyrwhitt House.

3.2.2. Participants

The project was open to participants from anywhere in the UK as the intervention was remote-access. Recruitment was focused around the three UK treatment centres of Combat Stress, but referrals were also accepted from Combat Stress community teams. Referrals were made by Combat Stress professionals only, i.e. there were no self-referrals. In the initial stages of the project, contact was made with senior staff members from the three treatment centres to disseminate information about and increase awareness of the project. The lead clinician attended residential and community staff team meetings to raise awareness about the project. It was important for staff to be aware of tele-therapy as a possible treatment option when carrying out assessments and reviews. Potential participants were also approached if they were currently on a waiting list for existing treatment programmes.

Veterans were considered for the project if they had difficulties with PTSD, either through a formal diagnosis or as self-reported via outcome measures. Veterans were not excluded if they had co-morbid mental health difficulties, which were also measured via the study's outcome measures (see Table 3). Those deemed to be high-risk in terms of suicidality were not eligible due to concerns about remote risk management. Any referrals who did require this level of support were referred to their GP or other local services as appropriate. Access to the internet was essential as all appointments were conducted online, as well as access to a private space from which participants could complete therapy sessions. If participants did not have access to suitable technology,

e.g. laptop, the research team at Combat Stress sent them a tablet device to use for the duration of treatment.

The aim was to offer tele-therapy to a minimum of 24 participants in the duration of the study. This sample size was based on a power calculation of the number of participants required to detect a meaningful reduction of scores on the PCL-5 measure (see below for details) between the start and end of therapy, at 90% power and 5% significance level with a standard deviation of 15. These figures are based upon previous research within this population (Murphy et al., 2015).

3.2.3. Outcome measures

PTSD Checklist for DSM-5 (PCL-5). The PCL-5 (Blevins et al., 2015) is a 20-item, self-report questionnaire which measures symptoms of PTSD. Items are rated on a five-point Likert scale with participants indicating the level to which they have been affected by given problems. Example items include “Avoiding memories, thoughts, or feelings related to the stressful experience”, and “Feeling jumpy or easily startled”.

Patient Health Questionnaire (PHQ-9). The PHQ-9 (Kroenke et al., 2001) is a nine-item self-report questionnaire which measures symptoms of depression. Items are rated on a four-point Likert scale with participants rating the extent to which they have been affected in the past two weeks. Example items include “Having little interest or pleasure in doing things”, and “Feeling tired or having little energy”.

Generalised Anxiety Disorder (GAD-7). The GAD-7 (Spitzer et al., 2006) is a seven-item self-report questionnaire which measures symptoms of generalised anxiety. Items are rated on a four-point Likert scale with participants rating the extent to which they have been affected in the past two weeks. Items include “Feeling nervous, anxious or on edge”, and “Worrying too much about different things”.

Dimensions of Anger Reactions (DAR-5). The DAR-5 (Forbes et al., 2014) is a five-item self-report questionnaire used as a measure of anger in relation to trauma. Items are rated on a five-point Likert scale. Items include statements such as “I often find myself getting angry at people or situations” and “When I get angry, I stay angry”.

Alcohol Use Disorders Identification Test (AUDIT). The AUDIT (Saunders et al., 1993) is a ten-item self-report measure used as a screening tool for harmful alcohol consumption. Items are rated on a five-point Likert scale with participants reporting on their alcohol use over the past six weeks. Items include “How often do you have six or more drinks on one occasion?” and “How often in the last year have you had a feeling of guilt or remorse after drinking?”.

Scale to Assess Therapeutic Relationships in Community Mental Health Care (STAR). The STAR

(McGuire-Sneckus et al., 2007) is a 12-item self-report measure of therapeutic relationships. The measure has two versions, one completed by the participant (STAR-P) and the other by the clinician (STAR-C). Items are rated on a five-point Likert scale. Items include statements such as: “My clinician and I shared an honest relationship” and “We agreed what was important for me to work on”. Both versions of the STAR give an overall rating of the therapeutic relationship, as well as each having subscales of Positive Collaboration (both STAR-P and STAR-C), Positive Clinician Input (both STAR-P and STAR-C), Non-supportive clinician input (STAR-P only), and Emotional difficulties (STAR-C only). Total and subscale mean scores are provided in a validation sample (McGuire-Sneckus et al., 2007).

3.2.4. Intervention and materials

The intervention used was Cognitive Processing Therapy (CPT). CPT was chosen as there is evidence from studies in the USA suggesting it is effective as a tele-therapy to treat veterans with PTSD. As such, it has an established evidence base. For the purpose of this study, CPT was adapted for use with veterans, and standardised into a 12-session programme, ensuring the participants in the current study received a consistent treatment.

CPT is delivered using a standardised treatment manual (Resick et al., 2008) which outlines the theory underlying the treatment, as well as session-by-session guidelines for delivery. The manual also includes information and worksheets corresponding to each treatment session. The full CPT manual (Resick et al., 2008) was condensed into brief session plans for the clinician to use as prompts during sessions. The lead clinician spent time familiarising themselves with the manual’s content and completing online CPT training (https://cpt.musc.edu/). A handbook of therapy materials, hand-outs and practice assignments was also created and sent to participants prior to beginning therapy. In practice, the clinician was afforded some flexibility in the delivery of the programme, depending on the specific needs of each participant.

3.2.5. Procedure

Participants were referred directly to the research team via the lead clinician, who then contacted the veteran by telephone to gauge their interest in taking part. At this stage, participants were given further information about the project, including a written information sheet (see 10.3 in Appendices). They were informed that their participation was not obligatory and that they would still be eligible to attend further treatment programmes if they completed tele-therapy. In some cases, the clinician was able to meet face to face with veterans (e.g. if they were attending appointments or programmes at Tyrwhitt House).

Once a participant had expressed an interest in taking part, a brief telephone

screening assessment was carried out by the lead clinician (see 10.5 in Appendices). This involved gaining information about current PTSD symptoms, previous experience of psychological therapies, and hopes and goals for treatment; screening for current risk and suicidality; assessing readiness to engage in therapy; and exploring any potential barriers to engagement such as having time available for appointments and access to appropriate technology. Participants were also asked about their confidence and previous experience in using Skype and were advised about how to use it if they had not done so before. Tablets were available to send to participants who did not have access to a device with which to use Skype. Tablets were programmed by the Combat Stress IT department, which included setting appropriate security settings and pre-loading Skype. An instruction sheet about how to use Skype was sent to participants where required (see 10.9 in Appendices).

Participants were asked to complete the outcome measures at three time points: before therapy, immediately after therapy, and at a three-month follow-up point. Measures were either sent in the post or via email depending on each participant's preference. Post-treatment measures also included a measure of therapeutic alliance, which was completed by the participant and clinician. Participants were contacted by telephone one to two weeks after their final tele-therapy session by a research assistant to complete a semi-structured interview about their views on the acceptability and feasibility of tele-therapy. The time and date of the interview were arranged with the therapist during the final tele-therapy session. One month after the final session, participants were invited for a review appointment with the clinician via Skype. The purpose of this was to review progress made since the end of the therapy, to reinforce any relevant therapy strategies, and to assess any outstanding need for further intervention.

All therapy sessions were conducted via Skype, which is an encrypted, free to use and readily available software application for video-conferencing. Sessions were conducted from clinic rooms at Tyrwhitt House. The clinician called participants on the phone prior to the first session to assist in logging into Skype. Participants were invited to call the clinician once they were ready to begin. Participants were also asked to ensure they had an alternative method of contact available during sessions, such as a mobile phone. This was to ensure that contact could still be made between the clinician and the participant in the result of any technological issues with Skype, which also meant that the clinician could effectively manage any distress a loss of connection might cause if during an emotionally sensitive point of the session.

3.2.6. Data analysis

Responses from mental health outcome measures were entered and analysed using SPSS. Firstly,

descriptive statistics were used to explore the sample in terms of demographics. Following this, regression models were fitted to explore differences in primary and secondary mental health outcomes at pre-therapy, post-therapy and at follow-up. Effect sizes between pre-therapy and follow-up were calculated and interpreted using accepted guidelines (effect size 0.2 = small; 0.5 = medium and 0.8 and above = large) (Cohen, 1998). Tele-therapy effect sizes were then compared to those of the Combat Stress Intensive Treatment Programme (ITP) and veterans' programmes in other countries. Severity of mental health symptoms in the present sample were compared with those previously reported in veterans attending Combat Stress treatment programmes to ensure a fair comparison.

Feasibility was assessed by measuring attendance and dropout rates; the number of 'did not attend' appointments (DNAs); the amount of time spent per client by the clinician; and the average number of weeks it took for participants to complete the 12-session course of therapy.

3.3. Acceptability

3.3.1. Participants

Sixteen participants who had completed the tele-therapy pilot were contacted about completing a qualitative interview. The first participants to engage in the therapy were selected, regardless of whether they had completed the full course of treatment or not. The current sample size was informed by guidelines for using thematic analysis, as 12 is considered sufficient for new themes to emerge and data saturation to be reached (Guest et al., 2006). One participant who had terminated therapy early was happy to be interviewed, with the remaining 15 being treatment completers. Those who dropped out were included to avoid bias and ensure all viewpoints were represented.

3.3.2. Data collection

A semi-structured interview schedule was developed prior to contacting participants (see 10.7 in Appendices). Interviews were carried out by a separate research assistant at Combat Stress who was not involved in the therapy, with the responses not discussed with the lead clinician. This was to ensure that participants felt able to discuss the therapy openly. Using the interview schedule, participants were asked four questions regarding their experience of tele-therapy:

(1) Have you had any previous experience with mental health professionals? If so, how was meeting with a therapist over Skype different?

(2) What were the positives of using Skype-based therapy?

(3) What were the negatives of using Skype-based therapy?

(4) How did you find the relationship you had with the therapist? How was it different from face-to-face therapy?

These questions were followed by standardised prompts where extra information was required. For example, the research assistant would ask “Were you more or less able to talk about your trauma? Why?”; “Did you have any concerns beforehand? How did they play out?”; “How did you find it using the technology?”; “Do you think that would have happened anyway?”; “What could have been done differently” and “How did you find the levels of trust you had with the therapist?”

3.3.3. Data analysis

The interview transcripts were analysed using an inductive approach to thematic analysis (Braun & Clarke, 2013). This method of qualitative data analysis consists of the researcher familiarising themselves with the scripts, re-reading and noting commonly used words, combining words into themes, coding them and then developing overarching categories. The research assistant who conducted the interview analysed the scripts to ensure interpreter singularity. The themes were then discussed with the other team members for triangulation.

In line with Pope and Mays’ (1995) procedures for demonstrating rigour in qualitative research, several steps were taken by the researchers during the qualitative analysis. The researchers used systematic, non-probabilistic sampling through contacting the first sixteen participants to complete the treatment, who all agreed to take part. To ensure the reliability of the analysis, the interpretative procedures were determined before the analysis was conducted, the same questions were used for all participants, and the research assistant conferred with two other researchers when analysing the themes. To ensure the accuracy of the transcripts, an additional research assistant compared the written transcript with the audio recordings of interviews and any uncertainty was discussed between the two researchers. In addition, to minimise researcher and reporting bias, the qualitative interview transcripts are available on request.

Method summary

Aims	Data collected	Analysis
Feasibility	Attendance, dropout rate, DNA rate, time taken to complete therapy, therapist hours per client, therapeutic alliance (STAR)	Quantitative
Acceptability	Participant feedback via semi-structured interviews	Qualitative
Effectiveness	Mental health outcome measures: PTSD (PCL-5), depression (PHQ-9), anxiety (GAD-7), anger (DAR-5), and alcohol use (AUDIT).	Quantitative

4. Results

4.1. Participants and recruitment

In total, 54 referrals were made for tele-therapy between January and August 2017. Attempts were made to contact all participants who were referred, although it was not possible to establish contact with five of these. In these instances, after three attempted phone calls, an opt-in letter was sent asking them to contact the team if they were interested in taking part. Of those contacted, 11 opted not to take up the offer of tele-therapy. Reasons for opting out included having a lack of social support and therefore concerns about managing strong emotions evoked in therapy, preferring face-to-face therapy, and not being able to commit to therapy at the time. A further six referrals expressed an interest in taking part but then could not be contacted further, or circumstances meant they could not engage. Overall, of the 54 referrals made, 27 started tele-therapy. A recruitment flowchart is presented in the appendices (see 10.6).

The majority of referrals (28) came from Tyrwhitt House. A further 21 were referred from the remaining two treatment centres in Shropshire and Ayrshire, with five being referred by different community teams within Combat Stress. Anecdotal reports from referrers suggested that the majority of participants agreed to be referred for tele-therapy because they could not attend a residential treatment programme due to work or other commitments.

Please refer to Table 2 below for details of participant demographics. Compared to veterans engaging with the Combat Stress intensive treatment programme (ITP), the veterans who received tele-therapy were no less complex in terms of mental health difficulties. This comparison is presented in Table 3.

4.2. Feasibility outcomes

4.2.1. Participant engagement

Of those who were referred for tele-therapy, 50% commenced therapy. This increased to 57% when including those who agreed to take part but were later not able to due to a change in their circumstances. 27 participants started therapy, with six dropping out of treatment. Two participants were sent tablets to use for therapy sessions as they did not have suitable equipment at home. Of the 21 participants who completed the therapy, 20 completed post-therapy outcomes measures, and 18 completed measures at three-months' follow-up. There were no significant differences in PTSD scores between those who did and did not complete post-therapy and follow-up measures.

In total, 255 tele-therapy sessions were completed, with a DNA rate of 12%. This statistic compares favourably with previous research which has shown that an outpatient

Table 2 Demographic data

Demographic characteristics	N (%)
Sex	
Female	3 (11.1)
Male	24 (88.9)
Age	
25-34 years	6 (22.2)
35-44 years	10 (37.0)
45-54 years	9 (33.3)
55 and over	2 (7.4)
Education	
No formal qualifications	4 (14.8)
O-Level/GCSE/NVQ L 1-2	11 (40.7)
A-Level/HND/NVQ L 3+	5 (18.5)
Undergraduate degree	2 (7.4)
Postgraduate	4 (14.8)
Employment status	
Unemployed	1 (3.7)
Not working due to ill health	7 (25.9)
Full time employed	12 (44.4)
Part time employed	5 (18.5)
Retired	2 (7.4)
Relationship status	
Single	1 (3.7)
In relationship, not co-habiting	5 (18.5)
Married/Cohabiting	18 (66.6)
Separated/divorced	3 (11.1)
Widowed	0 (0.0)
Service	
Royal Navy	1 (3.7)
British Army	21 (77.7)
Royal Air Force	4 (14.8)
Royal Marines	1 (3.7)
Service role	
Non-combat	1 (3.7)
Combat	13 (48.1)
Combat support	10 (37.0)
How left service	
Non-voluntary/redundancy	2 (7.4)
Voluntary release	15 (55.6)
Medical	9 (33.3)
Length of service	
0-5 years	3 (11.1)
6-10 years	10 (37.0)
11-15 years	7 (25.9)
16 + years	6 (22.2)
Completed treatment (12 sessions)	
Yes	21 (77.8)
No	6 (22.2)

Table 3 Comparison of individuals using the ITP and Tele-therapy programmes

	ITP programme[2] Mean score (SD)	Tele-therapy programme Mean score (SD)
PCL-5	55.1 (14.0)	58.9 (15.3)
PHQ-9	17.1 (5.2)	16.8 (6.6)
GAD-7	15.6 (4.8)	15.8 (4.9)
DAR-5	11.3 (5.2)	11.8 (5.8)
AUDIT	8.92 (8.4)	10.8 (7.5)

2 Murphy et al. (2015). Mental health and functional impairment outcomes following a 6-week intensive treatment programme for UK military veterans with post-traumatic stress disorder (PTSD): A naturalistic study to explore dropout and health outcomes at follow-up. *BMJ Open, 5*.

mental health service for UK veterans reported a DNA rate of around 19% (Clarkson et al., 2016). The same study reported a dropout rate of just over 21%. In the current study, six participants dropped out of tele-therapy, at a rate of 22%.

On average, it took 14 weeks for a participant to complete 12 sessions of therapy, (the range for time to complete therapy being from 6 – 24 weeks). The CPT manual advises that where possible, clinicians should aim to hold two sessions per week with a client, meaning therapy can be completed in six weeks, but findings here suggest that this was not possible in most cases. Also, for those completing treatment, the clinician spent an average of 23.5 hours of clinical and administration time, including pre-therapy screening and administration (e.g. letters to GPs); conducting sessions; writing up session notes; supervision; and post-therapy administration (e.g. writing treatment summaries).

4.2.2. Mental health outcomes

Table 4 below shows mental health outcome scores pre-therapy, post-therapy and at three months' follow-up. The data suggests that there is overall improvement in mental health scores following tele-therapy, an effect which is maintained at three months. The effect sizes reported for tele-therapy are comparable with those previously reported for veterans attending the six-week ITP and other treatment programmes internationally (see Table 5).

4.2.3. Therapeutic alliance

Out of a total score of 48, the mean score on the participant version of the STAR measure of therapeutic alliance was 44.8 (19 participants). For the clinician's version, the mean score was 45.9 (21 participants). There are few studies from which a direct comparison can be made of overall STAR scores. However, one study found mean

Table 4 Comparison of mental health outcomes before and after tele-therapy

	Pre-therapy Mean score (SD)	Post-therapy Mean score (SD)	Follow-up Mean score (SD)	Adjusted model β (95% CI)	Effect size
Primary Outcomes					
PCL-5	58.9 (15.3)	41.9 (20.7)	40.7 (24.2)	-19.8 (-26.4 to -13.3)	0.94
Secondary Outcomes					
PHQ-9	16.8 (6.6)	11.4 (6.1)	12.6 (7.3)	-6.1 (-8.5 to -3.7)	0.61
GAD-7	15.8 (4.9)	12.5 (5.6)	11.9 (6.4)	-3.35 (-5.7 to -1.0)	0.70
DAR-5	11.8 (5.8)	8.5 (5.8)	9.3 (6.5)	-4.83 (-6.8 to -2.9)	0.41
AUDIT	10.8 (7.5)	8.4 (8.4)	8.2 (7.3)	-2.27 (-4.4 to -0.1)	0.35

Table 5 Effect size comparisons

Intervention	Country	Effect size	Follow-up
CPT Tele-therapy	UK (present study)	0.94	3 months
ITP (TF-CBT)	UK[3]	1.04	12 months
TF-CBT	Australia[4]	0.9	2 years
CPT	USA[5]	0.7-0.9	1 month
Exposure Therapy	USA[6]	1.2-2.1	Post-therapy

3 Murphy et al. (2016). Long-term responses to treatment in UK veterans with military-related PTSD: An observational study. *BMJ Open, 6*.

4 Creamer et al. (1999). Treatment outcome in Australian veterans with combat-related posttraumatic stress disorder: A cause for cautious optimism? *Journal of Traumatic Stress, 12*.

5 Monson et al. (2006). Cognitive processing therapy for veterans with military-related PTSD. *Journal of Consulting and Clinical Psychology, 74*.

6 Turek et al. (2011). Prolonged exposure therapy for combat-related posttraumatic stress disorder: An examination of

participant-rated scores of 37.2 in a mental health crisis service, and 28.3 in an acute mental health ward (Sweeney et al., 2014), which would suggest that the tele-therapy format allowed for good levels of therapeutic alliance. Figure One shows participant and clinician ratings for subscale scores on the STAR measure.

4.3. Acceptability outcomes

Five key themes concerning the acceptability of tele-therapy emerged from the qualitative interviews, each including various sub-themes: Effect of your own environment; The importance of a good therapeutic alliance; Technicalities and practicalities; Personal accountability; and Measuring change. See Table 6 below for a summary of themes and sub-themes.

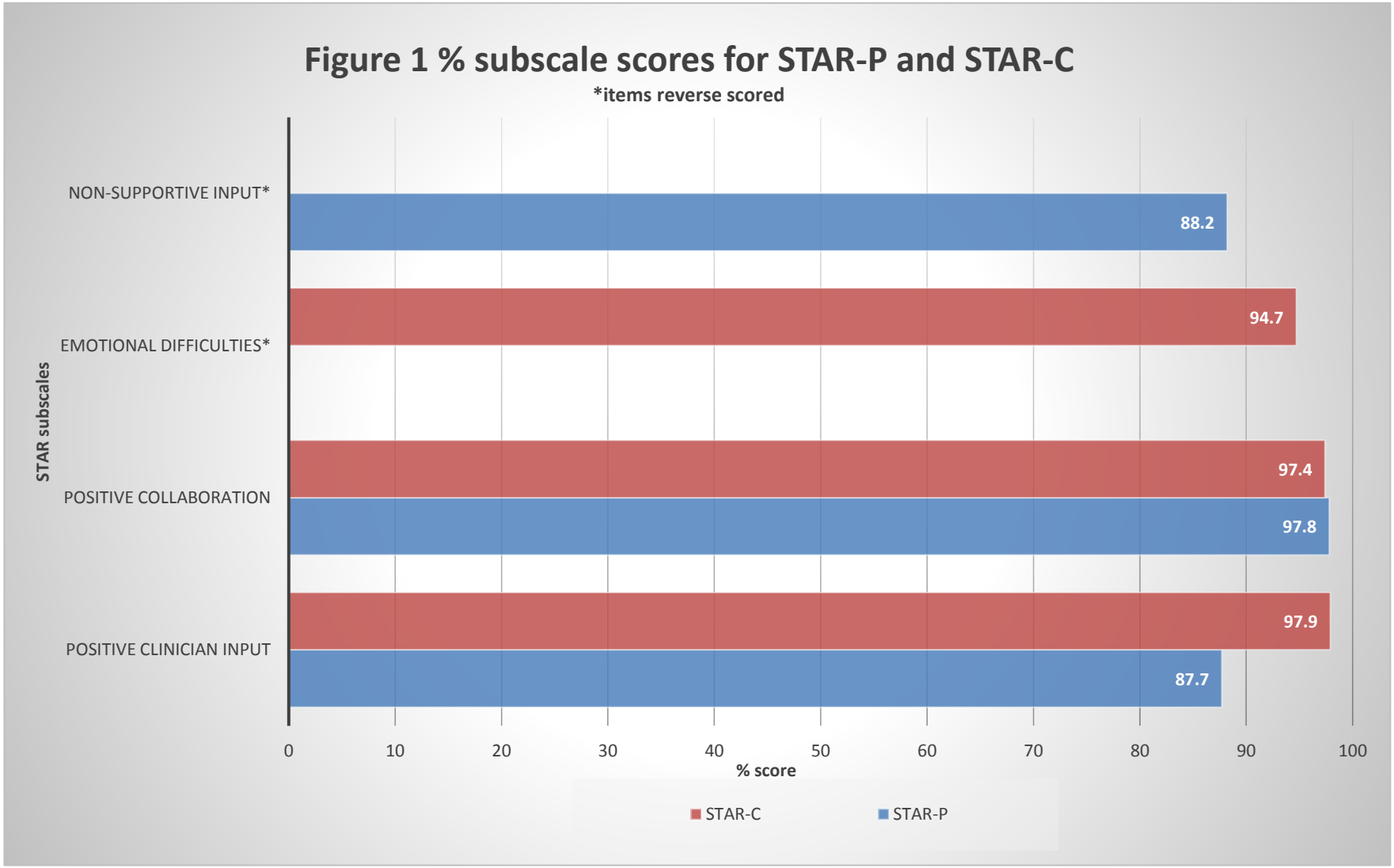
Figure 1 % subscale scores for STAR-P and STAR-C
*items reverse scored
STAR subscales
NON-SUPPORTIVE INPUT*
EMOTIONAL DIFFICULTIES*
POSITIVE COLLABORATION
POSITIVE CLINICIAN INPUT
88.2
94.7
97.4
97.8
97.9
87.7
0
10
20
30
40
50
60
70
80
90
100
% score
STAR-C
STAR-P

Table 6 Table summarising the key themes and sub-themes from the qualitative interviews

Key theme	Sub-theme
Effect of your own environment	Control over your own environment
	Lack of support between sessions
	Snapback to reality
Importance of a good therapeutic alliance	Putting a face to the name
	Impersonal feeling
	No different from being in the room
Technicalities and practicalities	Good preparation is key
	Flexibility of Skype
	Technical aspects
	Session length and timing
Personal accountability	Finding the time and space
	Managing attendance and engagement
Measuring change	Negative past experiences with therapy
	Improving self-recognition
	Managing symptoms

4.3.1. Theme One: Effect of own environment

This theme encompasses the positive and negative aspects associated with doing therapy in the participant's own environment. Sub-themes comprised of *control over your own environment, lack of support between sessions*, and *snapback to reality.*

Control over your own environment

Participants often mentioned that being able to do therapy in their own environment, on their own terms helped them to relax and engage better than if they had had to go somewhere unfamiliar. Doing therapy sessions over the internet appeared to alleviate the anxiety associated with having to leave the house, go to new places and meet new people.

"Because a lot of it was at home, I was more relaxed…because it was in my environment and I hadn't gone somewhere." Participant 6

"I think it took the pressure off because you were in your own home." Participant 11

"When the session was over, I went out for a walk which actually calmed me." Participant 12

"You've got that anxiety of going to an appointment, whereas that doesn't happen on Skype, or it didn't for me anyway." Participant 8

Lack of support between sessions

One of the downsides of tele-therapy commonly reported by participants was that they felt they missed out on the support in-between sessions which they felt was valuable in the residential programmes. For example, having someone to talk to or being around people who understand their difficulties. However, this is a similar experience when patients attend outpatient appointments.

"On the residential you would get different therapies all day. Whereas on Skype you're just getting that one blast and then it's over for another couple of days or a week." Participant 3

"The advantage of the residential course is that it removes you from everyday life and gives you space to prepare for and reflect on the therapy." Participant 5

"The negative side of Skype is you can feel very lonely and you're unable to talk about trauma treatment to your spouse or family because we're trying to protect them from it." Participant 1

Snapback to reality

One of the difficulties experienced with working in their own environment was that once the session was finished, participants would suddenly be jolted back into their everyday lives and there was no acclimatisation or time for reflection in-between. Due to technical difficulties, sometimes this quick snap back to reality would occur in the middle of the session. In some cases, this jolt back to reality would get in the way of participants lives and some would struggle to move on and continue with their day.

"You go into a therapy session for an hour and then you're instantly back in the room. The therapeutic bubble is burst and you're back to all the normal stuff around you." Participant 3

"It was hard to switch from talking about it all and then getting on with normal life." Participant 8

"You need to be careful with boundary setting because if you start opening up real traumas, that room in the house starts getting related to that distress." Participant 1

4.3.2. Theme Two: Importance of good therapeutic alliance

The second theme related to the therapeutic alliance between the therapist and participant and how Skype affected it. Sub-themes included *putting a face to the name, impersonal feeling* and, *no different from being in the room.*

Putting a face to the name

One factor that appeared to be particularly important when conducting therapy over Skype with veterans was that when they first met the therapist, it is important they could see the therapist's face.

"I'd spoken to counsellors over the phone, but actually being able to see someone made a big difference. I could see his body language, it made me feel really comfortable." Participant 2

"You were still face to face, there was that personal element" Participant 3

"I didn't find it too bad at all. It was quite easy to get on with someone because you've got video contact." Participant 11

"Using the tech instead of face to face makes it easier to express yourself." Participant 9

Impersonal feeling

Despite being able to see the therapist's face, several participants reported that they felt that doing tele-therapy felt impersonal because they weren't in the same room as the therapist. Some participants found it difficult to read body language without seeing the whole individual.

"It felt almost business-like rather than as personalised as it could be." Participant 4

"Some people may find it a bit impersonal just having someone on the end of a computer, but I think people are more and more used to it these days." Participant 11

"The difference is that it's not personal, all you see is a face." Participant 12

"It's hard to pick up on non-verbal communication, which is key to therapy in my view. I'm not sure how easy that is to pick up through a screen." Participant 4

"I realised I would overcompensate by vocalising much more and emphasising what I was saying." Participant 5

No different from being in the room

In contrast to the impersonal experience, some participants felt that doing tele-therapy over Skype was no different from being in the same room with the therapist.

"To be honest, it didn't feel any different because I could see him, it felt like he was in the room with me." Participant 2

"Sitting in front of somebody and talking on Skype is not that different from meeting somebody, you get the same treatment as you would sitting in front of them." Participant 7

"It was as close as you can get to being in a room because modern technology is that far advanced, it feels like you're not that far apart." Participant 12

"He picked up on my surroundings and I picked up on his office space and it just felt very natural, which was surprising because I didn't think it would be. I thought it would be different locations every time, but it seemed like he was in the same space most of the time." Participant 14

4.3.3. Theme Three: Technicalities and practicalities

The third key theme covered both the technical and practical aspects of delivering therapy to participants over Skype. These included *the flexibility of Skype, good preparation is key, technical aspects,* and *session length and timing.*

Flexibility of Skype

The flexibility of being able to do tele-therapy appealed to the majority of participants, reducing the impact on work and cost-savings. It was beneficial to participants who travelled around a lot or lived in remote areas with less accessibility.

"For people who can't find time to do the residential course, it's a very convenient way of delivering therapy. It has a minimal impact on your day-to-day life." Participant 5

"If I came in for the six week programme I would have had to take more time off and I'd have lost money." Participant 2

"I managed to get a job offer. If I did therapy somewhere else I wouldn't have been able to." Participant 12

"It's ideal for those from Northern Ireland or up in the islands of Scotland." Participant 12

"I probably would've lost my job for one but I wouldn't have been able to get childcare." Participant 11

Good preparation is key

A practical sub-theme that emerged from the interviews was participants reporting that they would have liked to have known more before starting the therapy to help them be better prepared. Many participants said that the workbooks and additional information given to them between sessions were beneficial.

"I would recommend quite a structured session with creating goals and managing expectations of what the therapy would be." Participant 1

"I'll say a lot can be done in terms of the preparation of the client for therapy. The more aware you are of the issues that are likely to come up, the better chance you have of recognising when that happens." Participant 5

"Before the sessions, he sent me through a workbook. Which, whenever we had a session, I could relate back to a previous session in the workbook, so it wasn't as hard as I thought it was going to be." Participant 2

Technical aspects

Throughout their therapy sessions, some participants reported experiencing problems with the technology, such as a bad connection, interference or poor image quality. But, in general, participants reported that they found Skype easy to use.

"In my view Skype isn't particularly stable for a long call. There were a couple of sessions where we finished over the phone because Skype just wouldn't connect." Participant 5

"When I stood still and was leaving an area, sometimes I didn't get a connection which was frustrating. But I think a good 80% of the 12 weeks I did were really positive and had some good coverage." Participant 10

"I think that there needs to be a better way than the Skype because I think at some points the line kept dropping and you can't hear him properly. It definitely has glitches and they need to develop another program to do that instead of relying on Skype." Participant 13

"I had to YouTube it just to see how it all sort of worked because I'm not the best at technology and to be fair, once I got the account set up and I'd done a trial with my wife, it was very easy." Participant 14

Session length and timing

One area noted for improvement was the times that the sessions were run, during the work day. Participants said they would have preferred more flexible timings. In addition, the majority of participants said they felt that they would have benefited from more than 12 sessions of therapy.

"The times I get home around 7 o'clock for the therapy is actually really quite difficult to do." Participant 4

"During the working day is not ideal. Something that is delivered in the early hours of the evening might be something that people would be really eager to do". Participant 5

"Could have been longer than just 12 sessions because it's good to talk to somebody every week or even every month." Participant 7

"I felt like I was obviously getting a lot and I learnt a lot but I felt like maybe it could have gone on longer. 12 weeks seems like a long time, but it's not, in reality, the sessions fly by." Participant 14

4.3.4. Theme Four: Personal accountability

Many participants reported that tele-therapy required a greater level of personal accountability in comparison to other forms of therapy. The sub-themes that describe this key theme are *finding the time and space, managing attendance and engagement* and, *moving forward.*

Finding the time and space

This subtheme encompasses the difficulty experienced by participants in having to find a private place or manage their time themselves to complete a therapy session.

"If you're living in a two bedroom flat with your partner and kids, finding a quiet hour where you can focus isn't necessarily going to be straightforward." Participant 5

"The only negative for me was trying to make that quiet spot at home or work with having two children." Participant 6

"Our house is open plan, so I can only really do it if nobody else is here." Participant 11

Managing attendance and engagement

Taking part in tele-therapy meant that individuals had to manage their own time and be responsible for their own attendance and engagement with the therapy, which some found difficult to do.

"Because I could just say, you know, "it's only a Skype session", I'm not having to go anywhere specifically for it. It's very easy for me to avoid it and to email to say "I'm sorry I'm not going to make tonight's session". If you're not going into a room to do it nobody can hold you to account." Participant 4

"I needed quite a lot of planning and organisation on my part to make sure that I put time aside to reflect on the sessions and do any preparation and situate myself into the right frame of mind to do therapy." Participant 5

"If you were in a worse situation than myself, I think you'd find it hard with the sort of planning and time management." Participant 6

4.3.5. Theme Five: Measuring change

The fifth theme that emerged regarded how the participants measured any change they saw in themselves following therapy. Sub-themes included *negative past experiences with therapy, improving self-recognition* and, *managing symptoms.*

Negative past experiences with therapy

A prevalent theme was that many participants had previously had negative experiences with other types of therapy, which led to them not making progress or hitting a plateau. Tele-therapy appeared to break the plateau for some.

"I got more out of the Skype than I did sitting in a room with a senior person who didn't understand the military." Participant 1

"It was almost like he'd turned a switch and put me in a completely different perspective and since then, I've been able to deal so much better regarding my PTSD." Participant 2

"If I was on a residential course I might have forgotten most of it because you're listening to other people's problems. But with Skype, you're only listening to your own problems and no one else's." Participant 10

Improving self-recognition

As a result of the tele-therapy, participants reported being able to better recognise and understand their traumatic experiences and their problems, for example, triggers, compared to their previous experiences of more traditional forms of therapy.

"I was quite sceptical that it would even manage to do maintenance, but I think that over the course of the sessions, I actually think I've made some real progress." Participant 5

"I was able to spot it yesterday whereas normally I would have just carried on and then either had an argument with my wife or been in a foul mood. I feel as if it has helped me notice what the triggers are." Participant 6

"I found that the understanding stuff and dissecting, stuff sort of feelings and thoughts, it helped me with that." Participant 14

Managing symptoms

A common theme was that many veterans saw improvements in how they managed their symptoms of PTSD, depression, anxiety following the intervention. Nevertheless, participants stressed that although their symptoms had reduced, they were still there and the therapy was not a cure.

"I don't have flashbacks anymore but I do have the sort of anxiety around it which I can spot earlier now instead of letting it take over completely." Participant 6

"It's worked for a lot of my symptoms, my PTSD has sort of calmed down, so I'm guessing that it's working." Participant 8

"One of the things was lack of sleep and I'm actually getting more sleep now and feeling better." Participant 12

"I mean, sometimes it's good, sometimes it's bad. But I would say that it has helped me but not all." Participant 13

"I definitely did get things from it, it hasn't cured me or anything like that, as in what my main problems are but they're things that I spoke to him about and they're long term things." Participant 14

4.4. Therapist observations

All therapy sessions were completed by the lead clinician. A number of observations and reflections are presented below based on their experiences of using tele-therapy. These observations are presented with the caveat that they are based solely on the experiences of one clinician and are not therefore necessarily universal.

4.4.1. Communication and body language

As detailed above in some of the qualitative interviews, some participants described tele-therapy as just like being in the same room as the therapist, whereas others suggested that it was harder to read body language. In some ways, both of these observations were shared by the therapist. In most cases, it was only the head and shoulders of the other person that could be seen. Therefore, it was inevitable that some body language would be missed that might be significant, for example a leg tremor or shake that indicates anxiety. However, in the experiences of the therapist, this did not compromise their ability to detect emotions in the individual, as these were mostly displayed via verbal and facial expressions. It is also the case that, when considering transference and countertransference processes, the therapist was able to detect distress and feel emotion that was created in the therapeutic interaction.

Some participants described feeling more comfortable in talking to a

therapist online rather than face to face. This might be because there is an extra barrier between the therapist and the client in tele-therapy that is not present when face to face, that perhaps feels less exposing to a client who is not accustomed to discussing personal or emotional matters. Using tele-therapy did not pose any additional difficulties in building rapport with participants, which was typically achieved early on in therapy. The therapist also observed that using tele-therapy led to subtle changes in communication style, perhaps in order to compensate for some of the missing body language such as hand gestures, for example trying to be clearer and more succinct when explaining complex psychological processes. This also occurred because it was more difficult to write or draw things out on paper to illustrate certain points as one might commonly do when face to face.

4.4.2. Managing distress

The therapist followed the same principles for managing distress in tele-therapy that would commonly be used when doing trauma-focused therapy face to face. This included preparing each participant fully prior to completing trauma re-living, as this is most often the part of therapy that is associated with increased distress. Sessions were also managed so that the participant had ample time within the session to recover before the session ended, i.e. sessions were never ended whilst they were still showing signs of distress. Allowance was made to have longer sessions if required, and would be arranged with the participant prior to the appointment. The therapist also allowed for flexibility of session duration in the scheduling of appointments, in case extra time was needed, for example ensuring that there were no back to back appointments, with at least thirty minutes in-between. The therapist would also discuss with the participant what they were going to do immediately after the session, which is not necessarily different from what would happen when face to face. In some respects, tele-therapy might hold an advantage as some participants were able to go for a walk for example in the nearby area which they found helpful after a difficult session.

4.4.3. CPT and adapting the protocol

The therapist had previous experience of using trauma-focused CBT, and whilst CPT has many similarities, there were some key differences to note. The first is that CPT contains a written exercise as part of trauma processing. Some participants found this particularly helpful and therapeutic, whereas others were not able to commit the trauma to writing. When they were not able to write about it, participants completed the processing exercises verbally within sessions, as would typically occur in TF-CBT.

There were some differences between participants in terms of their preparedness for therapy, such as that some had completed psychological

therapies before, or had more social support, which meant they felt more able to start the trauma processing work early on. For those participants, they were perhaps more familiar with basic theories of PTSD, and grounding or relaxation strategies that would often be covered in the first phase of trauma-focused therapy. There was little space for this work to be completed in the CPT protocol, so extra time was spent with participants where required, with longer sessions used if necessary.

Generally speaking, following a manualised protocol had its pros and cons, mostly because participants had varying needs and priorities. The therapist therefore found it useful to use the protocol as a guide and made use of all the major therapeutic strategies within it. However, flexibility was used on a case by case basis in how much time was spent on different topics, depending on the needs of each participant.

5. Discussion

5.1. Summary of results

Results suggested that tele-therapy is a feasible alternative to traditional, face-to-face therapy, albeit from a limited sample size. Using a structured 12-session programme of CPT, 27 veterans started the therapy with 21 completing it in total. Six participants dropped out after beginning the course of treatment and the DNA rate of 12% compared favourably with other services.

Findings suggested that tele-therapy was an acceptable method of delivering trauma-focused therapy, with most participants reporting that it was easily accessible due to the flexibility to arrange sessions around their life, and it saved travel time and money (both in travel costs and lost earnings if attending sessions otherwise during work time), and was effective in helping with their difficulties.

Participants also reported that their experiences of tele-therapy were very similar to face-to-face therapy. However, some participants reported feeling isolated after sessions, with little support available between sessions compared to residential treatments, although this issue could also arise between outpatient appointments. They also reported finding it difficult to find time to unwind at home, and thought the tele-therapy would be difficult if the individual didn't know what to expect beforehand. The therapeutic alliance was high regardless of the delivery medium of therapy being remotely conducted over Skype.

In terms of effectiveness, the results showed that PTSD and other mental health outcomes had significantly reduced at three-month follow-up. Effect sizes were comparable with those of other Combat Stress treatment programmes, suggesting that tele-therapy was not inferior to programmes already offered at Combat Stress.

5.2. Strengths and Limitations

The modest sample size within this study makes it hard to draw confident conclusions about its effectiveness in terms of mental health outcomes. Going forward, if tele-therapy were to be used more widely, outcomes and feedback should continue to be collected so that stronger conclusions can be drawn about its effectiveness.

The study benefited from the fact that the sample used was representative of the wider veteran population who are accessing support from Combat Stress. Other than active suicidality, there were no further restrictions on eligibility criteria, meaning that the findings were based on a sample of veterans that were a fair reflection of the population typically seen at Combat Stress. In some cases, the clinician conducting the therapy sessions was able to meet face to face with participants prior to them being screened. It is possible that this led to those participants feeling more comfortable going forward, which

might have influenced the outcomes relating to therapeutic alliance, although the number of such cases was very few.

CPT was a good choice of intervention because it has an evidence base and is time-limited which was useful given the relatively short period of time (12 months) in which this pilot study was undertaken. Using this manualised approach also meant that participants received an intervention that was standardised as much as possible. However, some participants would have benefited from a more flexible and formulation-based approach. That said, in some cases, the protocol was adapted in order to fit the needs of each participant.

6. Recommendations

6.1. Care pathway

If tele-therapy is to be continued in its current form of time-limited CPT, consideration should be given to its place in the overall care pathway. In its current format, 12 sessions of manualised CPT does not include space for much of the preparatory, 'phase one' therapeutic work recommended in the treatment of PTSD, such as psycho-education and grounding techniques that prepare the participants for trauma-focused therapy. This is currently offered in Combat Stress's one-week Preparing for Therapy residential programme, and on two-week Trans-diagnostic and Stabilisation programmes. Within this pilot trial, some participants completed tele-therapy before attending any of these programmes, meaning they had not completed any of this phase one work. In some cases, this phase one work had to be included in the tele-therapy which meant that some flexibility was required in the delivery of the therapy.

Going forward, it is recommended that participants who complete tele-therapy have enough resources to be able to cope with the demands of the therapy, e.g. by completing a one-week Preparing for Therapy programme beforehand, or by effectively screening for those who are functioning well, perhaps due to having less severe PTSD difficulties or more social support. Alternatively, the tele-therapy protocol should be adapted to make space for this work, perhaps meaning an increase in the number of sessions offered. This increase in the number of sessions would respond to the desires of some participants to have more sessions and would meet the will of participants to have more preparation before therapy. As the current six-week ITP offered by Combat Stress uses 15 TF-CBT sessions, perhaps tele-therapy could use this number as a baseline. However, current NICE guidelines do state that psychological therapies for PTSD should typically last for 8 – 12 sessions, with the option to extend this if difficulties persist, so the 12 sessions as used in this study may well be sufficient in some cases. To further enhance the success of future tele-therapy sessions, providing workbooks and information sheets that outline the nature and structure of the therapy, could be beneficial.

In some cases, participants reported that tele-therapy provided a breakthrough in treatment that they had not been able to find elsewhere. It is not clear whether these participants were referring to previous Combat Stress programmes or elsewhere. Nevertheless, it is worth considering tele-therapy as an alternative option for clients who might have been resistant to therapies in the past, perhaps because tele-therapy removes some of the barriers to completing therapy in more traditional ways, e.g. travel, absence from work.

6.2. Therapeutic challenges

6.2.1. Rapport building

Some reflections are warranted on the nature of tele-therapy compared to face-to-face therapy. In particular, participants reported that it took a couple of sessions to build rapport over Skype and suggested that meeting the therapist face-to-face for an initial introduction could be particularly helpful in overcoming this barrier, although this is unlikely to be possible for those who live in more remote areas. Once rapport is built, participants said they felt that doing tele-therapy felt no different from being face-to-face with the therapist.

6.2.2. Engagement

In terms of readiness to engage, some participants found it hard to engage in trauma exposure or re-living work, which involves talking about past traumas in a lot of detail; a process that can be very distressing. In the screening process, all participants were informed that part of the therapy would involve talking about traumas in a lot of detail. However, more could have been done to help participants consider the impact of this work and how they might manage the challenges it can pose. While this was a challenge faced in this study, it is perhaps not unique to tele-therapy.

In some cases, participants reported struggling with the end of a session and returning back to their day to day lives. While this might cause anxiety in some clinicians, it is worth noting that this is not markedly different from a face to face outpatient appointment, whereby the client would go back to 'reality' after a session. The only meaningful difference is that with tele-therapy a client might be at work or at home and would not have the time in between such as travelling from the session. As with any therapy session, a tele-therapy session would not be ended abruptly if a client was still in distress, so concerns such as these can be managed in the same way as would be done in more traditional therapy formats.

6.2.3. Attendance

Some participants suggested that they found tele-therapy less intimidating than face-to-face, with some suggesting it was less anxiety-provoking. This should be considered alongside the fact that some participants opted out of tele-therapy in the first place because they felt it would be too impersonal. Nevertheless, this perceived reduction in formality appeared to help some participants access the service.

It is possible that this lack of formality also affected the quality of therapy and impacted the ease of late appointment cancellations. Because tele-therapy affords more flexibility than face-to-face outpatient appointments, perhaps some participants found it easier to cancel appointments and perceived it to be more acceptable to do so, especially by email, even if on the same day as the appointment. Contacting participants via email made it easier to arrange appointments, but

perhaps also made it easier for participants to cancel appointments which may have affected overall attendance rates. Alternatively, perhaps making it easier to cancel and rearrange appointments led to lower than average DNA rate.

In the future, steps could be taken to make tele-therapy more formal in line with standard outpatient practices. This could include sending appointment letters, emails and text message reminders and confirmations of appointments. Some participants benefited from scheduling appointments at regular days and times. These participants tended to complete therapy more quickly and with fewer gaps in time. It is unknown whether or how this affects treatment outcome. In many cases, however, participants were not able to schedule regular appointments due to work and other commitments.

6.2.4. Alternative interventions

Based on the experiences of the lead clinician, consideration should be given to using other therapies in addition to, or instead of CPT. CPT was a useful intervention for a time-limited pilot study, but there would not be any barriers posed by tele-therapy to offering other therapies, such as TF-CBT which is used in other Combat Stress treatment programmes.

6.3. Attendance and accessibility

While the DNA rates reported here compared favourably with other services, some changes could be made that might improve this further, such as via the use of a formal attendance policy. For example, if two concurrent appointments were missed without sufficient warning, participants would be formally requested via post to opt-in to continue the treatment. Further, as a greater level of independence and responsibility is needed in tele-therapy for participants to be able to manage their own time and space, tele-therapy may not be suitable for some.

A number of participants opted for tele-therapy as they could not take time away from work to attend a residential treatment programme. As such, many participants were in full-time employment at the time of engaging in tele-therapy. Therefore, a degree of flexibility was required on the clinician's part in order to schedule appointments at mutually convenient times. If tele-therapy were to be used beyond this pilot trial, it would be recommended to allow clinicians capacity to work some evenings to accommodate the needs of participants.

However, it may also be that more could be done by employers to make time and space available to participants to attend appointments, although in some cases participants did not wish for their employers to be aware of the fact that they were engaging in therapy, especially given the 'snap back to reality' following sessions as described by some participants in the qualitative interviews.

6.4. Technology

In some instances, the connection was lost on Skype resulting in a significant delay or complete breakdown in communication. At times, the technical difficulties resulted in confusion over what steps should be taken to resolve the issue or participants struggling with a sudden 'snap back to reality'. In practice, these situations were largely resolved by terminating the call and calling back. On two occasions, sessions were completed on the phone after connection on Skype was lost and could not be restored. Nevertheless, participants reported that phone calls were as effective as tele-therapy once they had established rapport and built a good relationship with the therapist.

Perhaps, the potential of doing therapy over the phone in the event of technical difficulties should be discussed with participants prior to commencing the therapy. A standard protocol of actions to take in such cases should be developed so that participants are reassured that, if the connection is lost, they will still be able to complete the session and will not lose contact with the therapist. This is particularly important given the emotional nature of trauma-focused therapy.

In terms of the hardware used to conduct the therapy, it is important for the therapist to have a separate, stand-alone device used solely for therapy. This will ensure that there is enough space on the device to run the video software smoothly, and also serves to ensure there are no distractions during the sessions, e.g. email notification sounds or prompts appearing on screen.

6.5. Access and contact issues

Having the option of the clinician holding appointments from home would afford greater flexibility in terms of when appointments could be offered, with several participants only being able to attend in the evening. There are a number of considerations required, however, for this to be a viable option. Firstly, the option of the clinician working at home requires reliable internet access and importantly, a private space in order to protect participant confidentiality. While the clinician could access Combat Stress emails remotely and use this to contact participants if required, it would not be possible to phone them directly due to it being inappropriate for the clinician to use their personal number and having no access to the Combat Stress number off-site. In future, clinicians working at home would benefit from a mobile phone provided by the employer.

Secondly, because tele-therapy was separate from the main Combat Stress treatment programmes, there was no clear way for participants to contact the clinician other than directly between sessions. In some cases, this led to participants reporting a lack of support between sessions and feeling isolated. Future tele-therapy clinicians

would benefit from formal administrative support, which would also ensure that future participants are able to make contact more easily in-between sessions.

6.6. Clinician workload

Based on the experiences of the lead clinician in the present study, a caseload of 12-16 cases at any one time is feasible, given the average time spent per case to complete therapy, as reported above (Results section, page 14). This is based on clients completing one full course of 12 sessions of CPT for one clinician working full-time and incorporates the time required for delivering sessions, various administrative tasks (such as pre-therapy screening calls and writing therapy summary letters), attending team and peer support meetings, and receiving and providing clinical supervision.

7. Conclusion

The findings from this study suggested tele-therapy interventions for UK veterans with PTSD are both feasible and acceptable. Significant improvements were seen in mental health outcomes following the intervention, although the relatively small sample size prevents any firm conclusions about the effectiveness of tele-therapy in this study. The DNA and dropout rates compared favourably with standard face-to-face therapy outcomes for veterans. In terms of acceptability, participants gave favourable feedback about tele-therapy, reporting that it was flexible and accessible, often meaning that they could access therapy that they would not otherwise have been able to receive due to various geographical and/or time limitations or other commitments.

There was mixed feedback in terms of the impact of using tele-therapy on the relationship with the therapist, with some saying that it felt no different from being in the same room, but others commenting that it was difficult to read body language fully. Many found the tele-therapy treatment to be beneficial and did not find it to be less acceptable than face to face therapy. There were some challenges reported such as feeling isolated in-between sessions, and other technical issues regarding the use of Skype, which could unexpectedly cut off a session, interrupting the flow of the therapy session. That said, delivering the rest of the session by phone if necessary did still prove effective and acceptable. Some participants described that tele-therapy had provided a breakthrough in their treatment that they had not been able to access previously, highlighting the importance of being able to offer more flexible formats for psychological therapies. Care should be taken when considering how to extend the use of tele-therapy at Combat Stress, such as considering the types of therapy that could be offered, the length of therapy, and where it would fit within the current care pathways.

Overall, based on the findings of this pilot study, tele-therapy presents a viable option for delivering trauma-focused psychological therapies to veterans with PTSD. This was a pilot study, and as such there were many lessons learned and recommendations considered, which could be used to inform any extensions of the use of tele-therapy going forward.

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health inpatient wards and crisis house alternatives: A cross-

9. Appendices

9.1. Demographics questionnaire

Initials: ……

1. Gender? Male □[1]

Female □[0]

2. Age? _____ (years)

3. Highest Level of Education?

Left school with no formal qualifications □[0]

O Levels/GCSEs/NVQs Level 1-2 □[1]

A Levels/HNDs/NVQ Level 3/Highers □[2]

Undergraduate/NVQ Level 4-5 □[3]

Postgraduate qualifications □[4]

4. Are you currently working?

Not working, seeking employment □[0]

Not working due to ill health □[1]

Full time □[2]

Part time □[3]

Retired □[4]

Other □[5]

5. What is your Relationship Status?

Single □[0]

In relationship/not living together □[1]

Married/Cohabiting □[2]

Separated / divorced □[3]

Widowed □[4]

6. What service were you in?

Royal Navy □[0]

British Army □[1]

Royal Air Force □[2]

Royal Marines □[3]

7. What was your main role during service?

Non-Combat □[0]

Combat □[1]

Combat Support □[2]

8. How did you leave the armed forces?

Non voluntary/admin/redundancy □[0]

Voluntary release □[1]

Medical □[2]

9. Year left service? _____

10. Total length of service_____(years)

9.2. Summary of measures used

Outcome type	Outcome measure	Title	Purpose	How to score	Cut-off score
Primary	**PCL-5**	PTSD Checklist for DSM-5	Measuring the 20 symptoms of PTSD	Add up scores. Scores range from 0-80.	33 and above
Secondary	**PHQ-9**	Patient Health Questionnaire	Assessing for presence of depression	Add up scores. • 0-4 none • 5-9 mild • 10-14 moderate • 15-19 moderately severe • 20-27 severe	10 and above
Secondary	**GAD-7**	Generalised Anxiety Disorder	Measuring levels of anxiety	Add up scores. • 0-4 none • 5-10 mild • 11-15 moderate • 15-21 severe	8 and above
Secondary	**DAR-5**	Dimensions of Anger Reactions	Assessing for the presence of anger problems	Add up scores. Below 12 is a low problem, above is high.	12 and above
Secondary	**AUDIT**	Alcohol Use Disorders Identification Test	Measuring risk of alcohol misuse	Add up scores. Maximum 40.	8 and above
Acceptability and Feasibility	**STAR**	Scale To Access therapeutic Relationships	Measuring therapeutic alliance from both patient and clinician	Add up scores. Reverse score answers to question 4,6 and 9. Maximum 48.	

9.3. Participant information sheet

Combat Stress Tele-Therapy Trial: Information for Veterans

At Combat Stress we are running a research project where we are offering "tele-therapy" via Skype as an alternative to face-to-face appointments.

Why are we doing this?
For many Veterans, attending a two or six-week residential programme at one of our treatment centres is difficult or not possible. This could be due to work or family commitments, or other reasons that make it difficult to commit to a residential stay. Therefore, we want to find out whether offering therapy in other ways is possible and suitable. By taking part you will be helping us to shape the services we offer to Veterans.

What is tele-therapy?
Tele-therapy for PTSD follows the same format as any other therapy in terms of what is discussed and what it hopes to do, i.e. it aims to help you to reduce PTSD symptoms. The main difference however is that rather than meeting face to face with a therapist, you 'meet' them online, via Skype. This means that you can still see and hear each other, but you're not physically in the same room.

Why tele-therapy?
We are looking at ways of making it easier for Veterans to access therapy without having to commit to a residential stay. It has been trialled with Veterans in the USA and been found to be helpful, but it has not yet been tried in the UK.

What would it involve?
The therapy we are using is called Cognitive Processing Therapy (CPT). It is a trauma-focused therapy that has been adapted specifically for Veterans with PTSD. CPT consists of twelve sessions. We would hope to complete two sessions per week, so the therapy would last around six weeks in total.

Because we want to find out how useful tele-therapy is, we would ask you to complete some questionnaires before and after the therapy, and again three months later. We would also like to complete a telephone interview after the therapy to find out how it went. Any information you give to us will be treated confidentially.

What are the pros and cons of tele-therapy?
The main advantage of tele-therapy is that you don't need to travel to appointments or commit to longer residential programmes. This means you would be more able to fit therapy around your other commitments such as work or childcare. Or you may have physical health difficulties that make it harder to travel to appointments. However, some people might prefer to be in the same room as their therapist, or might not like the idea of having therapy at home.

If I'm interested, what do I need to do?
Hopefully if you have received this information sheet you will have already spoken to one of our therapists on the phone. If you would like to try tele-therapy, we will contact you to arrange an initial appointment. In order to engage in tele-therapy, you

will need to have access to a laptop, computer or tablet with internet access. We can support you in setting up a Skype account and how to use it if necessary. If you don't have a computer, we can arrange for a tablet to be sent to you for the duration of the therapy.

Will doing tele-therapy affect my place on other Combat Stress treatment programmes?
If you are already waiting to attend a treatment programme at one of our centres, doing tele-therapy will not exclude you from this. However, we would not recommend doing further trauma-focused therapy within the three months after you finish tele-therapy. The main aim of tele-therapy is to improve PTSD symptoms, so it may be that following tele-therapy you feel like you no longer need residential treatment. After tele-therapy, we can discuss this with you and decide together what is best for you.

What if I decide it's not for me?
Taking part in this project is completely voluntary, so you do not have to agree to take part. Also, if you start tele-therapy you are free to opt out at any time if you wish.
If you want any further information about the project than feel free to contact Dr David Turgoose, Clinical Psychologist, on 01372 587092 or at david.turgoose@combatstress.org.uk

9.4. Information sheet for clinical teams

Telemedicine project: Exploring the feasibility of offering remote-access trauma therapy

Information for clinicians at Combat Stress

Aims
We are running a research project piloting the use of remote access therapy, i.e. therapy delivered via Skype. The aims of the study include assessing the feasibility of this approach, with the hope that it can increase the numbers of individuals who are able to get support. There is some evidence showing that this approach is acceptable for American veterans with PTSD, but no such evidence with UK veterans.

What the project involves
We are hoping to recruit a modest number of Veterans, beginning with two 'pilot' cases in January 2017. Veterans will complete 12 sessions of Cognitive Processing Therapy; a manualised intervention specifically aimed at Veterans with PTSD. We are aiming to deliver the intervention in six weeks, with two sessions per week.
Psychometric measures will be completed at the beginning of therapy, after the final session and then at three months' follow-up. A telephone interview will also be conducted to help assess the acceptability and feasibility of the approach.

Recruitment
Suitable Veterans will have already completed an initial assessment and been deemed suitable for programmes at Combat Stress. This project is in theory suitable for any Veteran with PTSD, but might be especially useful for those who are unable to attend residential programmes, or in cases who are currently waiting for other treatments. Because it will be Skype-based therapy, Veterans could potentially be based anywhere in the UK.

Once a suitable Veteran has been identified, a member of the research team will contact them to discuss tele-therapy and complete a brief screening assessment.
Following completion of the CPT intervention, Veterans will be referred back to the therapy teams. While completing CPT would not exclude Veterans from attending an ITP, a three-month 'cooling off' period would be required to cover the follow-up period, before attending any programmes.

Participants will also require access to a computer, tablet or smartphone with Skype, as well as a private space where they can go for sessions. In cases where a participant does not have access to appropriate technology we can arrange for a tablet to be sent to them for the duration of treatment.

Contact details
Dr David Turgoose, Clinical Psychologist (based at Tyrwhitt House)

Email:david.turgoose@combatstress.org
Tel: 01372 587092

9.5. Telephone screening questionnaire

Tele-therapy trial: Brief screening questionnaire

To be completed before screening call

Name **DOB**
Address
GP details
Date of initial assessment at CS
Outcome of assessment, e.g. ITP

Screening call

Introduction and briefly explain the trial and tele-therapy as a possible treatment option
Gauge initial interest

If interested in having further information, explain that:
Tele-therapy will involve completing 12 sessions of Cognitive Processing Therapy
6 weeks + 3 months 'cooling off' period and follow-up
Therapy will take place over Skype.

Taking part will not necessarily exclude them from attending residential programmes.

Does the participant have access/means to appropriate technology and internet for tele-therapy? (If not, explain option of sending them a tablet).

Other barriers to completing tele-therapy? E.g. access to a private room

Current alcohol and drug use?

Brief risk assessment

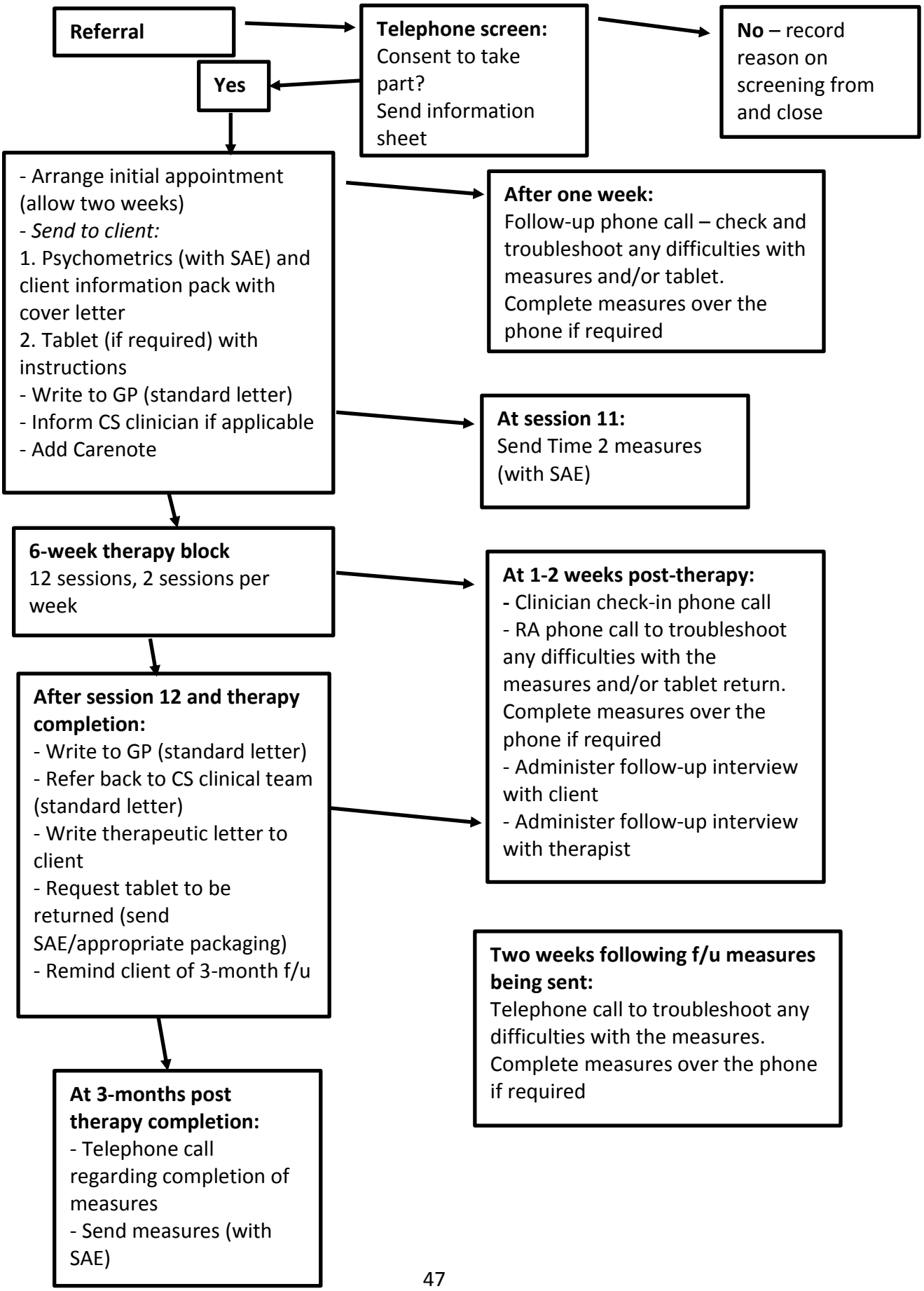
Access to social support during therapy period?

Participant consents to take part? Yes No (if not, give reason below)

If yes, explain that we will write to GP and inform the therapy team at CS

Arrange an initial appointment for in around two weeks' time

9.6. Process flowchart



9.7. Semi-structured interview schedule

The purpose of this phone call is to find out your experience of using Skype for therapy as opposed to other forms of interactions such as face-to-face therapy.
I will be asking you 4 questions about the therapy, it should take around 20 minutes.

1. **Have you had any previous experience with mental health professionals? If so, how was meeting with David over Skype different?**

    - How was it different to other types of therapies?
    - Did you feel you were more or less able to talk about your trauma? Why?
    - Did you have any concerns beforehand? How did they play out?

2. **What were the positives of using Skype-based therapy?**

3. **What were the negatives of using Skype-based therapy?**

    - What would you like to be done differently?
    - How could it be improved?

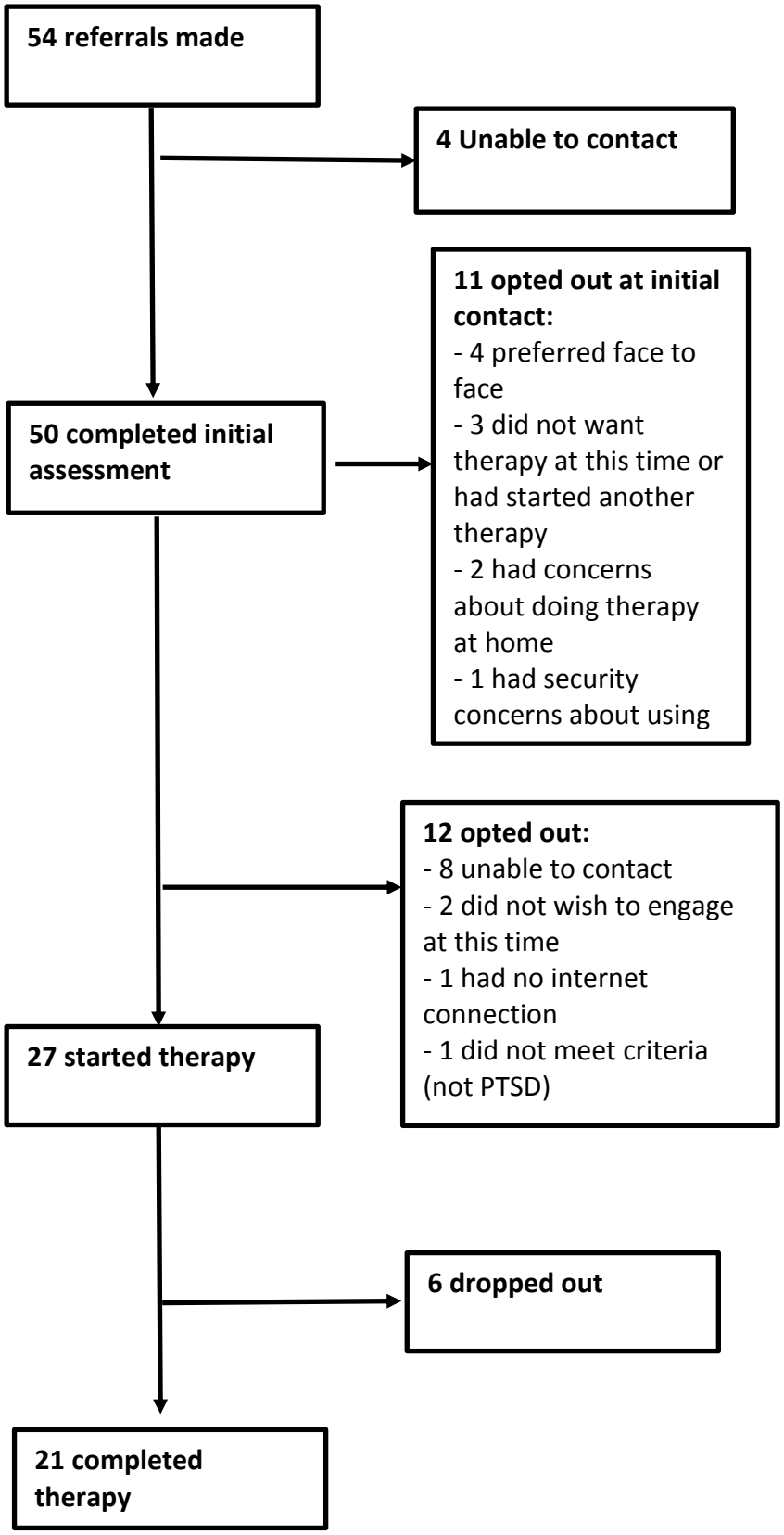
4. **How did you find the relationship you had with the therapist? How was it different to face-to-face therapy?**

    - How did using Skype impact on the relationship with the therapist?
    - How did you feel the levels of trust in the relationship were impacted?

Running prompts:

- Do you think the use of Skype affected that in anyway? How?
- Did you find that was different compared to a face-to-face therapy session?
- Do you think that would have happened anyway?

9.8. Flowchart of recruitment



9.9 Instructions for using Skype

Instructions for using Skype

Installing Skype

- Skype can be used on a number of different devices, e.g. computer, laptop, tablet, smartphone. To download it, go to www.skype.com, or search for 'Skype' using a search engine.
- Click on the 'download Skype' link and follow the instructions. Once you have installed Skype, it will prompt you to set up an account which you will need to make Skype calls.

Your first Skype appointment

- Your therapist will contact you by phone to arrange the time and date of your first appointment on Skype.
- At the time of the first appointment, your therapist will call you on the phone first, to talk you through the process of getting connected with them on Skype. Please have your device switched on with Skype open and ready to use, with your Skype username or email address handy. Once you are connected the session will take place over Skype.
- For all future appointments, your therapist will not call you first but will be ready on Skype at the time of the appointment. Once you see they are online, feel free to call them by clicking on this icon to start the appointment.

What happens if we lose connection during a Skype call?

- In the vast majority of cases, Skype calls are reliable with no connection problems. However, there might be some instances where the connection is lost and the call ends. In the first instance your therapist will restart the Skype call which often resolves the issue.
- If the problem persists, your therapist will call you on the phone so you can resolve the issue together. In the very rare case where the issue can't be resolved, the rest of the session can be completed via the telephone, or rearranged if you prefer.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