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A research portfolio exploring remote interventions for psychological trauma, including:

Efficacy and feasibility of remote one-to-one interventions for psychological trauma: A systematic review.

&

‘We are always learning’: A qualitative inquiry into the experiences of clinicians adapting to remote trauma interventions throughout COVID-19.

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Doctorate in Clinical Psychology

School of Health in Social Science, The University of Edinburgh

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Portfolio Abstract

**Background:** The onset of COVID-19 brought significant change to the structure and delivery of mental health services. As such, the need for a clear evidence base and understanding of remote interventions for mental health difficulties such as psychological trauma are of utmost importance. The examination of interventions has generally lacked in quality and scope. Moreover, this evidence has rarely accounted for the experiences of those involved in the delivery of interventions.

**Method:** To this end, the current portfolio utilises two research methods to examine this phenomenon. Firstly, a systematic review of quantitative papers assessed the efficacy, feasibility, and overall study quality of one-to-one remote interventions for psychological trauma. Findings were presenting using a narrative synthesis of 15 empirical papers. Secondly, an empirical paper employed a predominantly qualitative mixed-methods design to explore individual lived experiences of clinicians utilising trauma interventions remotely throughout COVID-19. A background questionnaires as well as individual interviews were used, whilst Interpretative Phenomenological Analysis (IPA) was applied to explore the lived experiences of clinicians specific to the recent context of working with psychological trauma remotely.

**Results:** The systematic review indicated good efficacy for a variety of manualised treatments for psychological trauma delivered remotely. In addition, such findings were found to be comparable to traditional, face-to-face conditions. Efficacy was supported by large effect sizes, as well as feasibility in relation to client satisfaction and clinician fidelity in particular. However, there was an overall limited quality of included studies, with specific issues found relating to uptake, attrition and controlling for confounders. Results of the empirical paper reported changes to caseloads and perceived ability of different forms of delivery, as well as yielding four superordinate themes: ‘Progressing the trauma treatment journey’, Building a Therapeutic Relationship Remotely’, ‘Learning over time’, and ‘Creating change in how we work’.

**Conclusions:** Findings from the review contribute to the evidence base for clinicians actively engaged in remote interventions for psychological trauma. However, the lack of quality and predominant account of short-term, Type 1 trauma limits the generalisability to other trauma populations and presentations. Key markers for methodological quality are noted for future researchers, whilst also highlighting the need for both qualitative methods and grey literature. Qualitative findings suggest clinicians can experience both opportunities and challenges when working with trauma remotely, which is impact at both a client and service level. The use of clinicians’ accounts provides direct implications to inform services providers in how clinicians may adapt interventions according to the nuances of remote working.
Portfolio Lay summary

**Background:** The COVID-19 pandemic brought great change to how mental health services were operated in recent years. In particular, services which provide therapy for psychological trauma were required to deliver their services remotely, either via telephone or video. Given how sudden this change was, it is important that services have clear guidelines and evidence for how to treat people with psychological trauma on these remote platforms. This can also be helped by exploring how services themselves have found this change to how they operate.

**Method:** This thesis aimed to address this phenomenon in two ways. Firstly, a systematic review analysed 15 studies on remote interventions for psychological trauma. The review summarised these papers in terms of how effective and applicable treatments were, and how well their evidence is gathered. Secondly, a project examined the lived experiences of clinicians who were treating psychological trauma remotely throughout COVID-19. Clinicians completed a questionnaire, whilst a smaller group participated in a one-to-one interview to add an in-depth account of their experience.

**Results:** The systematic review showed that several remote interventions for psychological trauma were effective and generally as good as those interventions when they are delivered face-to-face. This was shown in relation to how trauma and other symptoms reduced over time, how well clinician used these interventions as well as how well they were received by clients. However, these studies also had a number of weaknesses which limits how ‘effective’ these treatments may be. The second project showed that the types of treatment and how able they felt in delivering remote treatment changed over time. In addition, the main aspects explored in interviews included how clinicians made progress in trauma treatment, the importance of their relationship with clients, changes to their opinions over time and seeing change in the way they provided psychological care.

**Conclusions:** The review provides helpful information and guidelines to clinicians using these psychological treatments via video and telephone. However, as these studies only explored a limited set of people, we must be careful not to overly generalise this evidence to different types of trauma and individuals who require these treatments. Improving the quality and expanding the types of research can help to address this in the future. The interviews showed that clinicians delivering therapy for psychological trauma remotely during COVID-19 experienced both challenges and opportunities, which were influenced by their clients, their services and COVID-19 itself. This information can help services to train and improve the confidence of their clinicians using these treatments remotely for individuals who have experienced psychological trauma.
Chapter 1: Systematic Review

Efficacy and feasibility of remote one-to-one interventions for psychological trauma: A systematic review.

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Review Abstract

**Background:** Enhancing access to evidence-based therapies for psychological trauma requires review of treatment options out with face-to-face formats. The rapid service change resulting from COVID-19 highlights the need for such expansion in relation to remote / online formats of therapy in particular. The current review assesses the efficacy and feasibility of one-to-one, live remote interventions for psychological trauma.

**Method:** A systematic review of quantitative studies was conducted using PsychINFO, PsychArticles, EMBASE, MEDLINE and Applied Social Science Index and Abstracts databases. Studies were assessed for methodological quality, treatment effectiveness, feasibility, and related factors.

**Findings:** Remote interventions demonstrated favourable efficacy across several trauma-specific interventions as standalone treatments as well as being comparable to face-to-face formats. Although limited to few studies, comparable evidence was also found in relation to therapist fidelity, client satisfaction and homework engagement. Some weaknesses were found regarding latency of some treatment effects; however differences were not found to last over time. Study quality was predominantly moderate, with limitations found in relation to treatment uptake and attrition, highlighting risks of selection and publication bias; however this was not specific to remote interventions.

**Conclusions:** This review provides further favourable evidence for remote trauma interventions directly applicable to current evidence for remote therapy practice, however the majority of evidence remains with type 1 or military-specific trauma groups. Future reviews should expand to include qualitative research and studies examining different levels of remote interventions, as well using non-published findings would also be beneficial given the context of services impacted by COVID-19.
Introduction

Interventions for trauma

The high prevalence of psychological trauma is well evidenced in epidemiological literature (Cloitre, 2021; Kessler et al., 2017). This has resulted in several evidence-based therapeutic interventions recommended across national service guidelines (NHS Education for Scotland, 2017a). However, researchers have often highlighted the high rate of comorbid mental and physical health difficulties which may accompany trauma (World Health Organisation (WHO), 2013), as well as the disproportionate amount of individuals from marginalised communities who experience trauma and adverse experiences (Substance Abuse and Mental Health Adminstration (SAMHSA), 2014). Moreover, the ongoing impact of trauma can in fact hinder individuals accessing appropriate services (Perri et al., 2021). With these considerations in mind, researchers have debated whether traditional therapeutic services for psychological trauma are in fact fit for purpose across populations. One avenue used to address this concern is the increased use of remote platforms for the delivery of psychological therapies (Scottish Government, 2022).

The impact of COVID-19

The impact of the COVID-19 virus has led to dramatic changes in health, economic and social policies, challenging the psychological wellbeing of individuals across society (Brooks et al., 2020). This impact is reflected in national statistics illustrating a two-fold increase in adults reporting significant depressive symptoms in the early days of the pandemic (Office for National Statistics, 2021). Such statistics align to service figures showing an ongoing increase in individuals initiating psychological treatment in this same time period (Public Health Scotland, 2021). In response to this societal impact, this has placed substantial pressure on healthcare services to meet ongoing demands (Legido-Quigley et al., 2020). In addition, restrictions resulting from the pandemic has meant that the majority of healthcare services have pivoted to the use of telehealth interventions as the primary method of service provision. As such, the need for a clear evidence base regarding the efficacy of remote psychological interventions is of greater importance than ever.

Treatment efficacy

In this paper ‘remote therapy / interventions’ refer specifically to live, active psychological therapies taking place via video or telephone format and will be differentiated from alternate forms of telehealth where appropriate. In the earlier years of telehealth interventions, review evidence for Post-traumatic Stress Disorder (PTSD) and other anxiety and mood-based presentations showed favourable review and meta-analytic evidence (Barak et al., 2008), a trend which continues to be demonstrated
over the last two decades (Varker et al., 2018). Review evidence has also sought to specifically compare remote interventions to traditional (face-to-face) therapy. While meta-analytic findings suggest that therapist-guided remote CBT can produce similar effects as face-to-face conditions across mood and anxiety presentations (Andersson et al., 2019), reviewers exploring PTSD specifically have suggested that the quality and breadth of evidence is insufficient to produce reliable comparisons to face-to-face conditions (Dedert et al., 2013; Lewis et al., 2019). One Randomised Control Trial (RCT) review of trauma interventions illustrated that whilst remote CBT was superior in symptom reduction compared to waitlist or unguided conditions, results suggested that remote interventions were potentially inferior to face-to-face conditions in maintaining symptom reduction at follow-up (Olthuis et al., 2016). However, alternative meta analytic findings examining face-to-face and videoconferencing behavioural activation treatment for PTSD showed superior symptom reductions compared to waiting list controls, regardless of treatment delivery format (Etherton & Farley, 2020).

The contrasting findings in these reviews may suggest that specific elements such as behavioural interventions may be more comparative, whereas cognitive approaches in remote conditions could be less efficacious compared to face-to-face conditions. However, a systematic review of veteran populations demonstrated that remote interventions for PTSD were generally comparable to face-to-face interventions across a number of treatment modalities with differing weights of intervention focus, including Cognitive Behaviour Therapy (CBT), Cognitive Processing Therapy (CPT) and Prolonged Exposure (Turgoose et al., 2018). The evidence presented above suggests that whilst remote interventions for trauma have promising potential, its direct comparison to face-to-face interventions is somewhat unclear. Furthermore, many reviews such as those above compared face-to-face interventions to different forms of telehealth formats, such as guided or therapist-assisted or internet-only remote interventions. Explicitly comparing live active video or telephone therapy to face-to-face conditions can provide a more accurate comparison of feasibility, process, and outcome.

**Replicating therapeutic processes**

Apart from treatment efficacy, researchers have also analysed other processes associated with trauma interventions in remote conditions. One such factor has been the development and influence of the therapeutic relationship, given its significant importance to therapeutic outcome in general and in the context of trauma specifically (Kliethermes et al., 2014). Therapeutic alliance is often considered alongside treatment satisfaction and other process-related outcomes as a measure of treatment acceptability. Across a broad range of presentations, older reviews found that remote interventions were equivalent to face-to-face conditions in both treatment outcome and the development of the therapeutic relationship (Sucala et al., 2012). More recent findings focusing on trauma specifically are less conclusive, with the previously cited military-based review suggesting factors facilitating the
therapeutic relationship such as a client’s sense of comfort is lower in remote conditions (Turgoose et al., 2018).

However, in studies utilising statistical outcomes, the working alliance has been shown to be equivalent in both face-to-face and remote trauma interventions (Maieritsch et al., 2016). In other studies, whilst the therapeutic relationship has been initially inferior in remote conditions, this appears to become equivalent to face-to-face conditions as therapy progresses, (Morland et al., 2015), perhaps suggesting a delayed effect to rapport building in remote settings. Regardless of these mixed findings, one meta-analytic study examining various mental health presentations suggests that whilst a reduction in the therapeutic relationship may occur in remote interventions, the target symptom reduction remains equivalent to face-to-face conditions (Norwood et al., 2018), a finding which has been evidenced in group interventions for individuals experiencing PTSD (Morland et al., 2010). The evidence above suggests that whilst some uncertainty remains regarding the development of a strong therapeutic relationship in remote interventions, the development of this rapport building may have limited impact on actual trauma symptom reduction.

Assessing feasibility

Whilst the effectiveness of remote trauma interventions is important, it is also important to assess feasibility, or the degree to which these interventions are relevant and sustainable for future practice (Bowen et al., 2009). Feasibility may be explored in several ways; study criteria, outcome measures, attrition and adherence, treatment fidelity, as well as acceptability (Tickle-Degnen, 2013). Given the complexity which may accompany trauma-related difficulties, treatment engagement has often been a challenge in both face to face and remote interventions (Cloitre, 2021). Review evidence of remote interventions have noted high attrition rates across trauma interventions, which has been cited as a key weakness in the quality assessment of intervention studies (Turgoose et al., 2018). The reasons for attrition however may be out with therapeutic processes regardless of treatment format, such as work or family permissions or a lack of perceived support outside of therapy (Hernandez-Tejada et al., 2014). Moreover, attrition rates in remote trauma interventions have been found to be similar interventions utilising face-to-face conditions (Morland et al., 2015), which has typically been found to fall between 18 and 35% (Imel et al., 2013). It is therefore unclear whether factors leading to attrition may be directly related to remote formats of therapy delivery.

Exploration of feasibility can also extend to therapist fidelity, which is concerned with a clinician’s ability to deliver specific interventions as intended in terms of competence, adherence and or a lack of deviation from treatment protocols (Southwick, 2012). This is of particular importance to the current topic given that evidence-based interventions need to be efficiently adhered to when adapted to remote contexts. Whilst only addressed in a few studies, clinicians utilising remote trauma
interventions have generally been rated highly in relation to treatment fidelity (Turgoose et al., 2018). This may suggest that clinicians may be able to adhere to manualised protocols even when delivered in an alternative format.

The current review

Whilst the evidence for remote trauma interventions has been explored in previous reviews as described in the sections above, a number of factors justify the need for further examination. Earlier review evidence demonstrated short-term effects of remote trauma interventions, the studies included a lack of treatment follow-up data, whilst the lack of comparative studies limited conclusions as to whether remote interventions were as effective as traditional face-to-face methods (Bolton & Dorstyn, 2015; Dedert et al., 2013). Furthermore, whilst a subsequent review did include comparative studies and relevant process variables, (Turgoose et al., 2018), these studies were limited exclusively to military populations, whilst review conclusions also did not distinguish ‘live’ remote interventions from other forms of telehealth, such as therapist-assisted or ‘internet-only’ interventions. Finally, the magnitude of mental health service change resulting from the impact of COVID-19 highlights the need for ongoing updates to this evidence base by considering studies from more recent years. With these considerations in mind, the current review aims to evaluate the efficacy and feasibility of remote therapeutic interventions for psychological trauma through a synthesis of data from the last ten years. The current paper aims to conduct a systematic review with the following research question: What is the efficacy and feasibility of one-to-one, remote interventions for psychological trauma?
Method

Search strategy

The recommended guidelines from the Centre for Reviews and Dissemination (REF) helped to inform the current review strategy. Scoping searches were initially conducted within the research area to get an initial impression of relevant literature related to trauma working, remote therapy and their crossover. This also allowed the researcher to check for existing or similar systematic reviews on the current research topic. A resulting review protocol was submitted and processed through PROSPERO (registration no: CRD42022347576) as per recommended guidelines. Please see Appendix B for the registered protocol.

The final search was conducted across databases in June 2022. The chosen databases for this review included: OVID (PsychINFO, PsychArticles, EMBASE, MEDLINE) and ProQuest (Applied Social Science Index and Abstracts). Three primary subject terms were considered for this search, which were supplemented by the relevant range of terms discovered through a subject heading search. These included ‘Psychological Trauma’ with regards to the mental health presentation, ‘Online Therapy’ with regards to treatment delivery format, and ‘Psychological Therapy’ which specified the presence of psychological intervention(s). To maximise the search sensitivity, truncation (*) and adjacency (ADJ) was applied to pre-established terms for each of the three primary terms. See table 1.1 below for a breakdown of search terms.

Papers were limited to the last ten-and-a-half years, inclusive of 2012 until June 2022. This allowed for an up-to-date review of pertinent literature, whilst also accounting for the change in technological advances and resulting online therapy practices in recent years. This year limited extended from ten to eleven to account for the project ending a year after initial investigation. Following the removal of duplicate papers, titles and abstracts were initially screened using the elected review criteria, followed by a screening of remaining full text articles which resulted in the final selection of papers. This process was conducted using the COVIDENCE review management software. Following this process, relevant data was extracted from each paper and was systematically reviewed prior to quality appraisal.

Table 1.1
Search term strategy and relevant databases

<table>
<thead>
<tr>
<th>Psychological Trauma</th>
<th>psychological trauma OR posttrauma* OR post trauma* OR posttraumatic stress disorder OR PTSD OR complex trauma OR childhood trauma* OR desnos</th>
</tr>
</thead>
</table>

AND
Online Therapy

- online therap* OR telepsychiatr* OR internet-based OR online psychotherapy OR tele-psychiatr* OR tele mental health OR telepsycholog* OR tele-psycholog* OR teletherap* OR tele therap* OR videoconferenc* OR video conferenc* OR remote therap*

- OR ((electronic OR internet OR internet-based OR online OR "on line" OR remote OR web OR web-based OR web deliver*) adj2 (psych* or therap*))

AND

Psychological Therapy

- psychological adj1 (therapy OR therapies OR intervention*)) OR (eye movement desensiti* OR emdr OR cbt OR cognitive behav* therap*)

- OR Narrative Exposure Therapy OR Prolonged Exposure OR cognitive processing therapy OR cognitive therapy OR tfCBT OR trauma-focused cbt

Inclusion and Exclusion Criteria

To meet inclusion criteria, each relevant article had to: i) include adult participants aged 18 years or older, ii) involve trauma-specific treatment interventions using a recognised evidence-based intervention model(s) delivered remotely either via live video or telephone in a healthcare context, iv) include standardized assessment and outcome measure of psychological trauma, v) include formal assessment of psychosocial and related demographic factors, vi) consist of an active, live intervention engagement between patient and therapist as the core element of treatment(s). Articles were excluded if they were i) individual case studies, ii) book chapters, iii) bulletins, iv) reports, v) review papers or vi) grey literature. Only quantitative studies were included to allow a more robust analysis of empirically levelled measures of trauma-related and secondary outcomes and any measurements pertaining to efficacy and feasibility.

Data Extraction

The extraction and reporting of data was informed by previous review papers as well as guidelines in PRISMA guidelines (Moher et al., 2009). Items included in extraction were as follows: i) study design, ii) aims/objectives, iii) participant population, iv) sample size, v) inclusion and exclusion criteria, vi) relevant participant demographic variables, vii) intervention format (platform and model), viii) trauma / presentation type, ix) trauma-related outcome measures, x) relevant secondary outcome measures, xi) method(s) of data analysis, main study findings, and xii) explorations of feasibility –
adherence, attrition and or fidelity. These data items were used to inform the subsequent quality appraisal of each included study.

A narrative synthesis was chosen as the appropriate form of review for the current paper. The use of a meta-analysis was excluded due to a number of factors. Firstly, whilst a number of trials using randomised conditions were included, only two such trials were found to be ‘true’ randomised control trials (RCT’s). Secondly, studies had varying degrees of treatment dosages in terms of duration and intensity of interventions, which may limit the validity of an overall measure of effect taken by combining conditions. Finally, there was a lack of homogeneity in relation to intervention models, with varying forms of cognitive, behavioural, and processing-based models utilised as described in later sections. Finally, very few of the trials were ‘true’ randomised control trials, with others including various forms of equivalence and non-inferiority conditions. The use of a narrative synthesis provides a detailed, written account of similarities and differences between studies and delivery formats as well as the overall strength of evidence in relation to both treatment efficacy and feasibility.

Quality Assessment tool

Studies were assessed using the Effective Public Health Practice Project (EPHPP) Quality Assessment Tool (National Institute for Health and Clinical Excellence, 2006). This was selected as an appropriate tool for its suitability in assessing quality across various quantitative designs. In addition, the tool has previously been used in reviews of quantitative data relating to remote forms of trauma therapy (Turgoose et al., 2018). The original tool uses six items of methodological standards to provide an overall rating of strong, moderate, or weak quality, including: i) selection bias, ii) study design, iii) confounders, iv) blinding, v) data collection method, and vi) withdrawal and dropouts.

As a means to reduce bias, a second reviewer was provided with a randomised set (N=4) of the included papers to rate their quality using the same assessment tool to ensure inter-rater reliability of the review. Between raters, it was agreed that even if a study possessed no ‘weak’ ratings, it could not receive a strong rating overall unless it had at least one strong individual rating. In relation to data collection, it was agreed that studies would not be rated strongly unless validity and reliability was explicitly stated or described in the article. Furthermore, drop-out was evaluated based on the first post-intervention follow-up rather than the end of data collection to allow for variation in follow-up points and time between collection points. Finally, papers intentionally utilising self-report outcomes completed by participants were exempt from the ‘Blinding’ criteria. The reason for this was that the absence of blinding is common across public health service treatments, particular amongst those working with vulnerable, hard to access populations with limited resources (Day, 2000). One paper was not included in the quality assessment due to it being a retrospective, secondary analysis of the original experimental paper.
Results

Study selection

Figure 1.1 below shows the resulting PRISMA flowchart used for study collection. A total of 1934 studies were identified across databases, with 1227 studies screened following the removal of duplicate papers. A further 1161 studies were excluded by screening titles and abstracts using the review inclusion and exclusion criteria. This resulted in 65 papers reviewed in full for eligibility, which included an additional four imported via citation review within suitable studies. Subsequent full-text screening resulted in a total of 15 studies included in the final systematic review.

Figure 1.1

PRISMA Diagram of review process
Data synthesis presentation

Data from included studies is presented in an intentional order. An initial exploration of study characteristics provides an overview of study background and methodology. This is followed by the appraisal of methodological quality, which includes a more detailed description of the main strengths and weaknesses resulting from the appraisal. Subsequently, the main findings are first presented in relation to treatment efficacy through reporting of primary and secondary outcomes in each study, with descriptions of each study grouped by study design. Finally, findings are presented in relation to feasibility through examination of attrition, adherence and compliance, clinician fidelity and acceptability.

Study and sample characteristics

Table 1.2 below displays a breakdown of relevant study and sample characteristics. The majority of studies took place in the USA, whilst one study each took place in Italy (Perri et al., 2021), The Netherlands (Bongaerts et al., 2021) and the UK (Murphy & Turgoose, 2020). The collection of studies represented a total of 1936 participants, with sample sizes ranging from six to 581. Most participants were male (N = 1602) compared to female (N = 334), with only three studies focusing on female or male-only populations. The mean age was 41.13 across studies. The largest ethnic majority across all studies was White / Caucasian, however this was unspecified in two cases. The majority of studies included veteran or active military, with one of these studies also including civilians in a war context (Morland et al., 2015). The remaining three studies included rural survivors of domestic abuse (Gray et al., 2015), adult survivors of complex trauma (Bongaerts et al., 2021) and healthcare professionals impacted by COVID-19 (Perri et al., 2021). All studies required sufficient criteria being met for Posttraumatic Stress Disorder as part of inclusion criteria, through either clinician or self-report measures. The majority of studies had additional exclusion criteria, with the most frequent being active or recent self-harm, psychotic presentations and or substance dependence.

In terms of design, nine studies employed some form of randomised trial for treatment comparisons. Specifically, two studies employed a ‘true’ randomised control trial (RCT), comparing remote trauma therapy to a control condition (Franklin et al., 2017; Stecker et al., 2014). Six of the other randomised trials compared some form of remote trauma therapy to a face-to-face condition, whilst one study compared two conditions of remote therapy only (Perri et al., 2021). Two further studies compared remote and face-to-face conditions, however did not employ randomisation (Knowlton & Nelson, 2021; Wierwille et al., 2016). The remaining three studies consisted of a single cohort design, evaluating just one condition of remote trauma intervention over time. ‘Remote therapy’ in all studies was in the form of live videoconferencing, with the exception of the two RCT’s, whereby telephone delivery was an intervention condition. One paper (Glassman et al., 2019) was a secondary analysis of
an original study (Morland et al., 2015). This paper was included as whilst the same population sample was analysed, the paper reported on additional secondary outcome measures related to quality of life which were not included in the original paper. All other papers were separate study cohorts to the best of the researcher’s knowledge. The most frequent intervention model was Cognitive Processing Therapy (CPT), followed by Prolonged Exposure (PE), Trauma-Focused CBT (tf-CBT), Eye Movement Desensitisation and Reprocessing (EMDR) and Behavioural Activation (BA) respectively. Studies varied in terms of assessing one treatment model, combining and or comparing multiple models at once.
<table>
<thead>
<tr>
<th>Author</th>
<th>Design</th>
<th>Cohort</th>
<th>Sample Size</th>
<th>Mean Age</th>
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<th>Treatment Model(s)</th>
<th>Sessions / duration</th>
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<td>RT (non-inferiority)</td>
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<td>VC or IP</td>
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<td>10-12, 90 mins</td>
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<td>4x90 mins PE, + 4x90 mins EMDR</td>
<td>Pre, Post, 1-month</td>
</tr>
<tr>
<td>Franklin et al., 2017</td>
<td>RCT</td>
<td>Veterans (USA)</td>
<td>27</td>
<td>46.1</td>
<td>VC or Tel or TAU</td>
<td>PE</td>
<td>10-12, 60 mins</td>
<td>Pre, Post, 1-month</td>
</tr>
<tr>
<td>Gray et al., 2015</td>
<td>Cohort</td>
<td>Adults: Domestic / Sexual Abuse (USA)</td>
<td>21</td>
<td>32.9</td>
<td>VC Only</td>
<td>Unspecified, mainly PE or CPT</td>
<td>Mean = 12.33 sessions</td>
<td>Pre, Post</td>
</tr>
<tr>
<td>Knowlton &amp; Nelson, 2021</td>
<td>CCT</td>
<td>Veterans (USA)</td>
<td>581</td>
<td>47.14</td>
<td>IP (clinic), IP (home) or VC</td>
<td>PE or CPT</td>
<td>8-20 session range</td>
<td>Pre, Post</td>
</tr>
<tr>
<td>Liu et al., 2020</td>
<td>RT (non-inferiority)</td>
<td>Veterans (USA)</td>
<td>207</td>
<td>48.4</td>
<td>VC or IP</td>
<td>CPT</td>
<td>12 x 60 mins</td>
<td>Pre, Post 6-month</td>
</tr>
<tr>
<td>Maieritsch et al., 2016</td>
<td>RT (equivalence)</td>
<td>Veterans (USA)</td>
<td>90</td>
<td>30.93</td>
<td>VC or IP</td>
<td>CPT</td>
<td>Approx 10 x 50 mins</td>
<td>Pre, Post, 3-month</td>
</tr>
<tr>
<td>Morland et al., 2015</td>
<td>RT (non-inferiority)</td>
<td>Veterans + Civilians (USA)</td>
<td>126</td>
<td>46.4</td>
<td>VC or IP</td>
<td>CPT</td>
<td>12 x 90 mins</td>
<td>Pre, 2 weeks in, Post, 3-month, 6-month</td>
</tr>
<tr>
<td>Study</td>
<td>Design Type</td>
<td>Country/Sample</td>
<td>n</td>
<td>Mean Age</td>
<td>Format</td>
<td>Treatment</td>
<td>Sessions</td>
<td>Times of Measurement</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>----------------</td>
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<td>----------</td>
<td>--------</td>
<td>-----------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Glassman et al., 2019</td>
<td>Secondary Analysis</td>
<td>As above</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Murphy &amp; Turogoose, 2020</td>
<td>Cohort</td>
<td>Veterans (UK)</td>
<td>27</td>
<td>n/a</td>
<td>VC only</td>
<td>CPT</td>
<td>12 sessions</td>
<td>Pre, Post, 3-month</td>
</tr>
<tr>
<td>Perri et al., 2021</td>
<td>RT</td>
<td>HCP’s (Italy)</td>
<td>38</td>
<td>50.4</td>
<td>VC only</td>
<td>tfCBT or EMDR</td>
<td>7, Twice a week</td>
<td>Pre, Post, 1-month</td>
</tr>
<tr>
<td>Peterson et al., 2022</td>
<td>RT (stratified)</td>
<td>Veterans (USA)</td>
<td>120</td>
<td>40.5</td>
<td>IP (clinic), or IP (home) or VC</td>
<td>CPT</td>
<td>12 x 60 mins</td>
<td>Pre, 1-month, 4-month, 6-month</td>
</tr>
<tr>
<td>Stecker et al., 2014</td>
<td>RCT</td>
<td>Military – active (USA)</td>
<td>300</td>
<td>29</td>
<td>Tel or TAU</td>
<td>CBT</td>
<td>6-month period, 60 mins each</td>
<td>Pre, Post, 3-month, 6-month</td>
</tr>
<tr>
<td>Strachan et al., 2012</td>
<td>RT</td>
<td>Military - active and veterans (USA)</td>
<td>40</td>
<td>30.4</td>
<td>VC or IP</td>
<td>BA + PE combined</td>
<td>8 x 90 mins</td>
<td>Pre, Post</td>
</tr>
<tr>
<td>Wierwille et al., 2016</td>
<td>Cohort Analytic</td>
<td>Veterans (USA)</td>
<td>221</td>
<td>46.71</td>
<td>VC or IP</td>
<td>CPT</td>
<td>Mean = 11.29 sessions</td>
<td>Pre, Post</td>
</tr>
</tbody>
</table>

*Note:* RT = Randomised Trial, RCT = Randomised Control Trial, CCT = Clinical Control Trial, Tel = Telephone, VC = Video Conferencing, IP = In-person, CPT = Cognitive Processing Therapy, CBT – Cognitive Behavioural Therapy, PE = Prolonged Exposure, EMDR = Eye Movement Desensitisation and Reprocessing
Quality Assessment

Cohen’s Kappa (κ) was used as a measurement of inter-rater reliability given that this assessment tool utilises categorical ratings in an ordinal structure. A substantial rate of agreement (κ = .72) for interrater reliability was found in the current review. Both raters clarified and agreed on any discrepancies between these ratings. Please see appendix A for relevant SPSS workings of inter-rater analysis. Out of the 14 studies included in quality assessment, four studies received strong ratings of quality, seven received moderate ratings whilst three studies were deemed weak in quality. In terms of strengths, all studies received either moderate or strong quality ratings for study Design. Six out of nine trials received strong Design ratings, whilst the remaining three were deemed moderate due to not describing the randomisation process. All Cohort studies received a moderate Design rating, however, could not rate higher due to assessment tool guidelines.

Methodological weaknesses were mostly attributed to sample representation, either in relation to selection bias (3/14) or study drop out (5/14). In relation to selection bias, studies often underperformed due to having a low proportion (<60%) of intended participants taking part in the study, as well as other cases where participants self-referred to treatment, rather than being randomised or systematically referred through relevant services. In relation to drop out, a large proportion of studies reported high attrition rates (>40%) by post-treatment assessment, illustrating a substantial reduction in sample representation by the end of treatment. Furthermore, all studies with weak drop out ratings were deemed to have either a moderate or weak selection bias in the first instance. Notable weakness was also seen in relation to Data Collection. Whilst all studies utilised well-established primary and secondary outcome measures, many studies did not describe or cite evidence to demonstrate validity and or reliability. Further examples of low quality were evident in relation to Confounders, whereby some studies either did not specify or did not control for demographic or relevant confounder variables at baseline assessment. However, it is worth noting a larger proportion of studies did in fact control for confounders and provided relevant statistical data, demonstrating a variance in confounder control across studies. Please see table 1.3 below for a breakdown of quality assessment ratings for all studies.
Table 1.3

Breakdown of Quality Assessment scores for each study.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Selection bias</th>
<th>Design</th>
<th>Confounders</th>
<th>Blinding</th>
<th>Data Collection</th>
<th>Dropout</th>
<th>Global rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acierno et al., 2017</td>
<td>Moderate</td>
<td>Strong</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Strong</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
<tr>
<td>Bongaerts et al., 2021</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Weak</td>
<td>Moderate</td>
<td>Strong</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Franklin et al., 2017</td>
<td>Weak</td>
<td>Strong</td>
<td>Weak</td>
<td>Moderate</td>
<td>Strong</td>
<td>Weak</td>
<td>Weak</td>
</tr>
<tr>
<td>Gray et al., 2015</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>n/a</td>
<td>Moderate</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Knowlton &amp; Nelson, 2021</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Strong</td>
<td>n/a</td>
<td>Weak</td>
<td>Weak</td>
<td>Weak</td>
</tr>
<tr>
<td>Liu et al., 2020</td>
<td>Weak</td>
<td>Moderate</td>
<td>Strong</td>
<td>Moderate</td>
<td>Strong</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Maieritsch et al., 2016</td>
<td>Weak</td>
<td>Strong</td>
<td>Weak</td>
<td>Weak</td>
<td>Moderate</td>
<td>Weak</td>
<td>Weak</td>
</tr>
<tr>
<td>Morland et al., 2015</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Murphy &amp; Turgoose, 2020</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Strong</td>
<td>n/a</td>
<td>Weak</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Perri et al., 2021</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Strong</td>
<td>n/a</td>
<td>Moderate</td>
<td>Weak</td>
<td>Moderate</td>
</tr>
<tr>
<td>Peterson et al., 2022</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
<tr>
<td>Stecker et al., 2014</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Moderate</td>
<td>Weak</td>
<td>Strong</td>
<td>Moderate</td>
</tr>
<tr>
<td>Strachan et al., 2012</td>
<td>Moderate</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
<td>Strong</td>
</tr>
<tr>
<td>Wierwille et al., 2016</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
<td>n/a</td>
<td>Strong</td>
<td>Weak</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
Treatment efficacy

Table 1.4 below provides a summary of outcomes across studies. For assessment of trauma symptoms, the majority of studies (N=12) utilised the self-report PTSD Checklist (PCL-5) whilst six studies supplemented self-reporting with the Clinically administered PTSD Scale (CAPS-5). The most common secondary outcomes assessed were low mood (N=12) and anxiety (N=4). Effect sizes were reported in 10 out of the 15 papers. Since all reported effect sizes utilized Cohen’s d, interpretations were classified into small (d = 0.2), medium (d = 0.5), and large (d = 0.8 or more) effect sizes (Cohen, 2013). The majority of studies reported large or medium effect sizes for individual intervention groups, with effect sizes of trauma outcomes appearing numerically stronger than secondary outcomes. However, estimates of power calculations were only stated in three studies. Only one of these studies demonstrated sufficient power at post-treatment, whilst the other two fell below estimates due to attrition. Two further studies whilst not reporting estimates, did conclude that there was insufficient power to declare noninferiority. Two reports of confounders were found in relation to baseline group differences of age and symptom severity, however neither these nor any additional study reported any significant demographic or confounder variable findings.

In studies that utilised control conditions to evaluate the effectiveness of remote interventions, one set of findings found that two versions of video-based PE resulted in statistically significant trauma symptom reductions at post-treatment and follow-up, outperforming the TAU group (Franklin et al., 2017). The other control group which utilised a low-dose, cognitive-focused CBT intervention via telephone also found significant reductions in both trauma and depression symptoms which were maintained at follow-up; however the treatment condition only outperformed the control condition in the early intervention stages (Stecker et al., 2014).

All three studies utilising non-inferiority analyses reported that remote interventions were non-inferior to face-to-face interventions in reducing trauma symptoms at follow-up time points, with two studies also reporting significant reductions in depression symptoms at follow-up. One study found consistent non-inferiority whereby remote and in-person CPT showed similar reductions in trauma symptoms over time (Morland et al., 2015). The secondary analysis of this cohort also found similar increases in quality of life over time, with improvements in both groups beginning to decline at later follow-up (Glassman et al., 2019). However, another non-inferiority study reported that remote CPT initially showed significantly less improvement in trauma symptom reductions at post-treatment, but this difference was not maintained at follow-up (Liu et al., 2020). A similar finding in relation to depression symptoms was found in another study utilising PE interventions, whereby the remote condition initially showed less symptom improvement before evening out at follow-up (Acierno et al., 2017). In the one study which utilised an equivalence analysis for remote and face-to-face CPT, both
conditions were found to be statistically equivalent in reducing both trauma and depression symptoms which maintained at follow-up, with large effect sizes in both conditions (Maieritsch et al., 2016).

In an intervention examining remote against two in-person interventions of CPT, remote and ‘at home’ interventions showed significantly greater reductions in self-report trauma and depression symptoms over time compared to traditional ‘in office’ delivery, however these differences did not maintain over time, whilst clinician symptoms reports did not show this difference (Peterson et al., 2022a). In addition, a stratified study integrating BA and PE models showed comparable significant reductions in trauma symptoms, however the remote intervention in this case showed greater reductions of both anxiety and depression symptoms compared to in-person conditions (Strachan et al., 2012). Finally, the two non-randomised trials comparing CPT and PE interventions found similar significant reductions in both trauma and depression symptoms across intervention models and intervention format (Knowlton & Nelson, 2021; Wierwille et al., 2016), however the latter study reported numerically better performances in their in-person condition.

Across the cohort (remote only) studies, all interventions reported significant reductions in trauma symptoms with large effect sizes at post-treatment, with two studies also demonstrating this reduction at follow-up time points. Specifically, one study utilising CPT and PE interventions reported similar reductions in depression symptoms at post-treatment with large effect sizes (Gray et al., 2015), with similar results shown for remote EMDR or PE intervention groups (Perri et al., 2021). Another utilising CPT alone reported significant reductions in depression, anxiety, alcohol use as well as aggressive behaviours over time (Murphy & Turgoose, 2020). Most studies had a similar treatment length of approximately 12 sessions, however two studies utilised shorter-term, intensive treatment intervention utilising trauma-focused processing interventions (Bongaerts et al., 2021; Perri et al., 2021).
<table>
<thead>
<tr>
<th>Author</th>
<th>Outcome measure(s)</th>
<th>Trauma-related outcomes</th>
<th>Secondary outcomes</th>
<th>Measure of effect (Cohen’s d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acierno et al., 2017</td>
<td>PCL-m, BDI-II</td>
<td><strong>PCL:</strong> Scores at post-treatment (M= −3.2; 90% CI: −8.6 to 2.1) 3-month (M= −2.8; 90% CI: −7.6 to 2.0) and 6-month (M= 0.03; 90% CI: −4.9 to 5.0) fell within predetermined meaningful clinical difference (Δ = −8.8), indicating VC was non-inferior to IP.</td>
<td><strong>BDI:</strong> Scores at post-treatment (M = −2.4; 90% CI: −6.3 to 1.5) and 3-month (M = −2.0; 90% CI: −5.7 to 1.6) fell outside non-inferiority limit (Δ = −5.0). However, scores between conditions were almost identical (M = −0.3; 90% CI: −4.1 to 3.6) at 6-month follow-up.</td>
<td><strong>PCL (across groups):</strong> Post = 1.46, 3-month = 1.32, 6-month = 1.04</td>
</tr>
<tr>
<td>Bongaerts et al., 2021</td>
<td>CAPS, PCL-5</td>
<td><strong>CAPS:</strong> Significant decrease from pre- to post-treatment [t(5) = 2.56, p &lt; .05], and post-treatment to one-month follow-up [t(5) = 2.25, p &lt; .05]. <strong>PCL:</strong> significant decrease from pre- to post-treatment [t(5) = 2.29, p &lt; .05], and from post-treatment to one-month follow-up [t(5) = 3.04, p &lt; .05].</td>
<td>n/a</td>
<td><strong>CAPS:</strong> Post = 1.04, 1-month = 0.92. <strong>PCL:</strong> Post = 0.93, 1-month = 1.24</td>
</tr>
<tr>
<td>Franklin et al., 2017</td>
<td>CAPS, PDS, BDI, BAI</td>
<td><strong>CAPS:</strong> Significant decrease across groups at post-treatment and follow-up [F(6,30) = 3.64, p=.01]. <strong>PDS:</strong> Significant decrease across groups at post-treatment and 1-month follow-up [F(6,30) = 3.09, p = .02]. No significant differences between remote treatment groups for CAPS or PDS scores.</td>
<td><strong>BDI:</strong> Decrease at post-treatment and 1-month follow-up, but reductions across groups were non-significant [F(6,30) = 1.50, p = .21]. <strong>BAI:</strong> Decrease at post-treatment and 1-month follow-up, but reductions across groups were non-significant [F(6,30), = 1.24, p = .21].</td>
<td>Not reported</td>
</tr>
<tr>
<td>Glassman et al., 2019</td>
<td>QOLI</td>
<td><strong>QOLI:</strong> Significant increases in QoL ratings in both treatment conditions at post-treatment and 3 months [linear slope estimate = 0.54, 95% CI (0.22, 0.85, p &lt; .01)]. Decreases observed at 6-months [quadratic estimate = −0.15 (-0.25, -0.15), p &lt; .01]. No effect of treatment group on QoL changes.</td>
<td>n/a</td>
<td>Not reported</td>
</tr>
</tbody>
</table>
Gray et al., 2015  PCL-5, CES-D, WTTCCSS  
**PCL**: Significant reductions in symptoms at post-treatment \[t(20) = 7.31, p < .001\].

**CES-D**: Significant reductions in symptoms at post-treatment \[t(20) = 6.52, p < .001\].

**WTTCCSS**: High satisfaction reported by patients (M=52.62), clinicians (44.82), and staff (35.80).

Knowlton & Nelson, 2021  PCL-5, BDI-II  
**PCL-5**: Significant reduction in trauma symptoms over time in both VC and IP formats, as well as in both CPT and PE interventions as calculated by Real Change Index \[F(11, 65) = 3.21, p = .001\]. No significant differences were found within condition effects.

**BDI-II**: Significant reduction in symptoms over time in both VC and IP formats, as well as in CPT and PE interventions as calculated by Real Change Index \[F(12, 54) = 7.38, p < .001\]. No significant differences found within condition effects.

Liu et al., 2020  CAPS, PCL-5, PHQ-9  
**CAPS**: VC was statistically inferior to IP at post-treatment \(p = 0.430; \text{difference} = 0.58, \text{CI:} 0.19 \text{ to} 0.96; \text{NI margin} = 0.61\) but showed non-inferiority in improvement at six-months \(p = 0.011; \text{difference} = 0.03, \text{CI} = -0.17 \text{ to} 0.22; \text{NI margin} = 0.26\).

**PCL-5**: VC was non-inferior to IP at post-treatment \(p < .001; \text{difference} = -0.10, \text{CI} = -0.37 \text{ to} 0.17; \text{NI margin} = 0.40\) and 6-month follow-up \(p < .001; \text{difference} = -0.05, \text{CI} = -0.17 \text{ to} 0.07; \text{NI margin} = 0.16\).

**PHQ-9**: VC was non-inferior to IP at post-treatment \(p = .002; \text{difference} = 0.01, \text{CI:} -0.09 \text{ to} 0.11; \text{NI margin} = 0.16\) and 6-month follow-up \(p = .004; \text{difference} = 0.005, \text{CI:} -0.04 \text{ to} 0.05; \text{NI margin} = 0.07\).

Maieritsch et al., 2016  CAPS, PCL-5, BDI-II, WAI  
Significant reduction in trauma symptoms across groups.  **CAPS**: Observed equivalence of significant symptom reduction between VC and IP conditions \(\text{margin} = -0.5, \text{CI:} 12.4 \text{ to} 11.4, p = .094\).

**PCL**: Observed equivalence of symptom reduction between VC and IP conditions \(\text{ratio} = 0.92, \text{CI:} 0.78 \text{ to} 1.09, p = .079\). However, equivalence not declared due to low sample size.

**BDI-II**: Significant reductions at post-treatment for VC \(p < .05\) and IP conditions \(p < .05\) and in combined interventions \[t(2, 50) = 5.12, p < .05\].

**WAI**: Observed equivalence between VC and IP conditions \(\text{ratio} = 1.03, \text{CI:} 0.98 \text{ to} 1.08, p < .001\).

Morland et al., 2015  CAPS, WAI,  
**CAPS**: Significant reduction in trauma symptoms across groups. VC was non-inferior to IP at post-treatment \(\text{difference} = -20.5, \text{CI:} -29.6 \text{ to} -11.4\), 3-

**WAI**: In-person patients reported significantly higher alliance ratings after session two
<table>
<thead>
<tr>
<th>Source</th>
<th>Measures</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPOSS VA, TSAS</td>
<td></td>
<td>month (difference = −20.8, CI: −30.1 to −11.5), and 6-month follow-up (difference = −22.0 CI: −33.1 to −10.9).</td>
</tr>
<tr>
<td>Murphy &amp; Turgoose, 2020</td>
<td>PCL-5, PHQ-9, GAD-7, DAR-5, STAR, AUDIT</td>
<td>PCL-5: Significant decreases in symptoms at post-treatment which maintained at follow-up (β = -19.8, CI: -26.4 to -13.3). Significant decreases at post-treatment and follow-up for PHQ-9 (β = -6.1, CI: -8.5 to -3.7), GAD-7 (β = 3.35, CI: -5.7 to -1.0), CI: -26.4 to -13.3), DAR-5 (β = -4.83, CI: -6.8 to -2.9) and AUDIT (β = -2.27, CI: -4.4 to -0.1). STAR: High ratings of alliance for clinicians (M = 45.9) and clients (M = 44.8).</td>
</tr>
<tr>
<td>Perri et al., 2021</td>
<td>PCL-5, BDI-II, STAI-Y1</td>
<td>PCL-5: Significant decreases in symptoms in both PE and EMDR groups at post-treatment and follow-up (F2,72 = 57.12, p &lt; .0001) Comparisons showed similar reductions / no difference across treatment groups (p &lt; .0001).</td>
</tr>
<tr>
<td>Peterson et al., 2022</td>
<td>CAPS, PCL-5, BDI-II</td>
<td>CAPS: Significant reductions at post-treatment in VC [t(1,117) = -4.83, p &lt; .001]. Office [t(1,117) = -3.74, p &lt; .001]. and In-Home [t(1,117) = -5.04, p &lt; .001]. Significance maintained at follow-up. No differences between groups. PCL-5: Significant reductions at post-treatment in VC [t(1,117) = -10.41, p &lt; .001] and In-Home [t(1,117) = -9.86, p &lt; .001]. Effect sizes for In-Office was statistically lower than VC and In-Home (p &lt; .001) at post-treatment and follow-up. (Supplement tables not included)</td>
</tr>
</tbody>
</table>

**CPOSS:** IP had significantly higher rates of service satisfaction than VC (t(345.9) = −2.24, P = .03).

**PCL:** 0.94
**PHQ-9:** 0.61
**GAD-7:** 0.70
**DAR-5:** 0.41
**AUDIT:** 0.35

**BDI:** Significant decreases in symptoms in both groups at post-treatment and follow-up (F2,72 = 50.17, p < 0.0001)

**STAI:** Significant decreases in symptoms in both groups at post-treatment and follow-up (F2,72 = 41.75, p < 0.0001). No differences between groups on either measure.

**PCL:** VC = -2.0, Home = -2.1, Office = -1.3
**CAPS:** VC = -1.5, Home = -1.7, Office = -1.2
<table>
<thead>
<tr>
<th>Study</th>
<th>Measure(s)</th>
<th>Results</th>
</tr>
</thead>
</table>
| Stecker et al., 2014         | PCL-m, PHQ-9, PASS | **PCL:** Significant reductions (Group x Time) in symptoms at only at follow-up only (coefficient = 4.69, p = .004). No significant differences between groups.  
**PHQ-9:** Significant reductions in symptoms at post-treatment (coefficient = −.856, p = .026) and follow-up (coefficient = 2.361, p = .0005). No significant differences between groups.  
**Acceptability:** Tel participants were significantly more likely to seek treatment at initial follow-up only (χ2 = 3.85, df = 1, p < .049). |
| Strachan et al., 2012         | PCL-m, BAI, BDI-II | **PCL-5:** Significant reductions in symptoms across all patients, and individually for both VC [F(1,29) = 21.1, p < .001] and IP conditions [F(1, 29) = 7.9, p = .009]. Power not sufficient for noninferior analysis  
**BDI:** Reductions in both groups, but only significant for VC [F(1,29) = 6.3, p = .018].  
**BAI:** Reductions in both groups, but only significant for VC [F(1,29) = 5.7, p = .027].  
**PCL:** VC = .98, IP = .66  
**BDI:** VC = .51  
**BAI:** VC = .52 |
| Wierwille et al., 2016        | PCL-S, BDI-II  | **PCL-5:** Significant interaction effect showing reductions over time in both VC and IP conditions [τ(1,219) = 3.22, p = .001] Greater reductions seen in IP. No difference between CPT and PE.  
**BDI:** Significant interaction effect showing reductions over time in both VC and IP conditions [τ(1,219) = 2.04, p = .044] Greater reductions seen in IP. No difference between CPT and PE.  
**PCL:** Not reported |

*Note:* PCL-5/m, Post-Traumatic Checklist; PDS, Posttraumatic Diagnostic Scale; CAP, Clinically administered PTSD Scale; BDI-II, Beck’s Depression Inventory; CES-D, Centre for Epidemiology Studies Depression Scale; PHQ-9, Patient Health Questionnaire; BAI, Beck’s Anxiety Inventory; GAD-7, Generalised Anxiety Disorder Assessment; STAI-Y1, State Trait Anxiety Inventory; DAR-5, Dimensions of Anger Dimensions; AUDIT: Alcohol Use Disorders Identification Test; QOLI, Quality of Life Inventory; WAI, Working Alliance Inventory; STAR, Scale to assess Therapeutic Relationships; CPOSS-VA, Charleston Psychiatric Outpatient Satisfaction Scale-VA version; TSAS, Telemedicine Satisfaction and Acceptance Scale; PASS, Perceptions about Services Scale.
Feasibility

Uptake, Attrition and Compliance

‘Uptake’ was defined as the proportion of participants who had accepted an offer having been deemed appropriate for inclusion following assessment or screening. This did not include individuals who were excluded as a result of exclusion criteria or other circumstances. Across the nine studies which reported uptake rates, the mean uptake was 62.8% of eligible participants, which ranged from 33% to 93%. Only one study reported a statistical difference in uptake across groups, with remote conditions having greater uptake compared to in-person options (Peterson et al., 2022a). Participants here gave several reasons for non-participation, including the presence of distractions in home environments, inconvenience of travel and the ‘informality’ of remote conditions. Reasons provided for declining participation in other studies included not wanting to engage in exposure-based therapy and being unable to commit to the therapy schedule (Franklin et al., 2017). Conversely, this same study noted greater pre-treatment preferences amongst participants to engage in Prolonged Exposure via video compared to in-person conditions. Commitment was also cited in another study, as well as cases of perceived lack of support and readiness for therapy, and some individuals having a preference to attend a face-to-face intervention instead where only remote options were available. (Murphy & Turgoose, 2020).

Attrition rates (non-completion of the intervention) were reported in 13 out of the 14 intervention studies. There was a mean attrition rate of 28.73% across all studies and conditions, with four studies reporting attrition rates between 43% and 53.5%. In studies which compared across treatment formats, two studies did note a comparatively higher attrition rate in videoconferencing conditions compared to face-to-face conditions using PE and CPT models (Acierno et al., 2017; Wierwille et al., 2016), whilst one study using the same modalities reported higher attrition rates in the face-to-face condition (Knowlton & Nelson, 2021). However, no statistically significant differences were found in attrition rates between remote and face-to-face interventions in any study which reported this comparison. Furthermore, there was no significant difference in baseline trauma symptoms between completers and non-completers as reported in three studies (Acierno et al., 2017; Gray et al., 2015; Strachan et al., 2012). Reasons for non-completion were cited as geographical relocation as well as increasing job demands, however this was not specific to face-to-face versus remote conditions (Knowlton & Nelson, 2021; Strachan et al., 2012). In addition, one study noted that two out of seven participants using videoconferencing did drop out due to having a poor internet connection resulting in limited intervention progress (Franklin et al., 2017). Apart from uptake and subsequent completion, some studies did note further aspects of overall engagement with treatment. Three studies reported on homework completion between sessions, with all results showing high levels of homework
completion (>75%), with no differences reported between remote and in-person interventions for CPT and PE (Knowlton & Nelson, 2021; Liu et al., 2020; Morland et al., 2015).

**Clinician Fidelity**

Seven of the studies reported some form of therapist treatment fidelity. Three studies exploring CPT (Maieritsch et al., 2016; Peterson et al., 2022) and PE protocols (Acierno et al., 2017) extracted a randomised sample (5-20%) of recorded sessions to independently assess fidelity using a standardised measure of adherence and competence, all of which reported over 90% fidelity across treatment groups. A further study (Franklin et al., 2017) also reported high rates of clinician fidelity resulting from review of recorded sessions, however no randomisation or proportion of sessions under evaluation was noted. Similarly, Morland et al., (2015) reported high rates of CPT protocol fidelity, however no specifications of the evaluation process were noted. Finally, two additional studies descriptively reported no concerns with regard to clinician fidelity (Liu et al., 2020; Strachan et al., 2012), however neither study referenced any range of scores or specific assessment or evaluation process. No study cited any difference between face-to-face and remote conditions in relation to therapist fidelity.

**Acceptability**

Apart from treatment uptake as outlined previously, acceptability was operationalised mainly in relation to treatment satisfaction and therapeutic alliance across studies. One cohort study reported a high level of remote treatment satisfaction universally across patients, clinicians and wider service staff in relation to both technological resourcing and the overall therapeutic process (Gray et al., 2015). Similar findings of positive experience and comfort with using remote interventions were found in another study (Morland et al., 2015). However, when compared to in-person conditions, remote participants in this same study reported significantly lower satisfaction levels in relation to aspects of the therapeutic process as well as ‘atmospheric’ factors, despite both conditions being delivered in the same settings. One of the RCT’s found that participants in the remote condition were significantly more likely to seek treatment in its early stages, however this did not differ from controls as treatment progressed (Stecker et al., 2014). A further study reported descriptively on group differences in relation to time and resource provision, highlighting that both clinicians and patients required about half the time commitment to engage in remote interventions compared to traditional, in-clinic methods (Peterson et al., 2022a).

Therapeutic Alliance was measured in two comparison studies using the reliable and valid Working Alliance Inventory (Horvath & Greenberg, 1989), which yielded comparably strong alliance ratings in both remote and in-person CPT interventions at post-treatment (Maieritsch et al., 2016). In
contrast, the other comparison study reported that the remote intervention group showed significantly lower alliance ratings in the early stages of treatment, however this difference did not remain over time (Morland et al., 2015). Finally, in one remote-only study, self-reported ratings of therapeutic alliance were universally high across clients and clinicians, with clients specifically citing the increased flexibility offered by remote delivery (Murphy & Turgoose, 2020).
Discussion

The current paper conducted a systematic review using a synthesis of findings from quantitative studies to assess both the efficacy and feasibility of live, one-to-one therapeutic interventions for psychological trauma.

Summary of main findings

Results from this review demonstrates the effectiveness of several trauma-focused treatment modalities as standalone remote interventions, as well as showing equivalent effectiveness in reducing trauma and several secondary outcomes compared to face-to-face conditions. The inclusion of several intervention models was comparable to military-specific reviews encompassing several models (Turgoose et al., 2018), and expanding the evidence base beyond standalone remote interventions, such as CBT (Lewis et al., 2019) and Behavioural Activation (Etherton & Farley, 2020). Effectiveness was generally shown to maintain at follow-up time points, arguably reducing previous concerns regarding the lack of follow-up data available for such remote interventions (Olthuis et al., 2016). Effect sizes across studies were generally high or moderate, with some papers suggesting partially better reductions in trauma symptoms compared to secondary outcomes such as depression and anxiety. However, a lack of power calculations alongside high rates of attrition may limit the overall statistical power of these findings, alongside other methodological weaknesses as detailed in sections below. Examinations of feasibility also showed favourable evidence for remote interventions as well as being comparable to face-to-face conditions, with similar rates of treatment engagement, client satisfaction, therapeutic alliance, and clinician fidelity.

The current review included Cognitive Processing Therapy, Prolonged Exposure, Trauma-focused CBT and Eye Movement Desensitisation and Reprocessing. More specifically, all but one study included some form of processing or ‘trauma-focused’ element as part of the intervention. Whilst this adds favourable evidence for trauma-focused modalities, it is worth considering whether this evidence extends to non-processing interventions, such as Interpersonal Psychotherapy (IPT) or Person-Centred Therapy. This comparison would help assess how remote treatment options for trauma can be expanded, in line with local drivers aiming to increase accessibility through remote interventions (Scottish Government, 2022). In addition, review findings have in fact shown equivalent effectiveness for IPT compared to Prolonged Exposure in face-to-face studies, whilst also demonstrating lower attrition rates (Markowitz et al., 2015). Therefore, as well as enhancing overall intervention uptake by increasing treatment options, future research investigating non-trauma-focused interventions may help to mitigate the significant attrition rates as evidenced in the current review of trauma ‘focused’ remote interventions.
Examination of therapeutic alliance included accounts from clients, clinicians, and its comparison across treatment formats. Findings generally showed high and equivalent ratings of therapeutic alliance in remote and face-to-face conditions, and overall satisfaction with treatment, as evidenced in previous reviews (Sucala et al., 2012; Turgoose et al., 2018). There were examples of increased flexibility facilitated by remote delivery, suggesting specific benefits of remote context which may aid relationship building. There was however reference to reduced therapeutic comfort as well as an initial ‘delay’ in the establishment of therapeutic alliance in remote conditions. However, given that this difference did not last, the delay in alliance building may relate more so to the unfamiliarity and adjustment to remote delivery rather than its effectiveness, which has been evidenced in COVID-based studies from the perspective of clinicians and clients (Liberati et al., 2021). Despite these positive findings, it is worth noting that the therapeutic alliance was only assessed in three of the current review studies. Considering its importance in trauma working (Kliethermes et al., 2014), future studies should endeavour to include therapeutic alliance building and other process variables as routine outcomes in remote trauma treatments and indeed other mental health presentations.

**Evaluation of included studies and research recommendations**

Results from the quality assessment must be considered when evaluating the overall strength of the review findings. Generally, studies had a wide variation of quality, with only a limited number deemed to have strong overall quality. A relative strength across studies was seen in study design, most notably in relation to randomisation and suitability of chosen designs. Strengths were also seen in relation to using appropriate, standardised data collection methods; however some studies did not provide any additional information in relation to validity or reliability, resulting in a relative weak rating. Similarly, whilst some studies provided clear accounts of demographic and confounder variable control, this was not evident across the review as a whole. Whilst no significant demographics were found, it is important for researchers to account for such variables, given its potential impact on engagement and outcome in trauma treatment (Hale et al., 2019).

Included studies possessed a number of additional weaknesses. A key limitation was the low uptake and high attrition across interventions, thus increasing the risk of both selection and data collection bias, respectively. This is important in the context of current review, as this increases the likelihood of data being representative of the most engaging and or most suitable participants, rather than representing the overall intended sample (L. H. Smith, 2020). Reports of high attrition have been noted in previous reviews (Turgoose et al., 2018), suggesting that this remains a concern across remote trauma interventions. Whilst some reasons regarding poor technology quality and face-to-face preferences were noted as reasons for disengagement from remote interventions, the majority of studies either stated general reasons or did not cite reasons for disengagement. In addition, attrition rates were
comparable between remote and face-to-face conditions, whilst the average attrition found in the current review are in line with previous reviews of face-to-face trauma interventions (Imel et al., 2013). Given these findings, this limitation of feasibility does not appear to apply specifically to remote contexts, but more so to the context of all trauma interventions, regardless of the format of delivery. In terms of implications, service providers must consider the challenge of engagement in relation to trauma working across all treatment modalities and formats, whilst addressing potential barriers to remote engagement specifically, such as familiarity or technology quality.

A further limitation of the review is that only a select number of studies stated prior power calculations needed to assess the probability of finding genuine treatment effects. This is particularly relevant in the current review, given the wide range of sample sizes included and the high frequency of attrition as noted above. However, since most effect sizes were reported as medium or high, this would likely reduce the sample size required to observe such meaningful effects, particular amongst studies of larger sample sizes. Regardless, in order for research outcomes to achieve higher quality standards, studies should state explicit a priori power calculations where needed as well as stating whether such estimates are met at post-intervention.

In conclusion, the above section demonstrates that whilst remote trauma interventions can be effective, feasible and equivalent to face-to-face conditions, many of these interventions may be restricted in their current form in terms of both sample representativeness and methodological quality.

Review strengths, limitations, and recommendations

Given the increased attention towards remote therapy delivery, the current review provides valuable, up to date evidence of trauma-specific interventions. Specifically, half of the intervention studies in the current review were published in the last three years, adding substantial updates to previous reviews noted previously. Moreover, the efficacy for interventions is made more robust by including several trauma intervention models, as well as using a wide range of trials and analyses, including non-inferiority, equivalence, and randomisation where applicable. However, it is worth noting that the current study only included two true RCT’s with a control condition, one of contained a low treatment dose and did not show promising follow-up effectiveness. The inclusion of more consistent RCT’s would allow for a more robust meta-analytic review of the effectiveness findings emerging from the current study.

The inclusion criteria in relation to live, active therapeutic interventions allowed the synthesis of manualised treatments which are most commonly used and familiar to clinicians. This was not intended to discount the utility of indirect, or guided forms of remote interventions, but rather to provide the most direct and accessible evidence base for clinicians seeking to utilise remote interventions as
part of routine clinical practice. Given the local drivers for digital mental health provision is founded within a stepped-care approach (Scottish Government, 2022), it is important that findings from the current review are supported by investigations regarding the efficacy of all forms and ‘levels’ of remote treatment for psychological trauma.

Following from this, one limitation of the current review is the exclusion of qualitative material. Qualitative accounts may provide further context to the observed findings, such as the initially delayed effectiveness and alliance building, as well as the challenges regarding uptake and attrition. Such investigations have begun to emerge in the context of COVID-19, whereby greater familiarity over time and the challenge of alliance building online has been explored from the perspective of clinicians (Liberati et al., 2021). Furthermore, there is merit for considering alternative forms of literature. Given the current healthcare climate, it is likely that services are already gathering relevant outcome data resulting from large-scale changes to remote-based psychological interventions. As such, future reviews could expand criteria to include specific grey literature (i.e. working papers or theses) aimed at accounting for ongoing research assessing remote trauma interventions throughout COVID-19. In addition, the inclusion of such grey literature may further mitigate the risk of favourable publication bias (Paez, 2017).

Whilst not intended, the vast majority of papers focused solely on military populations and were based in North America. Whilst this further adds to this existing military review evidence (Turgoose et al., 2018), the degree to which this review evidence is generalizable across trauma types and populations is somewhat limited. There may be several reasons as to why this was the case. Given that the research was limited to manualised, trauma-specific protocols, military populations may be an ideal population group from which research has developed on this topic. This could be due to military personnel being a convenient, consistent sample with high levels of traumatic experiences and historical issues with treatment accessibility (Morland et al., 2015). By comparison, individuals experiencing complex trauma for example are generally harder to operationalise, whilst treatment protocols may not be as fixed or short-term in nature compared to PTSD, particular from a phased-based approach to trauma intervention (NHS Education for Scotland, 2017a). Despite this, a strength of this study is the inclusion of adult survivors of complex trauma, domestic violence and COVID-related trauma does add an initial breadth to this evidence base, from which future research may build upon to expand our understanding of remote interventions across a variety trauma types and population groups.

Service implications

In addition to the research implications noted throughout previous sections, the current review has direct relevance to service provision. Firstly, this review provides evidence of manualised, remote trauma interventions which is directly applicable to clinicians working across health services. This not
only provides immediate guidance to remote inventions to active clinical work, but also ensures that relevant training of remote delivery still contains the fundamental components which these manualised treatments contain in face-to-face conditions. Concurrently, the findings here which highlight potential challenges to remote intervention implementation, such as delayed effectiveness and or rapport building, can be used to inform training materials to account for some of the nuances and unfamiliarity which may accompany remote interventions, particularly when such interventions have not been part of routine practice. In addition, the variety of interventions accounted for in this review provides such evidence for a wide range of modalities, thus increasing treatment options which clinicians can offer to clients. The quality assessment also highlights to services the need for consistent and reliable outcome measurements to enhance this evidence base with feasibility practices, by incorporating elements such as uptake and engagement data, clinician fidelity and treatment satisfaction.

**Conclusion**

This systematic review shows favourable support for use of remote interventions for psychological trauma both in terms of effectiveness and some aspects of feasibility. In addition, these findings suggest that remote adoption of manualised, trauma-focused protocols can be as effective as traditional, face-to-face treatment options. However, these favourable conclusions are limited by weaknesses in methodological quality and a limited scope of trauma profiles and populations. As such, research must be continual and more robust in the design and evaluation of such interventions. Furthermore, it is important to explore the specific challenges associated with remote adaption, whilst also acknowledging the many challenges to trauma working which co-exist in remote and face-to-face conditions. As remote interventions become more frequent in our healthcare systems, this review represents an important evidence base which will continue to grow in significance for therapeutic research and practice.
Review References


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Chapter 2: Empirical Study

‘We are always learning’: A qualitative inquiry into the experiences of clinicians adapting to remote trauma interventions throughout COVID-19.

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Empirical Abstract

Background: Given the ongoing impact of COVID-19, the use of remote psychological interventions in mental healthcare is of ever-growing significance. The adaptation of trauma-specific interventions is of particular interest given the nuances of remote working and intensive nature of these interventions. Despite growing evidence exploring treatment efficacy, there is a lack of research accounting for the experiences of clinicians working with these remote interventions.

Aim: The current study examines the lived experience of clinicians working with remote interventions for psychological trauma throughout COVID-19.

Method: Clinicians working in adult psychology services (N=29) were recruited for an initial demographic exploration of the topic. From this, a more specific cohort (N=8) were recruited for 1:1 semi-structured interviews to explore individual experiences in greater detail. Accounts were analysed by employing an Interpretative Phenomenological Analysis (IPA) approach.

Findings: Exploration of clinician’s experience of working remotely with trauma during COVID-19 resulted in four emerging superordinate themes: ‘Progressing the trauma treatment journey’, ‘Building a Therapeutic Relationship Remotely’, ‘Learning over time’, and ‘Creating change in how we work’. Additional outcomes demonstrated a general increase in perceived ability to delivery remote interventions as COVID-19 continued.

Conclusions: Findings suggest clinicians experience a range of challenges and opportunities when working with trauma remotely, which is often impacted by individual clients, service attitude and resource, and the context of COVID-19. The inclusion of clinicians’ perspectives adds qualitative evidence to discussions relating to treatment efficacy, with direct implications of how clinicians may adapt interventions to account for the nuances of remote trauma working.

Keywords: Trauma, clinicians, remote therapy, psychological intervention
Introduction

Trauma

Psychological trauma is defined as an event or circumstance “that is experienced by an individual as physically or emotionally harmful or life threatening” (Substance Abuse and Mental Health Administration (SAMHSA), 2014, p. 7). Clinical and research practice differentiate trauma by content and aetiology. Type 1 trauma includes single incidences or unexpected adverse events (traffic accidents, natural disasters), whilst Type 2 or complex trauma is defined as repeated or enduring (mainly interpersonal in nature) experiences such as childhood sexual abuse or neglect (NHS Education for Scotland (NES), 2017). Whilst type 1 trauma is synonymous with symptoms of re-experiencing, alertness and reactivity, trauma-related avoidance and alterations in mood and cognitions, those with a history of complex trauma can also experience enduring difficulties with interpersonal relationships (Cloitre, 2015).

Epidemiological findings report a 70.4% lifetime prevalence of single-event trauma across populations, with many individuals experiencing multiple traumas in their lifetime (Kessler et al., 2017). Whilst a resulting diagnosis of Post-Traumatic Stress Disorder (PTSD) following exposure to trauma can be as low as four percent, this prevalence varies across trauma type and can increase four-fold in incidences of sexual or physical abuse (Kessler et al., 2017). The psychological impact of trauma out with PTSD can be devastating, with substantial research linking trauma with increased prevalence of personality, dissociative and eating disorders (Mauritz et al., 2013), emotional regulation difficulties (Briere & Rickards, 2007), substance misuse, violence victimisation (Public Health Wales, 2015) and physical health conditions (World Health Organisation (WHO), 2013). Furthermore, the enduring effects of traumatic events has been well documented in the increased susceptibility to mental health difficulties in adulthood following exposure to trauma at a young age (De Venter et al., 2013; Merrick et al., 2017).

Trauma interventions

Given its prevalence and comorbid complexity, national guidelines seek to increase access to specialised interventions for psychological trauma whilst also enhancing awareness and application of trauma-informed practices (NES, 2017). For Type 1 trauma, such guidelines recommend eight to twelve sessions of Trauma-Focused Cognitive Behavioural Therapy (tFCBT) or Eye Movement Desensitisation and Reprocessing (EMDR) for moderate to severe cases of PTSD. Randomised Control Trial (RCT) review evidence suggests that both interventions are equally efficacious and arguably superior to other trauma-based interventions and waitlist controls such as undefined drug or psychological input (Bisson et al., 2007; Seidler & Wagner, 2006). More recent review evidence has confirmed support for both tFCBT and EMDR, as well as strong evidence for Cognitive Processing Therapy (CPT) and Prolonged
Exposure (PE) (Watkins et al., 2018). The significant heterogeneity of type 2 trauma cases results in methodological limitations aimed at establishing evidence-based guidelines for complex trauma treatment protocols (Ford & Courtois, 2009). However, national guidelines recommend a three-stage, phased intervention programme modelled from Herman (1992), focusing on (1) Safety and Stabilisation, (2) Processing / Remembering and (3) Reintegration, which generally includes the application of type 1-specific models as appropriate to guide clinicians in delivering suitable treatment (NES, 2017). RCT review evidence has shown support for phased-based protocols in general (Melton et al., 2020). In addition, models which incorporate cognitive behavioural interventions have shown significant reductions in child-abused related self-reported PTSD symptoms in adult outpatient populations (Dorrepaal et al., 2012), with emerging evidence also supporting both EMDR and PE protocols for phased-based interventions (Ford, 2021).

**Mechanisms of change**

Despite this evidence base, researchers have considered whether distinct components of interventions are essential to treatment outcome. Theorists have debated whether trauma processing is necessary for symptom reduction, despite the suggested guidelines for such protocols (Ehlers et al., 2010). This debate is often reflected in clinicians attitude, with studies documenting apprehension towards the use of processing treatments such as exposure therapy due to risks of causing further distress, however this appears to be moderated by both service type and years of experience (Beidas & Kendall, 2010; Ruzek et al., 2014). For both CBT and Cognitive Processing Therapy (CPT), clinical trial reviews have suggested that cognitive-only and exposure-only therapy are equally effective in PTSD symptom reduction compared to combined conditions (Benish et al., 2008; Mendes et al., 2008). However, the sampling in these reviews may not have captured the growing effect sizes for combined CBT-based protocols (Ehlers et al., 2010). Moreover, such arguments are less evident for ‘type 2’ trauma interventions, as research has highlighted the need to combine exposure protocols with interpersonal regulation to produce greater effectiveness and adherence in complex trauma populations (Giourou et al., 2018). Specific dismantling studies have shown that while EMDR produces favourable outcomes in control studies, the use of eye movements may not be essential in producing treatment effects, whilst imaginal exposure may be a key component for therapeutic change (Davidson & Parker, 2001). Similarly, the use of somatic stimulation in Emotional Freedom techniques was not essential for treatment outcomes in comparison studies with EMDR (Karatzias et al., 2011). Whilst robust evidence may exist for specific trauma ‘processing’, it remains unclear whether mechanisms of therapeutic change are those unique to individual models or the non-specified, generalisable components. An extension of this may consider the ‘format’ of delivery for trauma intervention; namely, whether face-to-face, in-person conditions are essential in producing favourable outcomes.
Remote interventions

In this paper, ‘remote interventions’ refer to psychological interventions delivered either via telephone or video with the presence of an active clinician. Whilst expedited due to the impact of COVID-19, consideration for remote delivery of trauma treatment has become of growing focus at a national level, as evidenced by key government drivers focusing on a stepped-care approach to digital mental health as well as the national trauma training network (Scottish Government, 2022). The emerging evidence base for remote trauma interventions and other psychopathologies has shown favourable results in rapid review evidence expanding the last two decades (Varker et al., 2018), with meta-analytic evidence suggesting that guided internet-based CBT produces similar effects as face-to-face therapy across mood and anxiety disorders (Andersson et al., 2019). Other reviews have shown that Behavioural Activation treatment for PTSD showed superior symptom reductions for remote and face-to-face conditions compared to waiting list controls, regardless of treatment delivery format (Etherton & Farley, 2020). In pursuit of more ‘direct’ comparisons, reviews have also assessed the efficacy of active, manualised trauma intervention models, demonstrating equivalent remote and face-to-face evidence for CBT, CPT and Exposure-based protocols (Lewis et al., 2019; Turgoose et al., 2018). However, these reviews focusing specifically on trauma have generally concluded that the quality and breadth of evidence is insufficient to produce generalisable findings, due to various issues such as selection bias, limited populations and poor engagement rates (Dedert et al., 2013; Lewis et al., 2019). Moreover, additional evidence has found that symptom reduction outcomes in CBT-based remote trauma interventions can become inferior to face-to-face interventions at post-treatment follow-ups (Olthuis et al., 2016). Whilst more recent systematic review evidence has shown signs of maintained improvements at follow-up timepoints in more recent studies, such evidence still lacks high methodological quality (Adams, n.d.- previous chapter).

Given its importance in trauma treatment (Kliethermes et al., 2014), one criticism of remote interventions is its capacity to establish a sufficient therapeutic alliance, which has been partially evidenced among PTSD veterans (Turgoose et al., 2018). However, meta-analytic findings suggest that while a reduced alliance was found in videoconferencing, target symptom reductions were similar to face-to-face conditions (Norwood et al., 2018). This suggests that concerns regarding the efficacy of remote trauma therapy may relate to the therapeutic dynamic rather than symptom reduction. Furthermore, alternative systematic review evidence found remote interventions were equivalent to face-to-face therapy at developing therapeutic relationships and treatment outcome (Sucala et al., 2012). In the context of COVID-19, qualitative research on clinicians’ experiences have noted a perceived reduction in therapeutic relationship development attributed to the absence of non-verbal cues and processes, however this may be somewhat alleviated by videoconferencing compared to telephone interventions (Liberati et al., 2021). Overall, there is a general lack of follow-up data available for
remote trauma interventions (Bolton & Dorstyn, 2015), meaning comparisons of face-to-face and remote therapy for trauma is promising yet limited in quality and breadth.

Apart from treatment efficacy, there is also consideration for the impact of trauma working on clinicians themselves. Trauma-focused treatments have been found to produce secondary trauma symptoms amongst clinicians, however critical reviews note that reports of secondary trauma are generally below clinical cut-offs, whilst there is also argument that such symptoms may result from working with clinical populations in general rather than trauma-specific populations (Elwood et al., 2011). However, clinicians have also been found to be susceptible to compassion fatigue when working with trauma, which can be influenced by workplace factors out with their control (McKim & Smith-Adcock, 2014). In the context of COVID-19, given the urgency in which such workplaces have been adapted, clinicians may not have efficient understanding of remote interventions required to use such formats to their full potential. Such concerns have been noted in COVID-19 studies whereby clinicians experience a reduced readiness and confidence due to difficulties regarding technology and lack of prior training in remote therapy delivery (Liberati et al., 2021). With both these considerations in mind, it is worth examining how clinicians have experienced the use of remote therapy in terms of trauma treatment in the current climate.

COVID-19

The Coronavirus 2019 (COVID-19) is an infectious respiratory disease, which was officially declared a global pandemic on 11th March 2020 (Emanuel et al., 2020). The rapid spread of infection and implementation of drastic health, economic and social policies have posed a risk to psychological wellbeing across populations (Brooks et al., 2020). This has also placed significant pressure on healthcare systems to meet increasing demands (Legido-Quigley et al., 2020), whilst the long-term uncertainty of the pandemic may impact the standard of work provided by health services (Koffman et al., 2020). Early pandemic studies have illustrated significant emotional difficulties resulting from prolonged quarantine (Xiao, 2020), contagion fears (Zhou, 2020), as well as bereavement (Wang et al., 2020). At the beginning of the COVID-19 pandemic, National UK figures saw an almost two-fold increase in adults reporting moderate to severe depressive symptoms, with some evidence of reduction and stability in these rates after one year (Office for National Statistics, 2021). In addition, Scottish national statistics showed a steady increase in the number of people requesting psychological therapy treatment since summer 2020 (Public Health Scotland, 2021). Apart from the impact on general populations, these circumstances also lead to increased vulnerability amongst those with pre-existing mental health difficulties who may have already been actively accessing mental health services (Inchausti et al., 2020). This is important in that whilst mental health services have partially adapted in
response to the psychological impacts of COVID-19, many mental health professionals have been actively engaged in their pre-existing caseloads and waiting lists.

**Impact on healthcare professionals**

Emerging COVID-19 studies have shown that health care professionals (HCPs), display increased anxiety, depression, and sleep difficulties (Al-Rabiaah et al., 2020; Li et al., 2020), with findings from previous viral outbreaks suggesting this susceptibility can remain beyond outbreak periods (Gardner & Moallef, 2015). Most emerging research has examined frontline workers and those working closest with COVID-19 compared to other Healthcare Professionals (HCP’s). Indeed, systematic review evidence suggests that frontline / virus HCPs display higher levels of psychological distress compared to other HCP staff (Vizheh et al., 2020). However, all HCPs regardless of their role have been universally affected by the pandemic in terms of changes to structure and demands of their professional practice (Greenberg et al., 2020). In addition, one study from the above review illustrated higher rates of vicarious traumatisation amongst none-frontline HCPs compared to virus / medical staff (Li et al., 2020). Suggestions as to why this might be the case include a more ‘focused’ preoccupation as well as the voluntary status of many frontline workers in this study, whereas non-frontline workers tended to be less clear about the outcomes of the pandemic, as well as possibly holding a wider sense of psychological impact beyond immediate viral care. In the context of mental health workers specifically, studies conducted prior to COVID-19 have evidenced increased levels of work-related stress, burnout and psychological difficulties amongst mental health workers, contributed by factors such as working overtime, experiences of secondary stress as well as stigma surrounding self-care for such professionals (Luther et al., 2017; Rokach & Boulazreg, 2020). Moreover, government decisions regarding which areas of the health services are prioritised in terms of focus and increased resourcing during the pandemic may reinforce a narrative that provision for mental health services has been reduced in recent times (Molodynski et al., 2021). These considerations highlight the need to account for the challenges and narratives of mental health professionals in the current climate.

Apart from the psychological impact, a further consideration is the impact on attitudes of professionals towards care provision. Moral injury has been described as psychological distress resulting from action or inaction in contrast of one’s personal principles (Litz et al., 2009). Given the pivot and limitation of service change discussed, examples of moral injury among HCPs could include beliefs of not doing enough to provide optimal care for their patients (Greenberg et al., 2020). The themes associated with COVID-19 service restrictions likely facilitate this, as under resourced services and restrictive policies are associated with higher moral injury among non-frontline care workers (Haight et al., 2017). More generally, research in community health settings have shown that work-
related outcomes such as job performance and satisfaction are greatly impacted by workers attitudes, commitment, as well as how they perceive the quality of their work (Berta et al., 2018).

When considering recent changes to service delivery, whilst favorable evidence for the ‘efficacy’ of alternative care formats such as remote trauma therapy may be established, the urgency, limitation and strain felt by mental health services may influence both the degree to which clinicians believe they are providing optimal care and the attitudes they hold towards such care formats. Examination of clinician’s perspectives may therefore extend beyond direct comparisons of trauma interventions by exploring the way in which context and attitude can impact the implementation of such models.

Opportunities for resilience and change

Whilst acknowledging the adverse impact of COVID-19, it is also worth noting the opportunities which may result from COVID-19 service adaptation. Firstly, despite increases shown in national statistics pertaining to referrals and service response, these figures are difficult to interpret due to complexity related to changes in public restrictions and or mental health service access, particularly in the early stages of the pandemic. In addition, the ‘levelling’ out of these figures more recently suggests a natural adjustment and familiarity over time in terms of service delivery, as well as perhaps adjustment and resilience amongst the public. In the case of HCP’s, there is emerging evidence demonstrating post-traumatic growth and resilience amongst medical staff, whilst the overall psychological stress experienced appears to be influenced by the value or significance placed on COVID-19 compared to other life stressors (Luo et al., 2022). In the case of trauma working specifically, qualitative findings prior to COVID-19 have noted that whilst a common challenge to engaging in trauma work is the experience of vicarious trauma, such work also allows the opportunity for post-traumatic growth amongst and a genuine sense of reward amongst clinicians (Bartoskova, 2017). Furthermore, despite difficulties to therapeutic intervention noted by clinicians, the current context has also promoted an openness and flexibility towards intervention delivery, so long as appropriate training and readiness is acquired (Liberati et al., 2021). COVID-19 therefore presents an opportunity to establish a broader quality of evidence not only for the utilisation of remote therapies specifically, but also the use of combined or integrated format approaches informed by experiences of clinicians (Peng et al., 2020) and the opportunities that result from working with trauma as a professional. As such, any explorations do not need to be ‘problem-focused’, but rather be open to both challenges and opportunities.

The current study

This review of evidence and guidelines pertinent to remote trauma interventions highlights several considerations. i) The prevalence and impact of trauma emphasises the need for a reliable
evidence base for delivery of psychological treatment; ii) concerns regarding the essential components needed to produce treatment outcomes raise questions over the utility of remote versus face-to-face interventions, which has been growing in interest due to COVID-19; iii) this pandemic presents challenges to public mental health, service provision and the well-being and attitudes of mental health professionals; iv) while there is increasing evidence examining the use of remote trauma therapy, there is a lack of evidence both in terms of qualitative accounts, in-depth understanding and the perspectives of clinicians which serves to compliment this evidence base. The current study therefore aims to examine clinician’s perspectives of adapting to remote trauma interventions during COVID-19 using two objectives:

1. What are clinicians’ experiences of adapting to remote trauma interventions in the context of COVID-19?
2. How do clinicians view their ability to deliver remote interventions across the COVID-19 timeline?
Methodology

Design

A mixed methods design with a qualitative focus was used for the current study. A semi-structured interview was chosen to address the primary objective, whilst a background questionnaire provided a descriptive overview to address the secondary objective. As such, the study adopts a concurrent design, whereby qualitative and quantitative data are collected during a single phase. Where appropriate, quotes extracted from interviews will be triangulated with descriptive findings where they may elucidate or corroborate with quantitative findings (Creswell & Zhang, 2009).

Participants

Participants were accredited clinical staff delivering psychological therapies to adult clients across local NHS Primary Care, Community Mental Health, Eating Disorders, Forensic and or Addiction services throughout the COVID-19 pandemic. Clinicians who held a non-accredited or ‘training’ position and or those who were not actively working throughout the pandemic were excluded from participation. Sampling was facilitated in two stages. Firstly, convenience sampling was employed whereby all clinicians working in the above services were invited to complete a background questionnaire online through correspondence between the researcher and respective service team leaders.

A more specific, purposive sampling was subsequently introduced by screening completed questionnaires to identify suitable participants for interviews. Participants who expressed interest in an interview and who indicated higher percentages of active trauma caseloads were subsequently contacted for a follow-up interview. This percentage was defined by the proportion of cases which involved an ‘active trauma focus’ on their current caseload at the end of the questionnaire. Reported percentages ranged from zero to 100% across participants. Clinicians who indicated 40% or more as their trauma caseload were considered for participation. This figure was used given its use in a previous study in a similar setting examining clinician’s experiences of working with trauma (Bartoskova, 2017). Where clinicians had similar ‘eligible’ percentages, consideration for greater sample variation in terms of job title, service and experience were considered to inform this selection, as well as to account for diversity in trauma cases across different service ‘levels’, such as the varied proportion of Type 1 vs Type 2 trauma in primary versus community care settings (National Collaborating Centre for Mental Health, 2018). This demonstrates an appropriate implementation of distinct sampling stages, allowing for transition from an accessible population resulting in a generalisable overview (convenience) to a more homogenous cohort aimed at achieving richness and saturation (purposive) (Etikan, 2016). Furthermore, the use of purposive sampling particularly favours the qualitative inquiry, as it allows selection of rich cases to allow in depth phenomenological exploration of this topic (Patton, 2002).
Procedure

Following ethical approval, appropriate psychology services who agreed to advertise participation were provided with an overview of the study, the participant information sheet (Appendix C) as well as a secure link to the initial background questionnaire. Psychology service leads were asked to circulate this information to their respective staff cohorts, inviting them to complete the anonymous questionnaire. Clinicians were unable to complete the questionnaire unless they provided consent at the start of the link (Appendix D). From the recorded data, completion of the questionnaire took approximately 12 minutes. This was concluded with a debrief sheet, outlining a summary of the study, researcher contact details as well as details for NHS staff well-being services which provides confidential support should participants have any concerns (please see Appendix E).

Clinicians expressed interest in a follow-up interview by providing their work email addresses at the end of their questionnaire. A total of 29 clinicians completed the questionnaire, whilst fourteen expressed interest in the interview. Following initial screening of questionnaires, eight clinicians were contacted and offered a follow-up interview. Interviews took place either via secure Microsoft Teams video link or at on-site NHS premises. Each interview included time for participants to ask questions and to subsequently provide informed consent. Interviews were audio-recorded and lasted between 46 and 81 minutes. A debriefing session was subsequently provided to allow clinicians to voice any specific matters and to provide the same debrief information included in the questionnaire. Data collection took place between June and September 2021.

Background Questionnaire

The background questionnaire included demographics related to participants years of experience and current working positions. Clinicians indicated on a five-point Likert scale their perceived levels of Confidence and Competence in relation to working with face-to-face, video and telephone therapy in general. Clinicians repeated these measures across three time points; i) ‘before COVID-19 (prompted as prior to March 2020; ii) ‘peak COVID’ as indicated by providing a month in the timeline which participants felt was the most challenging in relation to their clinical work, and iii) ‘Present’ (at time of data collection, which occurred across June 2021). Clinicians also indicated the proportion of their active cases which were facilitated via face-to-face, video and telephone therapy across these time points. Finally, clinicians indicated proportions of their caseloads which included active trauma working across the timeline, as well as noting which trauma-specific models or approaches they received training and or applied in their clinical practice.
Qualitative Interview

A semi-structured interview was developed in line with IPA guidelines. An active researcher-participant dialogue was encouraged, whereby questions were informed by responses of participants, to further explore specific experiences (Smith et al., 2009). Participants were asked about their experience of working with trauma, their beliefs, and perceptions about remote therapy, as well as challenges and opportunities of adapting to remote trauma interventions. Interview questions remained as open-ended as possible to account for varied individual experiences. However, the researcher did provide additional prompts to explore how general experiences of remote therapy delivery may apply specifically to working with trauma. Please see Appendix F for the interview schedule.

Data Analysis

Qualitative approach

Interpretative Phenomenological Analysis (IPA; Smith & Osborn, 2008) was chosen for qualitative analysis. IPA was deemed suitable for this study’s interest in lived experiences of clinicians adapting to working with trauma over the course of the COVID-19 pandemic. IPA assumes that “person and world are not separate but instead are co-constituting and mutually disclosing” (Palmer et al., 2010, p. 99). This allows the phenomenon of adapting psychological interventions for trauma to be viewed within the unique sociocultural context of working as a clinician throughout COVID-19, as well as the societal and professional positions of clinicians.

Alternative approaches were also considered for analysis. Grounded Theory may be useful in developing a theoretical understanding and generalisable model of remote trauma interventions; an approach that has been used in trauma-focused intervention research (Murray et al., 2014). In addition, Discourse Analysis would provide understanding of remote trauma working through the language used to describe clinician’s experience by focusing on specific interactions within the phenomenon (i.e. discourses that shape the therapeutic relationship within trauma interventions). The use of IPA in the current study is underpinned by several important circumstances surrounding the phenomenon, including i) the unique and everchanging impact of COVID-19, ii) the adaptation of remote interventions for psychological distress in response to global crises, as well as iii) the inclusion of clinician’s perspectives, as well as their own interpretation of their experiences. As such, the use of IPA allows a wider exploration of remote trauma intervention delivery, whilst still considering elements of the discursive context (Starks & Trinidad, 2007). Furthermore, an initial phenomenological approach provides a foundational understanding of adapting to remote trauma interventions, from which future research can derive a more theoretically driven approach to remote trauma interventions.
Analytic process

To ensure commitment and rigour in line with IPA guidelines, analysis of interview data followed a specific procedure which was repeatedly evidenced to the supervisory team. Analysis began with several readings of interview transcriptions. An initial set of descriptive comments were used to provide a brief account of what was said, as well as any trending content that emerged. Following a grouping of initial comments into relevant themes, a higher level of abstraction of experiences in the form of emergent themes was developed to provide a psychological framing of phenomena. This was subsequently used to search for relevant connections across emergent themes. During these later steps, the researcher repeatedly referenced back to the transcripts and its quotations so that such framing remained grounded within the initial account given by participants. This allowed constant movement between data-grounded and psychologically grounded interpretations, enabling all aspects of the ‘hermeneutic cycle’ of interpretation integral to IPA analysis (Smith & Osborn, 2008). An example transcript analysis is included in Appendix G.

Statistical Analysis

Descriptive statistics provided summaries of participants’ professional backgrounds as well as caseload proportions in relation to both intervention format and trauma-focused working. Furthermore, means across time points and format groups were used to examine whether clinicians’ levels of confidence and competence across face-to-face, video and telephone therapy changed across the course of COVID-19. As measures of confidence and competence were asked with a single ordinal item, the current study does not employ more robust inferential analyses of variance.

Quality and Validity

The current study did not use methods of member checking with participants nor inter coder reliability of qualitative data, as IPA guidelines generally do not apply such approaches (Smith et al., 2009). In both instances, attempts to standardise or refine individual interpretations of experience may dilute the fundamental, subjective analysis of IPA researchers (Gauntlett et al., 2017). However, measures were taken to maintain this subjectivity whilst also committing to validity and quality control. Examples of coding procedures, generated themes and related quotes were shared and discussed with the supervisory team to ensure the researcher was adhering to the analytic process whilst also being reproduced in a readable and reflective manner. This also assisted in bracketing the lead researcher in relation to their prior experience as detailed below.
Reflexivity and transparency

Given the reflective and interpretive nature of IPA, reflexivity is of significant importance. This places the researcher within the context of the study to ensure transparency as to whether the researcher has been influenced by their backgrounds in the collection, analysis, or interpretation of the data. As a trainee psychologist working within the recruitment catchment areas, the primary researcher has knowledge of potential participants as well as the context and services within which participants have worked throughout the COVID-19 pandemic. The researcher has indeed experienced a number of challenges in relation to the remote delivery of psychological therapies, whilst also holding reservation regarding the efficacy of remote therapeutic interventions for trauma. However, the researcher holds a position of openness and curiosity for the topic, therefore benefitting a point of research interest and opportunity for professional learning.

The researcher reflected on how these factors may have led to certain assumptions relating to the current study. The researcher may have assumed that participants prior experiences of remote intervention delivery were to some degree, critical or sceptical. This may have resulted in viewing certain aspects of remote trauma working as inevitably ‘negative’ in how questions were framed to participants. This may be further influenced by examples of challenges faced by health care workers in the context of COVID-19 (Liberati et al., 2021). The joint supervisory analysis of sample transcripts as noted in the previous section assisted in bracketing this assumption. Furthermore, the interview schedule was always framed as challenges ‘and / or’ opportunities in an open manner, allowing participants to interpret the questions in their own way. In addition, explorations or either challenges or opportunities were prompted further if one or the other naturally emerged in conversation. Throughout data analysis, the researcher was in fact surprised by how similar experiences were interpreted as a challenge by some participants and by contrast, an opportunity or positive experience for others – for example, the experience of ‘distance’ from clients in remote contexts. The researcher accounted for this divergence in the analysis of themes as detailed in later sections.

Impact and Importance

The context of COVID-19 is pertinent to the professional and personal experiences of participants in this study. As such, it is important that the findings generated from the study will also have some direct contribution to such participants. An interim report of the current findings will be generated and disseminated to participating and wider psychological services at a local level. In addition, an empirical paper will be developed for formal publication, as a means to contribute to the relevant evidence base and to provide wider, academic dissemination. Specifically, the resulting
publication can provide in-depth understanding of clinicians’ experience to compliment the ongoing evidence base relating to treatment efficacy.

**Ethics**

The study was granted ethical approval and sponsorship from the School of Health in Social Science Ethics Committee, University of Edinburgh as well as local NHS managerial approval via the Integrated Research Application System (IRAS). Please see appendix I-L for approval documentations.
Findings

The findings are initially illustrated by descriptive data relating to the larger survey cohort (N=29), followed by reports of the qualitative interview sample (N=8).

Questionnaire findings

As seen in table 2.1 below, participants in the larger study cohort held several different positions, with Clinical Associates in Applied Psychology (N = 12) and Clinical Psychologists (N = 11) making up the two majority groups. Participants were predominantly employed in Primary Care settings (N = 18), however there was also representation from secondary and specialist services. Years of qualified experience averaged just under eight years (M = 7.80), ranging from one to 20 years. In terms of trauma training, the most commonly informed approach was Trauma-Focused CBT (tfCBT; 86.21%), Safety and Stabilisation (58.62%), Survive and Thrive Group (24.14%) and Eye Movement Desensitisation and Reprocessing (EMDR; 20.69%). In addition, only a minority of participants (20.69%) cited some form of training across these approaches that were adapted for remote delivery. Please see Appendix H for a full breakdown of cited trauma intervention models.

Table 2.1:
*Total number (N) of participants represented by job title and service type at the time of data collection.*

<table>
<thead>
<tr>
<th>Job title</th>
<th>N</th>
<th>Service type</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Psychologist</td>
<td>11</td>
<td>Primary Care</td>
<td>18</td>
</tr>
<tr>
<td>Clinical Associate in Applied Psychology (CAAP)</td>
<td>12</td>
<td>Community Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>CBT Therapist</td>
<td>1</td>
<td>Primary Care / CMHT split</td>
<td>1</td>
</tr>
<tr>
<td>Counselling Psychologist</td>
<td>2</td>
<td>Eating Disorders</td>
<td>1</td>
</tr>
<tr>
<td>Consultant Clinical / Counselling Psychologist</td>
<td>2</td>
<td>Health Psychology / CMHT split</td>
<td>2</td>
</tr>
<tr>
<td>Psychologist – not specified</td>
<td>1</td>
<td>Substance use</td>
<td>1</td>
</tr>
</tbody>
</table>

As per the study methodology, ‘pre-COVID’ was defined within a month prior to March 2020, ‘peak’ was a subjective point of most challenging periods for clinicians during COVID-19, whilst ‘present’ was defined within the last month prior to data collection. As all data was collected between June and July 2021, this third time point has a degree of consistency across respondents. Figure 2.1 below displays a breakdown of self-reported COVID-19 ‘peak’ periods. The data shows a variation in reported peak periods, with 67.8% (N = 19) of participants indicating peak periods within the first two months of COVID-19 restrictions (March and or April 2020).
As seen in table 2.2 below, participants reported a significant majority (97.6%) of appointments were delivered face-to-face prior to COVID-19, with video and telephone appointments making up less than three percent in total. However, Peak COVID-19 rates illustrate an evident increase in telephone and video delivery alongside a substantial decrease in face-to-face delivery. Rates of video delivery remained similar at the present time point, whilst a decrease in telephone delivery has been evident alongside a returning increase of face-to-face appointments. In addition, there was an observable increase in the proportion of trauma cases across participants caseloads at present compared to pre-COVID-19 periods.

<table>
<thead>
<tr>
<th></th>
<th>Pre-COVID (%)</th>
<th>‘Peak’ (%)</th>
<th>Present (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face appointments</td>
<td>97.60</td>
<td>6.90</td>
<td>28.28</td>
</tr>
<tr>
<td>Video appointments</td>
<td>2.10</td>
<td>26.21</td>
<td>26.55</td>
</tr>
<tr>
<td>Telephone appointments</td>
<td>0.70</td>
<td>67.24</td>
<td>45.17</td>
</tr>
<tr>
<td>Trauma caseload</td>
<td>60.90</td>
<td>n/a</td>
<td>68.60</td>
</tr>
</tbody>
</table>

Figure 2.2 below illustrates self-reported confidence and competence amongst clinicians for each delivery format across the study time points. The data shows that a large majority of participants reported at least some or a significant degree of confidence (85.7%) and competence (92.8%) in delivering face to face therapy prior to COVID-19 restrictions. However, these rates showed a decrease during ‘peak’ COVID-19 periods, before subsequently increasing to figures similar to baseline levels.
at present. In relation to video delivery, a comparatively lower percentage of participants reported at least some or a significant degree of confidence (25%) and competence (35.7%) prior to COVID-19 restrictions. However, these figures gradually increased at ‘peak’ COVID-19 times, with further increases illustrated at the present time point. Similarly, in relation to telephone delivery, a low percentage of participants reported at least some degree of confidence (28%) and competence (32.1%) prior to COVID-19 restrictions, whilst these figures gradually increased at ‘peak’ COVID-19 times, with further increases illustrated at the present time point.

Figure 2.2
Stacked bar charts of clinician’s self-reported confidence and competence

![Stacked bar charts](image)

Note: Levels of confidence (a-c) and competence (d-f) in delivering face-to-face, video and telephone therapy across the COVID-19 time points.

Qualitative interview findings

Table 2.3 below displays sample characteristics of participating interviewees with assigned pseudonyms. Participants had varying years of experience, job titles and service types. The most common form of trained trauma intervention was trauma-focused CBT (tfCBT), as well as ‘phase one’ one-to-one (Safety and Stabilisation) and group (Survive and Thrive) interventions.
<table>
<thead>
<tr>
<th>Name</th>
<th>Years of qualified experience</th>
<th>Job Title</th>
<th>Service type</th>
<th>Trauma training</th>
<th>Trauma caseload</th>
<th>Interview length (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Paul’</td>
<td>4</td>
<td>Clinical Associate in Applied Psychology</td>
<td>Primary Care</td>
<td>tfCBT, Survive &amp; Thrive</td>
<td>40%</td>
<td>81</td>
</tr>
<tr>
<td>‘Ruth’</td>
<td>8</td>
<td>Clinical Psychologist</td>
<td>Community Mental Health / Inpatient</td>
<td>tfCBT, Exposure, DBT, Safety and Stabilisation</td>
<td>60%</td>
<td>57</td>
</tr>
<tr>
<td>‘Jane’</td>
<td>5</td>
<td>Clinical Psychologist</td>
<td>Community Mental Health</td>
<td>tfCBT, EMDR, Safety and Stabilisation, Survive &amp; Thrive</td>
<td>90%</td>
<td>57</td>
</tr>
<tr>
<td>‘Lisa’</td>
<td>2</td>
<td>Counselling Psychologist</td>
<td>Primary Care</td>
<td>tfCBT, Safety and Stabilisation</td>
<td>60%</td>
<td>56</td>
</tr>
<tr>
<td>‘Claire’</td>
<td>20</td>
<td>Consultant Psychologist</td>
<td>Primary Care / Community Mental Health</td>
<td>tfCBT, Safety and Stabilisation, EMDR</td>
<td>80%</td>
<td>58</td>
</tr>
<tr>
<td>‘Alex’</td>
<td>6</td>
<td>Counselling Psychologist</td>
<td>Substance Misuse</td>
<td>tfCBT, EMDR, Schema Therapy</td>
<td>95%</td>
<td>48</td>
</tr>
<tr>
<td>‘John’</td>
<td>10</td>
<td>Clinical Associate in Applied Psychology</td>
<td>Primary Care</td>
<td>tfCBT, Survive &amp; Thrive</td>
<td>50%</td>
<td>71</td>
</tr>
<tr>
<td>‘Sam’</td>
<td>3</td>
<td>Clinical Psychologist</td>
<td>Community Mental Health</td>
<td>tfCBT, Safety and Stabilisation</td>
<td>70%</td>
<td>46</td>
</tr>
</tbody>
</table>

Data analysis produced four superordinate themes: 1) Progressing the trauma treatment journey; 2) Building a Therapeutic Relationship Remotely; 3) Learning over time, and 4) Creating change in how we work. Each theme was further divided into respective subordinate themes as displayed in Table 2.4 below, along with the frequency of occurrence for each as per this study’s methodological guidelines.
Table 2.4

**Breakdown of Superordinate and respective Subordinate themes with frequency of occurrences.**

<table>
<thead>
<tr>
<th>Superordinate theme</th>
<th>Subordinate themes</th>
<th>No. of occurrences</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Progressing the trauma treatment journey</td>
<td>Fears of ‘unsafe’ processing work</td>
<td>7/8</td>
<td>87.5%</td>
</tr>
<tr>
<td></td>
<td>‘Distance’, confidence, and control</td>
<td>8/8</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>‘Working harder’ in therapy</td>
<td>7/8</td>
<td>87.5%</td>
</tr>
<tr>
<td>2. Building a therapeutic relationship remotely</td>
<td>Laying foundations for trauma working</td>
<td>6/8</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Sharing experience with clients</td>
<td>4/8</td>
<td>50%</td>
</tr>
<tr>
<td>3. Learning over time</td>
<td>‘Holding’ due to uncertainty</td>
<td>5/8</td>
<td>62.5%</td>
</tr>
<tr>
<td></td>
<td>Accepting the reality of COVID-19</td>
<td>6/8</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Challenging assumptions</td>
<td>7/8</td>
<td>87.5%</td>
</tr>
<tr>
<td>4. Creating change in how we work</td>
<td>Bringing choice and access to clients</td>
<td>8/8</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Being limited by service context</td>
<td>4/8</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Theme 1: Progressing the trauma treatment journey**

Clinicians described experiences of moving trauma cases to later or more intensive stages of treatment. Both internal and external processes appeared to contribute to the challenges clinicians faced in deciding to progress individual trauma-focused cases.

**Fears of ‘unsafe’ processing work**

The majority of clinicians reported apprehension around facilitating trauma ‘processing’ via remote methods. Clinicians often experienced concern for their clients, whereby they were invited to engage in processing work from their own homes. Both Lisa and Ruth reflected on this in relation to the presence of others in the home:

Obviously you cannot do in-depth trauma work when there is a baby in the other room, but new mothers struggle to get childcare. You can still do some safety and stabilisation with them if their baby is gone for a nap. (Lisa)

Lisa’s account suggests a ‘certainty’ of not engaging in processing work when a vulnerable younger person is in close proximity, thus limiting input to ‘phase one’ trauma working. There is also an important reference to childcare, highlighting the potential limitations experienced by clients with regard to COVID-19 restrictions. Ruth, on the other hand reflected a sense of caution in trying to manage confidentiality “I was a bit worried about confidentiality at times … when they would say “oh
there is my son or my husband or”… I found that difficult knowing that.” Ruth’s account may allude to the ‘informality’ of the home environment, resulting in a reduced awareness of clients regarding confidentiality, ultimately leaving the clinician to hold this in mind. Paul’s experience extends this by considering what is ‘required’ of clients to engage with this work:

It felt it was a huge amount to ask and if they were open to it, it would be something that would warrant a great deal of discussion, planning and consideration … You know, asking someone to do exposure work in their own homes… and potentially contaminating that space. (Paul)

Paul’s language here “a huge amount to ask” suggests his perception of the potential weight or pressure placed on clients to engage in this form and phase of treatment. The use of “contamination” also illustrates the potential consequences of this work taking place remotely, perhaps diminishing the safety clients feel in their homes. A final aspect of this fear related to managing moments of distress during the processing work itself:

This is where my inexperience I suppose is knowing when I would go “Okay, let’s think about grounding. I can see you’re becoming [distressed], by your narrative now”... I think reading what my involvement should be is partially my lack of experience, but also getting to know a different medium of doing it … like where I go from here and how I contain that. (Sam)

Sam’s reflection suggests both a lack of clinical experience and an unfamiliarity of remote therapy contributed to this uncertainty of getting things ‘right’ as a clinician in response to someone becoming distressed. A final interpretation here relates to a wider reflection of this sub theme. Whilst many of these quotes focus on the impact on ‘clients’, there is also a shared ‘responsibility’ held by clinicians. This sense of responsibility may have further contributed to this uncertainty regarding the remote processing of traumatic experiences, regardless of whether such circumstances were within clinician’s control (their therapeutic response), or not (home environments of clients).

**Distance, confidence, and control**

The majority of clinicians also reflected on their own confidence and control, with these experiences relating to some sense of ‘distance’ created by remote contexts. Drawing from the theme of ‘unsafe processing’ discussed previously, Claire’s account considers the role of personal control when managing distress of clients:

I think it is just the number of unknowns. In a room I feel I have more control. That might be artificial. But I feel, if the person becomes really distressed I can manage that directly whereas if it is remote, I feel there is a disconnect. (Claire)
Claire’s use of “unknowns” here may link this experience of reduced control with a sense of unfamiliarity. Whilst acknowledging that this may not be a ‘practical’ reality, it appears even a greater ‘felt sense’ of control provided by face-to-face contexts can enable them to feel more familiar and prepared to manage instances of dysregulation with their clients. Whilst also alluding to this ‘distance’, Lisa’s account adds the internal dialogue that may set in as a result:

It felt like how am I going to be able to be as effective as a therapist? There are loads and loads of self-doubts going about - I have never done this over the phone, what if I can't see their face, what if I can't judge them. You know there is some elements to that where I can't use my body language to convey emotions. (Lisa)

Lisa experienced self-doubt regarding their ability as a therapist, as suggested by the use of almost ruminative-style questioning. This appears to have been driven by both inexperience as well as a sense of reduced control and limited input resulting from the removal of non-verbal cues. Lisa’s consideration for non-verbal cues is extended further later on when considering its implications on specific trauma work:

I have found because you can't see their face...and because you can't use your body language, it is very difficult to do those more intense processing things over the phone. So if i am doing things over the phone it tends to be more safety and stabilisation … but if I am wanting to do something more intense, say exposure. It tends to benefit a lot from the video. (Lisa)

Lisa’s experience suggests the ‘level’ of trauma work carried out was dependent on which remote platform was utilised. More specifically, the use of video most closely replicates the conditions (i.e. verbal cues) that are fundamental to face-to-face contact, thus enabling more intensive trauma working compared to telephone methods. Other clinicians related this ‘distance’ in the context of specific models, such as reflections provided by Jane:

Part of that is probably my confidence in delivering it remotely …I work predominantly with EMDR, bilateral hand stimulation is seen to be the most effective using eye movement. So I would become quite nervous if there was a glitch in the PC or it cuts out. (Jane)

Given Jane’s strong affiliation with EMDR, there is an understandable apprehension as to whether the mechanisms used in EMDR can be replicated in a remote context, whilst also alluding to a sense of reliance on the stability of technology. Jane’s confidence may therefore be impacted by this reduction in control of the mechanisms used for this intervention.

*Working ‘harder’ remotely*
All clinicians reported some sense of ‘doing more’ in remote contexts to replicate face-to-face conditions. Ruth reflected on this with regard to session input:

I thought I talked too much compared to face to face because I felt I took more responsibility for the agenda in the session … I felt maybe that need to help the person out. So I would come away and beat myself up after some sessions. (Ruth)

Ruth appears critical of her session management, feeling they were imbalanced towards the clinician’s input. Ruth alludes to a ‘need’ to work harder, driven by this sense of responsibility as mentioned previously. Jane extended this focus on clinician ‘input’ by considering visual communication:

I think there are certain things you have to do which I hadn't appreciated. So you have to look into the camera which is actually above you. To kind of show that you are making eye contact. Whereas I don't look up there naturally, I would look at the screen which actually looks like you are looking down, which makes you look uninterested, possibly. (Jane)

Jane reflects on specific considerations for visual cues, resulting in an increased attention towards the nuances of visual contact when working via video format. Jane considers the possible repercussions of clients not feeling attended towards as a result. Interestingly, this increased attention in remote contexts was also associated with comparatively positive experiences of engagement in Paul’s case:

I guess when you are just on a telephone call it takes some of that burden off you as a clinician. You can just focus on the words more - words, tone. that kind of thing. I guess my experience is that that has freed up some, band-with mentally. (Paul)

Paul’s experience reflects an opportunity to ‘work harder’ with regard to verbal cues, which resulted from the removal of non-verbal cues. This is a notably positive interpretation of telephone delivery compared to Lisa’s experience in the previous section. This contrast in experience also occurred in relation to rapport building for both Sam and John:

I felt there was something about the process took longer of assessment and formulation and therefore getting onto therapy … I wonder if it was about the person's safety and trust in me because we didn't have an established relationship, so they were getting to know me as a 2D screen. (Sam)

Sam’s reflection on ‘working harder’ here relates to increased time within treatment stages. Sam considered whether this was driven by a delayed rapport building and subsequently a client’s sense of trust. The perceived ‘distance’ is demonstrated by an almost dehumanising description of remote
rapport building over a “2D screen”. In contrast, John described experiences whereby clients were more forthcoming with regards to trauma-related disclosures in remote appointments:

Talking about trauma as well as other cases in that context. It may be that actually there are embarrassing elements of that experience, or like the idea that you're gonna be talking to this abstract voice in your head means that someone may be more willing to tell you the detail of an experience than if you had been face-to-face. (John)

Rather than viewing it in a dehumanising way, John wondered whether viewing the clinician in a more abstract form in remote contexts may have actually enabled greater comfort and willingness of clients to share distressing experiences with their clinicians. There is consideration for perhaps working ‘less’ with regard to client disclosure due to this removal of visual contact. Consideration for therapeutic rapport building was seen in many more experiences across clinicians.

**Theme 2: Building a therapeutic relationship remotely**

There were many organic discussions around the importance of the therapeutic relationship in clinical practice.

**A shared normalising with clients**

Half of the clinicians reflected on using shared experiences of remote working within the therapeutic relationship. Sam’s experiences of normalising the unfamiliarity associated with remote working presented as an opportunity for rapport building with one client: “The other bit is that me and her were trying to work it out together because she was one of my first cases to do remote working with and she was not tech savvy so we had quite a giggle.” On a therapeutic level, Sam’s account illustrates the combination of using humour and light-heartedness alongside problem-solving in relation to technological difficulties. For other clinicians, this normalising around technological working was experienced at a more personal level. Ruth detailed her own journey through the anxiety of remote working as a means to demonstrate the therapeutic concept of exposure:

So say you are trying to expose them to go to the supermarket or something. I will share with them that I was terrified of video therapy and was really scared the first time - but with repeated exposure…[it gets better, implied], so it’s quite a self-disclosure but I will use that. (Ruth)

The strong language of “terrified” and “really scared” illustrates the extent of this anxiety towards delivering video therapy. Ruth’s decision to use such a disclosure seemed to have had a dual purpose; normalising of uncertainty for the client as well as providing a rationale that would be relevant for exposure-based treatment. Other clinicians developed this further, reflecting on the opportunity to
provide greater honesty to clients. For Alex, this was seen as an important factor in how they themselves were viewed by clients on the other side:

I think the therapeutic relationship and having that kind of transparency is really helpful because it allows people to open up in and trust you and see you more as a human rather than this kind of psychologist that is there to fix them. (Alex)

Alex experiences suggest that modelling of “transparency” allowed this to be reciprocated by clients becoming more trustworthy in their therapeutic encounters. In addition, this shared unfamiliarity of remote working appears to have resulted in a ‘breaking down’ of power dynamics, allowing clinicians and clients to foster stronger therapeutic relationships, as well as to perhaps challenge a preconceived notion of simply being “fixed” in therapy.

A foundation for trauma processing

As well as noting the experience of building this relationship remotely, half the clinicians also discussed the importance of the therapeutic relationship with regard to the progression of trauma treatment:

I think as long as you have a strong therapeutic relationship and you work at the pace of the client and then I think that you know doing trauma work in any kind of form is helpful. As long as you've kind of got those kind of lower intensity and safety and stabilisation techniques down. (Alex)

Alex’s account suggests that this foundational therapeutic relationship works alongside both the fundamental, phase-one working, whilst also emphasising that such foundations need to be both “strong” and centred around the client. Ruth’s experience held a similar perspective, however accounted for this specifically in relation to trauma processing: “I would say in terms of the nuts and bolts of the actual trauma processing work - I would say it was pretty much the same.” Other accounts shed light on ‘why’ this relationship was so foundational. Sam described the familiarity and safety which resulted from having this foundational relationship, which in turn instilled greater confidence in managing challenges during trauma processing, perhaps suggesting a way of mitigating this challenge which was noted in the previous theme: “We had an established therapeutic relationship, so I felt like I knew them. I know them well enough to pick up this sense of if she wasn't coping … it gave me more confidence in using that medium.” Sam’s account is concluded with direct feedback from clients themselves regarding the importance of this relationship when delivering therapy remotely. This quote adds valuable insight from clients’ perspectives, who viewed the therapeutic relationship as the key mechanism of change in progressing trauma treatment. “I asked them what was it do you think that helps shift? And a few of them said, we wouldn't have got there had we not had that relationship.”
However, a key aspect that often emerged was the context in which therapeutic relationships are established. It is worth considering that Sam’s experience above was in the context of a client with whom a therapeutic relationship was formed face-to-face. Claire’s account argues the case for this to be an essential element of rapport building:

We tried to do EMDR online. Moving it [hand on screen] and she was following. That felt okay to try because we had established a relationship face-to-face. I would never do that (online) as a starting point, but it felt we had enough there. (Claire)

Whilst Claire’s experience here with using EMDR online was positively informed by the therapeutic relationship, there is an ‘certainty’ that this relationship had to be formed in a familiar, face-to-face context. Whilst there is a shared experience amongst clinicians of using therapeutic relationships as the foundation for trauma working, whether such foundations can be established using only remote means was not a universal opinion.

Theme 3: Learning over time

Participants described how their approach to clinical work changed over the time and context of COVID-19. Clinicians reflected on these changes in relation to their approach to work, their clients, and their services.

‘Holding’ due to uncertainty

The majority of participants identified with a sense of uncertainty in terms of their approach to therapeutic work in the early stages of COVID-19 restrictions. This uncertainty appears to have been shared collectively by clinicians and the wider services they worked in, as noted in Jane’s account “We didn’t really know what was happening.” Claire’s account reflected this collective sense as well as clinicians’ responses to this:

It felt the whole world had this big pause button; our role then became (pause) more of a kind of ‘holding’. Just trying to keep folk, 'hanging on' without slipping too much. So trying not to do anything too much forward. (Claire)

The language here “big pause button” suggests a sense of slowed progress amongst clinicians. Furthermore, the resulting actions described by Claire “hanging on” and Alex “put this a little on the back burner for now,” suggests that this change in therapeutic roles in the early stages of COVID-19 often focused on containing or doing the ‘minimum’ therapeutically rather than progressing treatment. Furthermore, this experience also raised questions around how useful clinicians felt in this new position. Lisa reflected on this in the context of providing additional or extended support by remote means:
I don’t know how much help that was in the long run. And I think a lot of those extensions were just containing stuff because the pandemic threw a wrench in everyone’s life. So yea it wasn't for progress it was just sort of, providing a holding space. (Lisa)

Lisa’s similar experience of ‘holding’ also suggests that whilst there was a capacity to provide some form of input via remote means, the nature and benefits of that input was at times unclear. This experience is developed further in cases where clinicians felt a resulting pressure from working in this way. Clinicians also experienced an assumption of returning to normality in the near future. Ruth described this in the context of early trauma working:

We thought it would be a few weeks and we would be back to normal. I had people saying, ‘Oh I don't want this on video’ - and that was a bit anxiety provoking for the waiting list because you had to just sit with safety and stabilisation. (Ruth)

Ruth’s account indicates an assumption of returning to normality in the near future. As a partial reason for engaging in this more limited form of input. It also appears that such assumptions were shared by patients as reflected in their decisions to ‘hold off’ from engaging in remote therapy. However, Ruth’s account illustrates a knock-on effect of this limited input at a service level, whereby clinicians experienced a sense of pressure as many patients remained waiting to be seen.

**Accepting the reality of COVID-19**

With these examples of uncertainty, service pressure and the longevity of COVID-19, clinicians identified with moving towards a position of realisation and acceptance. Over time, a number of clinicians such as Paul experienced a sense of frustration, “this is ridiculous now, let’s just give it a go” and perhaps desperation as noted by Claire: “to hell with this, we just have to do something.” Alex’s account adds to this by demonstrating how this accepting of reality was perhaps the catalyst to consider how best to move forward: “We realised that it wasn't going away [laughter] and we needed to just kind of go for it and give whatever kind of a form of kind of communication we could provide.” Alex’s use of humour could be interpreted as a reflection on how ‘obvious’ the longevity of COVID-19 eventually became, whilst also reflecting on the delayed realisation of this longevity. This move towards acceptance was also seen amongst client groups. Lisa noted how a greater acceptance toward remote delivery from clients allowed her to feel more able to move forward:

The reality of COVID … the more they [clients] got used to it, they actually then became more amenable to starting and talking and I got to a point where I said to them look we are not going to get face-to-face here, for potentially, a long time. So, either get re referred, postpone or we try and do the work. (Lisa)
Through this learning, clinicians also reflected on how this original uncertainty was applicable to their wider clinical judgement. Claire reflected on this in the context of trauma working specifically. As such, COVID-19 could instead be seen as an opportunity to challenge that uncertainty:

People are quite wary of that ‘when’ with trauma work and I think clinicians can feed into that in terms of when people are ready... We might use that to avoid doing what is difficult … and I think that was almost emphasised over lockdown. We can keep doing this avoidance but if it is safe enough, there's aspects of lockdown we can use to our advantage. (Claire)

Claire’s account suggests that an avoidance towards trauma working that is inherently present in clinicians. As such, clinicians’ hesitancy to progress trauma treatment as demonstrated in the fears around ‘unsafe’ processing discussed earlier may not be driven purely by COVID-19 and remote therapy delivery. As a result, COVID-19 conditions could be seen as a place of opportunity rather than limitation.

**Challenging assumptions**

Following this experience of greater acceptance, clinicians described becoming more embracing of telephone and video delivery as a viable option; seeing what can still be achieved in remote contexts despite previously held beliefs. John reflected on this with regards to establishing a therapeutic relationship:

Part of me has definitely been a little bit shocked by how willing someone is just, tell you whatever you ask them about in an hour-long appointment. That's not unusual for face to face. But I wasn't quite sure that it would translate to telephone. (John)

John’ use of “shocked” here may illustrate the extent to which his previous assumption around rapport building was challenged. In this case, John uses client disclosure as a key marker for rapport building, perhaps highlighting the honesty and trust some clients could feel even within an interaction over the telephone. John’s experience is of particular contrast to Claire’s early assumptions examined in theme 2, suggesting this trauma-related rapport building had to take place predominantly in a face-to-face setting. terms of ‘applying’ these challenged assumptions, Lisa noted being able to embrace remote options even if some apprehension over its limitations remained: “My previous assumption was that you cannot do effective therapy over the phone...you definitely can! You might be limited with the scope but you can definitely do it”. Other accounts developed this attitude change by highlighting how challenging such assumptions drew from various experiences in the process, as reflected by Alex:

Getting over my own personal apprehensions of doing work online and that's been a bit scary at times. And actually, it's just been a case of getting into it and I think doing some webinars
around working remotely, talking about in supervision and talking about it with your colleagues. (Alex)

Alex noted the internal process of overcoming anxieties associated with remote working, as well as external processes such as drawing from resources and advice from colleagues. This could suggest that engaging more proactively in this way may have helped reduce the apprehension towards intensive trauma working explored previously.

Cases where clinicians rationalised their previous assumptions around remote working provided further insight into this change over time. Sam described the lack of safety and stability associated with remote delivery as a key factor for not wanting to work remotely in the context of trauma: “My view would have been no chance … and I particularly wouldn't have advocated it for trauma work because at that point I probably wouldn't have trusted the stability of remote working. The safety of remote working.” Sam’s language reflects a very definitive position “no chance” in these early stages. In contrast, Sam’s later reflections highlighted how familiarity and experience of remote working enabled a greater ‘trust’ in remote platforms, whilst also acknowledging the need to build this trust over time: “I think we've also got access and knowledge of the platforms that works, so you know, we know MS teams. We know these platforms work and actually it took a lot for us as clinicians to trust it.”

Theme 4: Creating change in how we work

A final theme emerging from the data discusses the impact of COVID-19 and remote delivery on the ability of clinicians to change and broaden their methods therapeutic working. Many of these examples compliment the previous theme explored, whereby changing the ways of operating clinically emerged over time and often as a result of challenging previously held assumptions.

*Increasing access and choice*

Clinicians considered the additional opportunities they were able to provide clients using remote delivery. For example, the majority of clinicians noted the benefits of increasing access to psychological treatment as a result: “it’ll probably be helpful for people who live in rural communities who are going to struggle to come into town.” Here, Alex considers the benefit for clients who live further away from ‘physical’ services, whilst also highlighting the potential “struggle” clients who are required to make such journeys. Claire shared a specific experience of this, demonstrating the clear difference in time constraints depending on which delivery format is used:
We had a follow up face to face then a twenty-minute phone call. It had been going really well, the progress had been sustained. And for him that was twenty minutes rather than two and a half three hours out of his afternoon. (Claire)

Considerations for accessibility was also viewed beyond physical location or geography. Lisa provides an important extension here by broadening the definition of ‘accessibility’ to consider access barriers that are more personal to each person: “Being more ready to work with patients over video or phone. If they feel they need it. Because as I mentioned they may have disabilities, social factors, might be someone who can’t afford the bus.” Whilst considering the benefits of widening accessibility, other clinicians expanded by reflecting on the impact this may have on the overall care of the client. Sam advocated for having a variety of treatment options to allow the clients’ needs to be placed first: “We should be giving patients a choice rather than assuming we know what they need.” Sam provides an important insight here in relation to patient choice, reflecting that having limited treatment options results in an assumption from services in terms of what is best for clients. Whilst speaking from a practical level earlier, Alex also reflected on this at both a personal and service-wide level:

It just offers a menu of treatment options for clients and one size doesn't fit all. And you know as a clinician who's trying to be person-centred and as [named locality], obviously, are trying to help individuals access treatment in any way that they possibly can. (Alex)

The phrasing here aptly summarises the person-centred approach to mental health care, whereby “one size doesn’t fit all” and should ultimately be adapted for each person’s needs. Alex’s experience also suggests being able to ‘provide’ these treatment options allows both clinicians and services to be more grounded in a person-centred approach to their work. This may also suggest that limited consideration for the person-centred approach was perhaps an inherent part of face-to-face ‘only’ services in the past. A further reflection can be seen in Ruth’s experience below, who recalls an application of this in the context of trauma working:

I actually spoke to him on the phone a lot and then he came in for the last two or three and that worked out perfect. Really powerful - wrote the letter with all these feelings summed up everything we talked about in therapy and that was ....closure. (Ruth)

Ruth’s account provides a good example of offering both face-to-face and remote means throughout trauma working and how being able to provide this variety allowed for the most appropriate and meaningful therapeutic process for this client’s trauma recovery. This ‘broadening’ of approaches to treatment delivery was therefore considered at multiple levels; increasing initial access, considering clients’ needs and facilitating therapeutic change.

Being limited by service context
Despite various positive opportunities of remote delivery outlined above, a number of clinicians considered the limitations of their own service and the impact this had on delivering remote-based treatment. Lisa noted some examples of limited access to technology:

There was a bit of a delay for us to get readily accessed to video. We only got cameras in all the clinic rooms in [month] of this year. We had two machines for the entire department, it had to be booked a few weeks in advance and it could be a nightmare. (Lisa)

The vivid language here “only had”, “nightmare” illustrates the extent of how stretched these technological resources were and how challenging this period was for clinicians to navigate. The overall interpretation here suggests that any benefits of remote delivery were reduced when services did not have the appropriate resources in place. Other clinicians described the limitations of remote delivery in relation to specific client populations. Alex’s experience of working in substance use services is of particular relevance: “We work with quite a deprived population who maybe don't have access to Internet. Or they may have had a smartphone, but not necessarily have the money to access Internet to be able to do this work.” Alex makes an important reference here to digital poverty, whereby client groups with limited financial resources were at a disadvantage. Whilst provisions may be in place from ‘services’, clients may not be able to access and engage due to the financial resources needed to access the appropriate technology. Alex further illustrates these limitations in their experience of the delivering trauma-specific treatment:

From a service point of view, we didn't have the structure… To be able to confidently deliver trauma work over the Internet. Because our offices, there's a lot of hot desking going on. We don't actually have Wi-Fi. We didn't have headsets; we didn't have webcams. (Alex)

Whilst experiencing limited technology resources similarly to Lisa, Alex’s reflections consider a further impact whereby clinicians and services did not feel confident in delivering trauma interventions due to a reliance on having the appropriate technology. Alex’s overall experience here reflects possible limitations on either the ‘providing’ or ‘receiving’ ends created by a dependence on technology to delivery remote treatment. A final consideration for service ‘limits’ was considered at a wider, more historical level, as detailed by Claire here:

The only way we get shift is when it is radical, otherwise we just tiptoe around it. And none of us are really that…brave...And I think also we just don’t have that headspace to think creatively and do differently. You hit a barrier then you stop and go back … we are always learning, aren’t we? (Claire)

Claire’s experience considered the overall ‘attitude’ of services towards how psychological treatment is delivered. This account suggests a sense of hesitancy or lack of initiative “we just tiptoe around it” from services to bring meaningful change or “shift” at a service level, whilst also
acknowledging that services are not necessarily set up to allow clinicians to consider these changes. Claire’s belief that conditions need to be quite significant for change to occur suggests that COVID-19 may have presented this “radical” opportunity, which aligns with Claire’s previously noted experience of using COVID-19 “to our advantage”. The end question is quite rhetorical, suggesting the hesitancy and learning in the face of new experiences is both relatable, and perhaps inevitable in the provision of mental healthcare, adding further validity to the experiences of ‘uncertainty’ in the early stages of COVID-19. Figure 2.3 below provides a mapping of themes included in this section.
Figure 2.3

Mapping of qualitative themes

LEARNING OVER TIME

- ‘Holding’ due to uncertainty
- Accepting the reality of COVID

BUILDING A THERAPEUTIC RELATIONSHIP REMOTELY

- Laying foundations for trauma working
- Working “harder” in therapy
- Anxiety towards trauma processing
- Fear of destabilising
- ‘Distance’, confidence, and control
- Holding responsibility
- Contaminating safe place

PROGRESSING THE TRAUMA TREATMENT JOURNEY

CREATING CHANGE IN HOW WE WORK

- Being limited by service context
- Bringing choice and access to clients

WORKING WITH TRAUMA DURING COVID-19

- Being ‘human’
- Sharing the experience with clients
- Challenging assumptions

WORKING HARDER IN THERAPY

- Anxiety towards trauma processing
- ‘Distance’, confidence, and control
- Holding responsibility
- Contaminating safe place
- Fear of destabilising

LEARNING OVER TIME

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- Sharing the experience with clients
- Challenging assumptions

WORKING HARDER IN THERAPY

- Anxiety towards trauma processing
- ‘Distance’, confidence, and control
- Holding responsibility
- Contaminating safe place
- Fear of destabilising

LEARNING OVER TIME

- ‘Holding’ due to uncertainty
- Accepting the reality of COVID

BUILDING A THERAPEUTIC RELATIONSHIP REMOTELY

- Laying foundations for trauma working
- Working “harder” in therapy
- Anxiety towards trauma processing
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- Being limited by service context
- Bringing choice and access to clients

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- Being ‘human’
- Sharing the experience with clients
- Challenging assumptions
Discussion

The current paper utilised a qualitative inquiry as well as questionnaire characteristics to explore clinicians’ experiences of adapting to working with trauma using remote interventions throughout COVID-19.

Evaluation of main findings

A core part of clinician’s experiences was how they navigated the trauma treatment journey with their clients in a remote context. The main apprehensions clinicians had related to fears of dysregulating clients or contaminating the safe spaces of clients’ homes. This may suggest that certain aspects of remote working and indeed remote ‘living’ are not conducive to certain elements of trauma treatment. However, it is worth noting that such apprehensions are not dissimilar from those reported by clinicians when working with trauma in face-to-face contexts (Beidas & Kendall, 2010; Ruzek et al., 2014). As such, it is unclear whether these apprehensions are unique to remote working or are in fact an exacerbation of longstanding anxieties that many clinicians possess in relation to trauma working, regardless of the treatment format / platform.

Clinicians also reported a general sense of ‘distance’ resulting from remote interventions, which related to experiences of reduced control and increased self-doubt. The importance of control here may relate to the nuances of therapeutic power dynamics. Whilst there is a drive to address such dynamics within mental healthcare (Johnstone, 2018), these experiences may demonstrate the appeal of maintaining this power, particularly when it provides greater control and confidence for clinicians. Furthermore, there was a general sense of responsibility amongst clinicians in navigating the difficulties of remote trauma working in the interest of their clients. One could view this in as a form of moral injury, whereby clinicians may feel unable to do the best for their clients due to the challenges and unfamiliarity of remote working (Greenberg et al., 2020). Furthermore, there was also reference to the ‘levels’ of distant working, whereby engaging in trauma-focused work was more manageable via video compared to telephone platforms. This aligns with previous COVID-19 clinical research which suggested the challenges of face-to-face replicability were mitigated by this ‘level’ of remote intervention working (Liberati et al., 2021). The combination of these findings suggest that remote intervention models may be best applied within a ‘stepped care’ approach, whereby the format of remote delivery can change depending on the presenting needs, which would add specificity to this model of remote intervention endorsed at a national level (Scottish Government, 2022).

However, it is also worth noting the divergence of participants who saw ‘opportunity’ resulting from this distance and the need to ‘work harder’. For example, the more abstract presence of a ‘remote’ therapist appears to have enabled greater comfort amongst some clients in relation to disclosures of traumatic events. This may represent a removal of formality or power dynamics within remote
interactions which can result in a greater sense of trust that is essential to enhancing the therapeutic relationship (Audet & Everall, 2010). Furthermore, this ‘increase’ of verbal engagement has been associated with clients who are subsequently more engaged in therapeutic treatment, so long as such verbal communications are informative and do not collude with anxiety (Huang et al., 2013). This would suggest that increasing verbal engagements which may occur in remote contexts can be useful so long as they are well-informed and do not mirror a sense of uncertainty.

There was a significant emphasis placed on the therapeutic relationship and its role in clinicians adapting to remote trauma treatment. Firstly, the importance of this relationship emerged through the shared experience of COVID-19 between clinicians and their clients. Examples of this included naming anxieties and confusion with regard to remote delivery, as well as using intentional self-disclosure to explain treatment concepts. In both examples, there was an inherent sense of ‘humanity’ and reduction of power dynamics due to clinicians being willing to share their personal experiences with clients. The importance of this has been cited in previous phenomenological research from the perspective of client’s, whereby differing forms and levels of self-disclosure from clinicians can enable clients to feel more balanced and equal in the early stages of this rapport building (Audet & Everall, 2010). The current study therefore highlights the ability for the therapist to make use of such disclosures even in remote contexts.

Secondly, its importance was further highlighted in clinicians’ experiences as a key mechanism of trauma-specific treatment progress in remote contexts, thus adding further support for its importance across trauma working as cited previously (Kliethermes et al., 2014). Specifically, many clinicians highlighted how the therapeutic relationship provided the foundations from which remote trauma working could be facilitated, perhaps mitigating some of the concerns raised in the 'Processing the Trauma Treatment Journey' theme. Interestingly, this is perhaps a contrast to previous research findings suggesting that the relationship does not have an inherent impact on remote trauma working (Norwood et al., 2018). However, it is worth noting that this previous evidence specifically addresses the role of the relationship in trauma symptom reduction, which is not observable in the current study. Regardless of its association with treatment outcome, the current findings pose the question of what or ‘who’ this therapeutic relationship is for - whether the intent of utilising this relationship is as a key mechanism of change for the client, and or to reduce anxiety and concerns and thus increase confidence for the clinician. Whilst this answer is perhaps unclear, the current findings demonstrate that clinicians do experience a positive replicability of the therapeutic relationship in remote interventions, adding to existing quantitative review evidence supporting this replicability (Sucala et al., 2012).

Furthermore, despite these positive experiences, it is also worth considering that some participants did note some challenges, notably in relation to the absence of visual cues and a general ‘slowness’ of rapport building via remote formats. Interestingly, these findings support recent systemic
review analysis, which did note some experiences of delayed effectiveness of both rapport building and treatment effectiveness (Adams, n.d.). Once again, this raises the question as to whether such ‘challenges’ pertain to treatment outcome for clients or more so the personal experience of the clinician in their role. This is of course made more unclear given that client perspectives were not collected for the current study. Regardless, whilst remote therapy can positively replicate the therapeutic relationship, trainers and service providers should consider any potential barriers presented by remote working (i.e. absence of certain cues, technology quality, delayed effect) and how to address this to sufficiently develop and make use of the therapeutic relationship.

Whether it was challenges or opportunities, clinicians’ experience and perspective on remote interventions appeared to change over time throughout the pandemic. It is worth considering that this initial uncertainty and ‘holding’ of interventions was an understandable position for clinicians’ as it was reflective of the uncertainty and assumed temporary nature of COVID-19 in its early stages, combined with a lack of familiarity for remote modalities (Koffman et al., 2020). This could have further contributed to clinicians’ hesitancy to move towards more intensive trauma working, as indicated by references to ‘phase one’ specific work only, whilst also exacerbating pre-existing anxieties regarding the progression towards intensive trauma working as discussed previously. Despite these apprehensions, the finding’s showed clinicians were generally able to challenge these uncertainties and assumptions over time, resulting in greater replicability and perceived efficacy of remote forms of intervention. Given that job satisfaction and performance is associated with one’s perceived quality in the work they provide (Berta et al., 2018), clinicians’ familiarity and adjustment to remote working may have also improved the quality of interventions over time. This may have placed clinicians in a stronger position to challenge their previous assumptions, given that the ‘evidence’ to support these challenges were ever-increasing.

A final theme was clinicians’ perspectives on how remote working could extend and change the way in which therapists and services provide care. There were numerous acknowledgements of how remote therapy increased accessibility for client groups, which is a key driver behind national guidelines for digital health treatment options (Scottish Government, 2022). It is well documented that client groups can be prevented from accessing mental health services based on various internal and external barriers (Andrade et al., 2014), some of which may be mitigated by such remote intervention options. Moreover, having this ‘choice’ of remote delivery appears to enable a more individualised approach, focusing on one’s context and experience rather than their prescribed illness, both of which are key principles of person-centred (Smith & Williams, 2016) and trauma-informed care (Reeves, 2015). In relation to previous research, this openness and flexibility towards remote therapy aligns with previous clinician studies (Liberati et al., 2021), whilst also highlighting opportunities resulting from COVID-19, whereby service can seek to endorse a broader, more hybrid approach to mental healthcare delivery.
Future service provision and evaluation of treatment efficacy could therefore use face-to-face and remote options of psychological intervention as a single integrated treatment option as well as having the availability of both independently.

It is also important to acknowledge experiences whereby clinicians’ ability to make use of remote working was hindered. Specifically, clinicians noted the use and benefit of remote working was significantly impacted in situations where service provision was not adapted to meet these needs. Whilst this was specific to certain participants, this may relate to a general narrative of services feeling under resourced and of lesser importance in the wider health service context during COVID-19 (Molodynski et al., 2021), which may represent a sense amongst clinicians of being undervalued, which can in turn relate to a greater sense of moral injury (Haight et al., 2017). A key message here is that whilst COVID-19 presents opportunities in the form of remote working, it is essential that services are well resourced and clinicians feel valued and motivated to make the most of such opportunities. This is reflected in having a good standard of technological equipment and support, relevant remote-adapted training, and a service-wide endorsement of such approaches.

**Triangulation**

In terms of triangulation, the descriptive data demonstrated a gradual increase in confidence and competence in delivering remote interventions amongst clinicians over time. This increase for both telephone and video delivery may represent a gradual adjustment and learning from clinicians, as reflected in the ‘Learning over Time’ theme, as well as the increased openness and endorsement of remote delivery reflected in the ‘Creating change in how we work’ theme. This may be supported by the comparatively lower confidence and felt ‘readiness’ reported amongst other clinician samples in earlier stages of the pandemic (Liberati et al., 2021). When considering this alongside the previously cited ‘levelling out’ of adult mental health service referrals over time (Office for National Statistics, 2020), one could interpret this gradual adjustment as part of a wider, societal adjustment to COVID-19, resulting in a potential resulting reduction in service pressure. A further note on triangulation is that the apprehensions around trauma processing, risk and destabilisation predominantly came from clinicians working in either a secondary level service or engaged in cases of interpersonal and or complex trauma. This may suggest that the experiences of remote trauma interventions may present specific challenges depending on which level of service and or trauma complexity is presented. However, this is not to say that individuals engaging in single incident, non-relational trauma perhaps experienced in primary care services did not experience such challenges.

Despite these positive adjustments, it is worth considering why clinicians initially experienced a reduction in confidence and competence in face-to-face delivery at peak periods. One explanation could be how clinicians themselves interpreted the ‘peak’ COVID-19 period. Given the question was...
asked in relation to work-related pressure and occurred in the early stages of the pandemic for the majority of participants, this reduced perceived ability for face-to-face delivery may have been reflective of the wider increase in demand and pressure experienced by HCP’s (Legido-Quigley et al., 2020) as well as the general sense of uncertainty indicted in the qualitative data. Furthermore, it is worth considering that this reporting also aligned to the reported reduction in face to face ‘frequency’ at peak COVID-19 periods. As such, clinicians may have felt less ‘able’ due to being less active in their familiar face-to-face working, whilst increasing the frequency of less familiar (remote) ways of working. Overall, it would appear that measures of perceived competence and confidence should be interpreted within the wider context of this study and indeed the wider context of COVID-19.

**Additional strengths and implications**

Apart from the research contributions cited previously, the current study possesses several key strengths and implications. The use of IPA allowed this phenomenon to be explored whilst accounting for its unique time in history and the nuances of experience surrounding it, such as learning and adaptation of remote therapy, mechanisms of change related to trauma and its respective interventions as well as the experience of clinicians at a personal, professional, and service level. The current methodology has provided open and detailed insight into the phenomenon without being driven by pre-determined constructs. Furthermore, this study contributes to under-researched areas including psychology clinicians’ perspectives on trauma working and experiences relating to being a HCP during COVID-19. Whilst there continues to be promising evidence regarding the efficacy of remote trauma interventions as explored in the previous chapter, the current study provides complimentary qualitative data to this growing evidence base, by illustrating the direct experience of clinicians utilising these treatment models, and the specific factors which inform how they navigate the application of such models. In terms of service delivery, this study can inform services and trainers in terms of the nuances and challenges associated with remote trauma interventions that are not captured by review and training of treatment protocols. In light of the current findings, this may include general upskilling in using remote platforms, service protocols for remote risk assessment and management, providing alternative strategies where physical and or non-verbal cues are limited, as well as solutions to experiences of relational ‘distance’ between clinicians and clients. Finally, whilst there was some degree of sample homogeneity, the variety of clinicians included in the study provides a breadth of experience in terms of service type, clinical experience, and training. This allows findings to be applicable across workforces engaging in trauma interventions at various levels, which aligns with key national drivers already in place (NHS Education for Scotland, 2017b).
Limitations and recommendations

The current study possesses a number of limitations for consideration. An important limitation relates to the inclusion criterion associated with clinicians having an active focus on trauma work/interventions. The interpretation of this criterion may have varied across services and participants regarding the definition of ‘active trauma work’. This may have limited the differentiation of varied forms of trauma working, such as ‘phase one’ or ‘phase two’ interventions, utilising trauma-specific treatment model, or working with individuals with longstanding trauma histories regardless of intervention focus. Future research may address this by requesting greater specificity from participants in terms of the nature of this active trauma working at the first stage of data collection.

Furthermore, one aspect of the lived experienced of these clinicians includes being active clinicians employed in specific, local services which has its own professional dynamics. Whilst anonymisation and confidentiality steps were taken, it is worth considering that these professional dynamics may have influenced what clinicians chose to share during interviews. However, this perceived ‘limitation’ could also be interpreted as an inherent part of working as a clinician within a public health service. From a theoretical perspective, this could be reflective of the cultural and professional context surrounding these participants, as often acknowledged in phenomenological research (Tuffour, 2017). Regardless of this interpretation, future research could address this by broadening recruitment to a national or ‘out of area’ level, or by utilising a public forum out with specific psychology services and managers.

The current study focused exclusively on the experiences of qualified psychological clinicians with a variety of qualifications, locations, and years of experience. Whilst this was intended to account for variety within a homogenous sample as per IPA frameworks (Smith & Osborn, 2008), it is worth considering how these experiences may compare to other healthcare professionals delivering trauma-based care across different levels of intervention, expertise and lifespan stages. An example of this in the current study is the predominant citing of challenges to reprocessing and destabilisation amongst secondary level clinicians or those working with interpersonal trauma. This is of particular relevance given the national drivers promoting trauma-informed practice and training at all levels of the healthcare workforce as noted previously (NES, 2017). Future recruitment could include healthcare professionals beyond both psychological therapies and ‘adult’ services.

Finally, whilst the current study presents an in-depth account of qualitative findings, the descriptive and retrospective nature of the quantitative data limits any relevant statistical inferences. Furthermore, the use of a small sample size and accounting for subjective experience also limits generalisability, as commonly noted within qualitative frameworks (Starks & Trinidad, 2007). However, this methodological design was the intention of the current study, given that statistical findings related to the secondary research objective as well as being used to facilitate the sampling
procedure. Future studies should supplement these strong qualitative findings with more detailed, inferential statistics which include repeated measures examining clinicians’ changes in confidence and competence as well as matching this alongside treatment and or symptom outcome, thus enabling a more detailed, mixed methodological and triangulated approach (Flick, 2012).

Conclusion

The current study explored the lived experience of clinicians working remotely with interventions for psychological trauma throughout COVID-19. The findings represent a variety of clinicians’ experiences in terms of service type, training, and experiences of working with trauma. Clinicians generally identified with apprehension and a lack of confidence in the early stages of the pandemic in relation to remote working in general and the specifics of trauma interventions. However, experience and familiarity appeared to reduce this challenge over time, resulting in increased confidence and endorsement of remote interventions for trauma. Specific challenges associated with trauma treatment progression were often cited, including fears of destabilisation, a sense of distance and holding responsibility. Clinicians also highlighted the consistent and foundational importance of the therapeutic relationship and the importance of this in the context of COVID-19 and trauma treatment. The study provides insight into an under-researched staff population, adding individual meaning and context to compliment the evidence-based treatment interventions utilised within services, as well as exploring their experience at a unique time in history. The findings may provide the foundations for more consistent and ongoing research into the area of remote psychological interventions, by both supplementing evidence relating to the efficacy of remote-based treatments whilst also using staff perspectives to inform service provision and staff training. The context of COVID-19 accounted for in this study not only highlights the specific impact in the present, but also the legacy it may have in the future of mental health care and indeed society as a whole.
Empirical References


Substance Abuse and Mental Health Administration (SAMHSA). (2014). SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach.


Portfolio references


Substance Abuse and Mental Health Administration (SAMHSA). (2014). *SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach.*


Appendices

Appendix A: SPSS output calculations of inter-rater reliability

Table 1.5a
SPSS output crosstabulation and Cohen’s Kappa calculation

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<th>Judge 2 rating</th>
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<tr>
<td>Strong</td>
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<th>Approximate Significance</th>
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N of Valid Cases

24

Note: * = p is significant (<.01).
### Table 1.5b

Initial manual rating of item scores.

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<th>Disagreement?</th>
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*Note: Judge ratings, 1 = Strong, 2 = Moderate, 3 = Weak*
## Appendix B: Prospero Protocol

**Systematic review**

*Fields that have an asterisk (*) next to them means that they must be answered. Word limits are provided for each section. You will be unable to submit the form if the word limits are exceeded for any section. Registrant means the person filling out the form.*

1. **Review title.** [1 change]
   
   Give the title of the review in English
   
   Efficacy and feasibility of live remote interventions for psychological trauma: a systematic review

2. **Original language title.**
   
   For reviews in languages other than English, give the title in the original language. This will be displayed with the English language title.

3. **Anticipated or actual start date.**
   
   Give the date the systematic review started or is expected to start.
   
   19/07/2022

4. **Anticipated completion date.** [1 change]
   
   Give the date by which the review is expected to be completed.
   
   30/09/2022

5. **Stage of review at time of this submission.**
   
   This field uses answers to initial screening questions. It cannot be edited until after registration.
   
   Tick the boxes to show which review tasks have been started and which have been completed.
   
   Update this field each time any amendments are made to a published record.

   The review has not yet started: No

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</tr>
<tr>
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</tr>
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</tr>
<tr>
<td>Data extraction</td>
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</tr>
<tr>
<td>Risk of bias (quality) assessment</td>
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<td>Yes</td>
</tr>
<tr>
<td>Data analysis</td>
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Provide any other relevant information about the stage of the review here.
6. * Named contact.
The named contact is the guarantor for the accuracy of the information in the register record. This may be any member of the review team.

Pearse Adams

Email salutation (e.g. "Dr Smith" or "Joanne") for correspondence:
Mr Adams

7. * Named contact email.
Give the electronic email address of the named contact.
s2007896@ed.ac.uk

8. Named contact address
PLEASE NOTE this information will be published in the PROSPERO record so please do not enter private information, i.e. personal home address
Give the full institutional/organisational postal address for the named contact.

9. Named contact phone number.
Give the telephone number for the named contact, including international dialling code.

10. * Organisational affiliation of the review.
Full title of the organisational affiliations for this review and website address if available. This field may be completed as 'None' if the review is not affiliated to any organisation.

The University of Edinburgh

Organisation web address:

Give the personal details and the organisational affiliations of each member of the review team. Affiliation refers to groups or organisations to which review team members belong.
NOTE: email and country now MUST be entered for each person, unless you are amending a published record.

Mr Pearse Adams. The University of Edinburgh
Rachel Happer. The University of Edinburgh

12. * Funding sources/sponsors.
Details of the individuals, organizations, groups, companies, or other legal entities who have funded or sponsored the review.

Not applicable

Grant number(s)
State the funder, grant, or award number and the date of award
13. *Conflicts of interest.*
List actual or perceived conflicts of interest (financial or academic).

None

No conflicts of interest identified

Give the name and affiliation of any individuals or organisations who are working on the review but who are not listed as review team members. NOTE: email and country must be completed for each person, unless you are amending a published record.

State the review question(s) clearly and precisely. It may be appropriate to break very broad questions down into a series of related more specific questions. Questions may be framed or refined using PI(E)COS or similar where relevant.

What is the evidence base for the efficacy and feasibility of active / live remote one-to-one interventions for psychological trauma?

16. *Searches.* [1 change]
State the sources that will be searched (e.g. Medline). Give the search dates, and any restrictions (e.g. language or publication date). Do NOT enter the full search strategy (it may be provided as a link or attachment below.)

Sources: OVID (PsycINFO, PsycARTICLES, EMBASE, MEDLINE) and ProQuest (Applied Social Science Index and Abstracts).

Publication date: Restricted to papers from 2012 - Present (2022)
Language: Papers must be published in English

17. URL to search strategy.
Upload a file with your search strategy, or an example of a search strategy for a specific database, (including the keywords) in pdf or word format. In doing so you are consenting to the file being made publicly accessible.

Or provide a URL or link to the strategy. Do NOT provide links to your search results.

18. *Condition or domain being studied.*
Give a short description of the disease, condition or healthcare domain being studied in your systematic review.

Psychological Trauma - either Type 1 (PTSD) or Type 2 (Complex trauma / cPTSD).

19. *Participants/population.*
Specify the participants or populations being studied in the review. The preferred format includes details of both inclusion and exclusion criteria.

Adults (18+) receiving 1:1 therapeutic interventions for psychological trauma.

20. *Intervention(s), exposure(s).*
Give full and clear descriptions or definitions of the interventions or the exposures to be reviewed. The preferred format includes details of both inclusion and exclusion criteria.

Video and or telephone interventions (one-to-one) for psychological trauma. Any established models of trauma intervention will be accepted.

21. * Comparator(s)/control.
Where relevant, give details of the alternatives against which the intervention/exposure will be compared (e.g. another intervention or a non-exposed control group). The preferred format includes details of both inclusion and exclusion criteria.

Where applicable, traditional face-to-face trauma therapy, a control condition, “treatment-as-usual” (TAU).

22. * Types of study to be included.
Give details of the study designs (e.g. RCT) that are eligible for inclusion in the review. The preferred format includes both inclusion and exclusion criteria. If there are no restrictions on the types of study, this should be stated.

Quantitative studies only - RCTs, cross-sectional, quasi-experimental, longitudinal and or retrospective / secondary analysis studies.

Eligibility summary:
To meet inclusion criteria, each relevant article had to: i) include adult participants aged 18 years or older, ii) involve trauma-focused treatment intervention(s), iii) take place remotely either via video or telephone in a healthcare context, iv) include standardized assessment and outcome measure of trauma, v) include formal assessment of psychosocial and related demographic factors, vi) consist of an active, live intervention from a therapist as the core element of treatment(s).

Articles were excluded if they were i) individual case studies, ii) book chapters, iii) bulletins, iv) reports, v) review papers or vi) grey literature.

Only quantitative studies were included to allow a more robust analysis of empirically levelled measures of trauma-related and secondary outcomes and any measurements pertaining to acceptability.

Give summary details of the setting or other relevant characteristics, which help define the inclusion or exclusion criteria.

24. * Main outcome(s).
Give the pre-specified main (most important) outcomes of the review, including details of how the outcome is defined and measured and when these measurement are made, if these are part of the review inclusion criteria.

Trauma symptoms / presentations.

Measures of effect
Symptom change as reported by clinical interviewing and or validated self-reported trauma specific outcome measures.
25. *Additional outcome(s).* [1 change]

List the pre-specified additional outcomes of the review, with a similar level of detail to that required for main outcomes. Where there are no additional outcomes please state ‘None’ or ‘Not applicable’ as appropriate to the review.

Any additional mental health / process outcomes: anxiety, depression, quality of life, therapeutic relationship.

Any measures of acceptability: attrition, compliance.

**Measures of effect**

Symptom change as reported by clinical interviewing and or validated self-reported trauma specific outcome measures.

26. *Data extraction (selection and coding).* [1 change]

Describe how studies will be selected for inclusion. State what data will be extracted or obtained. State how this will be done and recorded.

To meet inclusion criteria, each relevant article had to: i) include adult participants aged 18 years or older,

ii) involve trauma-focused treatment intervention(s),

iii) take place in a healthcare setting

   iv) include standardized assessment and outcome measure of trauma,

   v) include formal assessment of psychosocial and related demographic factors,

   vi) vi) consist of an active, live intervention from a therapist as the core element of treatment(s).

Articles are excluded if they were i) individual case studies,

ii) book chapters, iii) bulletins,

iv) reports,

v) review papers or

vi) grey literature.

Only quantitative studies were included to allow a more robust analysis of empirically levelled measures of trauma-related and secondary outcomes and any measurements pertaining to acceptability.

All screening processes will take place on the COVIDENCE review software website.

1. Studies will initially be evaluated via a title and abstract screening, following the removal of duplicate studies.

2. Remaining studies will be screened by full-text review to assess suitability in line with the above criteria.

3. Final set of suitable studies will be included for full data extraction. Data extraction will consist of the following:

i) study design, ii) aims/objectives, iii) participant population, iv) sample size, v) inclusion and exclusion criteria, vi) relevant participant demographic variables, vii) intervention format (platform and model), viii) trauma / presentation type, ix) trauma related outcome measures, x) relevant secondary outcome measures, xi) method(s) of data analysis, main study findings as well as reports of adherence and or attrition.

27. *Risk of bias (quality) assessment.* [1 change]

State which characteristics of the studies will be assessed and/or any formal risk of bias/quality assessment tools that will be used.

Effective Public Health Practice Project (EPHPP) Quality Assessment Tool for Quantitative Studies
6 domains of assessment:
1. Selection Bias
2. Design
3. Confounders
4. Blinding
5. Data Collection
6. Drop out / retention
+ an overall Global Rating

With the following score options for each domain:
1) Low
2) Moderate
3) Strong

Quality of each study will be coded by two independent evaluators based on the above criteria.

28. * Strategy for data synthesis. [1 change]
Describe the methods you plan to use to synthesise data. This must not be generic text but should be specific to your review and describe how the proposed approach will be applied to your data.
If meta-analysis is planned, describe the models to be used, methods to explore statistical heterogeneity, and software package to be used.

A narrative synthesis will be adapted primarily for the current review of quantitative data. Specifically, this will include summary tables of extracted data, as well as a descriptive narrative of findings structured around relevant factors (i.e. efficacy, adherence and dropout, treatment fidelity, client satisfaction, process outcomes such as therapeutic alliance. Where not included, power calculations for each study will be calculated based on sample numbers to summarise degree to which studies reach statistical power.

Interpretation of all results will be given in the context of previous study / review findings in the area as identified in the literature search.

29. * Analysis of subgroups or subsets.
State any planned investigation of 'subgroups'. Be clear and specific about which type of study or participant will be included in each group or covariate investigated. State the planned analytic approach.

Sub group analyses will be examined where applicable to determine the effect size of remote therapy in the following contexts:
1) differ in videoconferencing from telephone group, 2) differ compared to face-to-face / TAU groups.

30. * Type and method of review.
Select the type of review, review method and health area from the lists below.

Type of review
Cost effectiveness No
Diagnostic No
Epidemiologic No
Individual patient data (IPD) meta-analysis No
Intervention Yes
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**Health area of the review**
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<td>Neurological</td>
<td>No</td>
</tr>
<tr>
<td>Nursing</td>
<td>No</td>
</tr>
<tr>
<td>Obstetrics and gynaecology</td>
<td>No</td>
</tr>
<tr>
<td>Oral health</td>
<td>No</td>
</tr>
<tr>
<td>Palliative care</td>
<td>No</td>
</tr>
<tr>
<td>Perioperative care</td>
<td>No</td>
</tr>
</tbody>
</table>
Physiotherapy: No
Pregnancy and childbirth: No
Public health (including social determinants of health): No
Rehabilitation: No
Respiratory disorders: No
Service delivery: Yes
Skin disorders: No
Social care: No
Surgery: No
Tropical Medicine: No
Urological: No
Wounds, injuries and accidents: No
Violence and abuse: No

31. Language.
Select each language individually to add it to the list below, use the bin icon to remove any added in error.

English

There is not an English language summary

Select the country in which the review is being carried out. For multi-national collaborations select all the countries involved.

Scotland

33. Other registration details.
Name any other organisation where the systematic review title or protocol is registered (e.g. Campbell, or The Joanna Briggs Institute) together with any unique identification number assigned by them.
If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here. If none, leave blank.

34. Reference and/or URL for published protocol.
If the protocol for this review is published provide details (authors, title and journal details, preferably in Vancouver format)

No I do not make this file publicly available until the review is complete
35. **Dissemination plans.**
Do you intend to publish the review on completion?

Yes

Resulting review paper will be developed for peer reviewed publication. An additional summary document of review findings will be developed and disseminated to local psychology services.

36. **Keywords.**
Give words or phrases that best describe the review. Separate keywords with a semicolon or new line. Keywords help PROSPERO users find your review (keywords do not appear in the public record but are included in searches). Be as specific and precise as possible. Avoid acronyms and abbreviations unless these are in wide use.

Trauma; Online therapy; Intervention

37. **Details of any existing review of the same topic by the same authors.**
If you are registering an update of an existing review give details of the earlier versions and include a full bibliographic reference, if available.

38. * **Current review status.**
Update review status when the review is completed and when it is published.
New registrations must be ongoing so this field is not editable for initial submission.

Review Ongoing

39. **Any additional information.** [1 change]
Provide any other information relevant to the registration of this review.

Review warrants update for several reasons: Onset of COVID-19 has led to increased need and use of remote trauma therapy interventions. Previous reviews focus largely on veteran-only populations and or incorporate therapy-assisted self-guided interventions, whereas this review solely looks at active video and or telephone interventions.

REQUEST TO ALTER - AMENDED

40. **Details of final report/publication(s) or preprints if available.**
Leave empty until publication details are available OR you have a link to a preprint (NOTE: this field is not editable for initial submission).
List authors, title and journal details preferably in Vancouver format.
Clinicians’ experiences of adapting to remote trauma interventions throughout COVID-19.

You are being invited to take part in research on clinician’s experience of working remotely with trauma interventions. Pearse Adams, Doctoral student in Clinical Psychology at the University of Edinburgh is leading this research. Before you decide to take part it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

What is the purpose of the study?

The purpose of the study is to examine clinician’s perspectives of adapting to remote working with trauma interventions during COVID-19.

Why have I been invited to take part?

You are invited to participate in this study because you are over the age of 18 and you are a qualified psychology staff member currently employed by NHS Tayside in either Primary Care, Community Mental Health, Forensic, Eating Disorders or Addiction services for adults.

Do I have to take part?

No – participation is entirely voluntary. Deciding not to take part or withdrawing from the study will not affect your employment in any way. Please note that your data may be used in the production of formal research outputs (e.g. journal articles, conferences, theses and reports).

If you do decide to take part, please keep this Information Sheet. You will be asked to sign an Informed Consent Form to show that you understand your rights in relation to the research, and that you are happy to participate.

What will happen if I decide to take part?

There are two components to the current study. The first is an online questionnaire which you are invited to complete. You will be asked a number of questions regarding your delivery of psychological therapies over the course of COVID-19 as well as the relevant training and experience in relation to trauma-specific work. This will capture a summary of clinician’s experience of adapting their interventions throughout the last number of months. The questionnaire can be completed in private in your own time and will take around twenty minutes to complete. This information sheet will appear at the start of the questionnaire to remind you of these details prior to providing your informed consent. The consent form will appear on your screen prior to completing the questionnaire. You will only be permitted to continue with the questionnaire if you indicate that you understand the details of this information sheet and agree to each of the conditions outlined in the consent form. If you only partially complete the study, you will be able to come back and complete this at a later time. However, it is intended that partially completed questionnaire data will still be anonymised and collated with the overall data and will be accounted for as being ‘incomplete’.

The second component to the study is an individual interview examining clinicians experience of working remotely with trauma in more detail. However, this will only be open to a smaller number of participants who complete the questionnaire. The reason for this is that interview participants will be those who have held a substantial trauma caseload prior to and during the COVID-19 restrictions which will be reflected by responses provided in the questionnaire.

Following the completion of the questionnaire, you will be asked to provide your work email address as a means to be contacted by the lead researcher, Pearse Adams to participate in an interview. Your
email address will be stored on an encrypted file only accessible to the lead researcher. The email address will only be used for this purpose and will be deleted once correspondence regarding your interview participation has concluded.

This interview will take place either face to face at an NHS site or remotely, via Microsoft Teams depending on the preference of the interviewee and subject to COVID-19 guidance at the time. Ideally, we would like to audio record your responses (and will require your consent for this), so the location should be in a fairly quiet area. The interview should take approximately 40 to 60 minutes. Once an interview slot has been allocated, you will be sent copies of this information sheet and a consent form in advance of the interview. For face-to-face interviews, you will be asked to sign the consent form prior to the interview commencing. For remote interviews, you will be asked to provide verbal consent over the Microsoft Teams call to the researcher who will document this on your consent form. You will also have the option of scanning a signed copy of your consent form prior to the interview if this is preferred.

**What are the possible benefits of taking part?**
While there are no direct benefits, by sharing your experiences with us, you will be helping our research team, the University, and the wider NHS to better understand how clinicians have adapted to remote working both generally and in relation to trauma interventions specifically.

**Are there any risks or disadvantages associated with taking part?**
We anticipate that there are no significant risks associated with participation. We do acknowledge that reflecting on experiences of working in the context of COVID-19 could cause distress. As such, we will ensure that participants are in contact with a supervisor or lead clinician within their service who will be committed to providing a reflective space for participants during their participation in the current study. Furthermore, I will provide my contact details if you have any questions or concerns regarding the study. A debrief will be provided after each questionnaire interview and will contain additional support contacts for healthcare staff.

We estimate that participation will take approximately 20 minutes for the questionnaire, 40-60 minutes for the interview and a further 10 minutes to read through this information sheet and to provide consent.

**Risks of participation (COVID-19)**
If you are among the interview participants, you may choose to have this interview in person. We have taken specific steps to minimise the risk of exposure to the Coronavirus during the study by adhering to the Scottish Government guidance (https://www.gov.scot/coronavirus-covid-19/). Further, you will only interact with the researcher if they are well, and have had no known contact with COVID-19 positive individuals for the past 14 days. However, even with these control measures, there remains some additional risk of exposure from participating in this study.

**What if I am unwell?**
If you feel unwell or have been in contact with a COVID-19 positive individual in the past 14 days, then please contact the researcher (Pearse Adams, / 07861081544), and we will postpone or cancel the research interaction. The lead researcher will adhere to the same standards and will inform you if your interview needs to be altered as a result.

**Will my taking part be kept confidential?**
Your data will be processed in accordance with Data Protection Law. All information collected about you will be kept strictly confidential. Your data will be referred to by a unique participant number rather than by name. If you consent to being audio recorded, all recordings will be destroyed once they have been transcribed. Your data will only be viewed by the researcher/research team. All electronic data will be stored on a password-protected computer file and all paper records will be
stored in a locked filing cabinet. Your consent information will be kept separately from your responses in order to minimise risk.

The University of Edinburgh is the sponsor for this study based in Scotland. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. The University of Edinburgh will keep anonymised information about you for a maximum of ten years after the study has finished / until it is no longer essential for any future research projects.

For general information about how we use your data go to: https://www.ed.ac.uk/records-management/privacy-notice-research

**How will we use information about you?**

The only personal information we will need from you is your NHS work email. As stated previously, the lead researcher will use this to contact you if you are eligible to complete the interview component of the study.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a participant number instead. We will keep all information about you safe and secure. If you complete an interview, your data will be presented under an assigned pseudonym.

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study. Your anonymised data and consent forms will be stored for the minimum time period of ten years as per GCP guidelines https://mrc.ukri.org/publications/browse/good-research-practice-principles-and-guidelines/. As stated before, your email address will be deleted once correspondence regarding your interview has finished.

**What are your choices about how your information is used?**

If you do decide to take part, you are still free to withdraw up until the data has been anonymised and collated. This will include the two-week period following your participation before the data collation will take place. If you would like to withdraw from the study after your data has been anonymised, we will keep your anonymised data but we will delete any identifiable data we have for you (your consent form, your email address). You are advised to contact the research team at the earliest opportunity should you wish to withdraw from the study.

We need to manage your records in specific ways for the research to be reliable. This means that we won’t be able to let you see or change the data we hold about you.

**What will happen if I can no longer provide consent?**

If at any stage during the study you lose capacity to consent, all of your identifiable data (your NHS email) will be removed. However, the research team intend to retain any of your data that is not identifiable to you, such as your questionnaire and interview responses.

**Where can you find out more about how your information is used?**

You can find out more about how we use your information at www.hra.nhs.uk/information-about-patients/ or by asking one of the research team, or by sending an email to

**What will happen with the results of this study?**
The results of this study may be summarised in published articles, reports, and presentations. You will not be identifiable from any published results. Quotes or key findings will always be made anonymous in any formal outputs unless we have your prior and explicit written permission to attribute them to you by name. Anonymised information may also be kept for future research. A summary of the research findings will be developed and distributed to area psychological therapies services following academic submission of this study.

Who is organising and funding the research?

This study has been organised by Pearse Adams and is being supervised by Prof. Kevin Power and Dr Rachel Happer. The research is sponsored by the University of Edinburgh.

The study proposal has been reviewed and approved by University of Edinburgh Health in Social Sciences Ethics Committee. NHS Management approval has also been obtained.

Who can I contact?

If you have any further questions about the study, please contact the lead researcher, Pearse Adams –

If you would like to discuss this study with someone independent of the study team, please contact Angus MacBeth – angus.macbeth@ed.ac.uk

If you wish to make a complaint about the study, please contact NHS Tayside:

Complaints and Feedback Team
Ninewells Hospital
Dundee
DD1 9SY
Telephone: 0800 027 5507
Email: TAY.feedback@nhs.scot

Alternatively, you may contact the University of Edinburgh’s School in Health and Social Science’s Head Office - health@ed.ac.uk

Thank you very much for considering your participation in this study.
Appendix D: Consent Form

PARTICIPANT CONSENT FORM
Clinicians’ experiences of adapting to remote trauma interventions throughout COVID-19.

Researcher’s name and contact details:
Pearse Adams, Trainee Clinical Psychologist

1. I confirm that I have read and understood the Participant Information Sheet (Version 1 dated 22 01 2021) for the above study.

2. I have been given the opportunity to consider the information provided, ask questions and have had these questions answered to my satisfaction.

3. I understand that my participation is voluntary and that I can ask to withdraw within two weeks of my participation without giving a reason and without my medical care or legal rights being affected.

4. I understand that my anonymized data will be stored for a minimum of ten years and may be used in future ethically approved research.

5. I agree to my interview being audio recorded.

6. I understand that relevant sections of data collected during the study may be looked at by individuals from the regulatory authorities and from the Sponsor (the University of Edinburgh) or from the/other NHS Board(s) where it is relevant to my taking part in this research. I give permission for those individuals to have access to my records.

7. I agree that if I were to lose the capacity to consent during the study, my identifiable data will be withdrawn from the study, while any non-identifiable data will be retained once it has been anonymised and collated for analysis.

8. I agree to take part in the above study.

Name of person giving consent  Date  Signature
_________________________________________  __________

Name of person taking consent  Date  Signature
_________________________________________  ___________________________
Debrief Sheet

Debrief – Post Questionnaire / Interview

Thank you very much for participating in this questionnaire / interview and research project. The aim of this study was to explore your experiences of working with trauma and other psychological interventions in the context of COVID-19.

We are very aware that discussion of recent work-based practices may evoke some difficult emotions in relation to professional and personal life in the current climate.

My email address is listed below. Please feel free to contact me, should you have any questions or concerns following your participation.

I have also liaised with your team lead who has agreed to offer support in confidence for any staff who have participated in this study. It is important to note however they will not be aware of your participation unless you were to disclose this to them.

Furthermore, here are a few resources that may provide support in confidence:

The health and social care workforce mental wellbeing support line is an anonymous helpline available to all NHS staff and is operated by NHS 24 on a 24/7 basis.

- 0800 111 4191

This webpage contains various resources and supports dedicated specifically to NHS stage


Thank you again for your participation, it is very much valued:
Appendix F: Interview Schedule

**Introduction:**

Thank you very much for taking the time to take part in this interview. As mentioned before, my name is Pearse and I am a Trainee Clinical Psychologist at the University of Edinburgh. This project is part of my doctoral thesis as outlined in the research information sheet.

Today is the second part to this project. Following from the initial questionnaire you would have completed in the weeks before, I am interviewing a subset of clinicians to gain a more in depth understanding of remote working with trauma interventions in the context of COVID-19.

Today I hope to get an understanding of your personal experience of being a clinician working with trauma over the last number of months and how all these recent events have shaped your experience and interpretations. The interview will last between 40 and 60 minutes.

- Check participant has had time to re-read information sheet
- Any questions about today / the project?
- Check that consent form has been signed
- Notify participant that recording will now begin.

**Can you describe your training and experience of trauma therapy / interventions?**

- How long have you worked with trauma?
- Are you trained in specific interventions?
- What approaches / models do you tend to use?

**Can you tell me about your experience of remote therapy?**

- What were your thoughts on remote therapy prior to COVID-19?
- What were your reasons for this?
- Thoughts on working with trauma remotely?
- How was it been to work remotely over the last number of months?

**What are some of the challenges you have experienced with working remotely with trauma?**

- Are there any aspects of therapy that are more challenging without face-to-face contact?
- How have you adapted to this?
What are some of the **positives or opportunities** you have experienced in working remotely?

- In general?
- In the context of trauma specifically?

How has your view of remote therapy changed throughout this experience?

- What has changed?
- Competence / confidence with working remotely?
- How may this impact your future clinical work?

What would be important for future training and service design in relation to this?

- What aspects may have helped your work during this time?
- What recommendations would you have regarding remote delivery
  
  o Both generally and in the context of trauma?

Any final thoughts or is there anything else you would like to discuss that hasn’t been mentioned today?

Thank participant and end recording at this time.
Appendix G: Sample transcript analysis

Transcript 5 – Claire

<table>
<thead>
<tr>
<th>Transcript</th>
<th>Initial coding / comments</th>
<th>Emergent themes / subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>[28:34] You know (pause) when we all went into lockdown as much as we were told it was going to be so many weeks knowing it is probably going to be a bit longer, not that we would go back into it for the winter again....it’s the kind of ‘right we have been here before, let’s get on with it’</td>
<td>Realising the longevity of COVID → the need to be more proactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Right and I guess that translates into maybe how you approach the work it if at the start it could be this week next week, who knows. So maybe that holding is appropriate?</td>
<td>Pausing – reflective ‘Get on with it’ – sense of frustration?</td>
</tr>
<tr>
<td></td>
<td>Yea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>But then, when it becomes a long-term thing and there is no end to that holding, it doesn’t really seem to go anywhere?</td>
<td>Reflecting on a wider issues clinicians have – moving to more intensive stages of trauma working.</td>
</tr>
<tr>
<td></td>
<td>And I think it is interesting with trauma work in general..... is that we can collude with avoidance...</td>
<td>Considers whether lockdown enabled / colludes avoidance clinicians already have towards intensive trauma working?</td>
</tr>
<tr>
<td></td>
<td>Yea</td>
<td>COVID as an opportunity rather than a challenge</td>
</tr>
<tr>
<td></td>
<td>People are quite wary of that ‘when’ with trauma work and I think clinicians can feed into that in terms of when people are ready, when are they stable enough. We might use that to avoid. Doing what is difficult but needs to start and I think that was almost emphasised over lockdown ok we can keep doing this avoidance but if it is safe enough....there’s aspects of lockdown we can use to our advantage.</td>
<td>PROGRESSING THE TRAUMA JOURNEY - anxiety towards processing (even out with remote working)</td>
</tr>
<tr>
<td></td>
<td>Yea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See if some folk felt safer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yea. And how does that in your experience and reflections with others - the actual processing of those more intensive parts of trauma working. You mentioned there bringing people in when needed. Did you completely withhold the intensive work remotely or did you have any experience with that?</td>
<td>Experience of remote EMDR.</td>
</tr>
<tr>
<td></td>
<td>I probably had, because I had one person who was shielding so couldn’t come in when we were.... so we tried to do EMDR online</td>
<td>Using the therapeutic relationship (pre-established) to enable greater remote engagement?</td>
</tr>
<tr>
<td></td>
<td>Okay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moving it and she was following. That felt okay to try because we had established a relationship face to face, we had sessions face to face. I would never do that (online) as a starting point, but it felt we had enough there and enough experience and she was well versed in it to do that. Her connection was not great and I think the whole kind of room set up I think she was sitting in front of a window so it was really hard to see a reaction</td>
<td>Therapeutic Relationship - Foundations for trauma working</td>
</tr>
</tbody>
</table>
Yea

One of the things about EMDR is you do all of these eye movements, but how you decide to stop is based on how the person is responding.

Okay yea

So you are up close and really kind of noticing any slight change. Even as small as are they holding their breath, have they left their breath out, has there been a sigh... Change in their expression. And if you got, even with a really good connection that is hard.

Yea

She did not mind, she thought it was fine, she thought she was getting something from it. I was less...

Okay

But I know I mean people do it and you can actually, I know in some areas you can do the butterfly where you are tapping. So you could use yourself as the bilateral bit. So that was just one and everyone else I managed to get back into the room at some point to do it.

Yea. And would that have been the decision, sounds like the decision apart from that case generally was not to maybe engage in maybe that more intensive work. Was it coming down to things like those practical barriers where it might not mimic properly and it mightn’t be the same, were they the reasons you felt it was more appropriate to stick with the in-person work or were there other concerns you might have had for doing something more intensively remotely?

I think it was probably just down to my preference and the persons preference. Maybe just more confidence in myself that i am only going to be able to feel this in the room, I don’t think I could read this and i don’t feel, again maybe it was down to experience. If i had used tapping in the session, maybe that would be a way to enable it more remotely

Yea okay

Em, I think it is just the number of unknowns. In a room I feel I have more control.

Yea

That might be artificial. But I feel, if the person becomes really distressed i can manage that directly whereas if it is remote, I feel there is a disconnect. So i think on my own personal preference of if i can bring them in, that is what I will do.

---

**Describes almost a dependence on having a good connection to attune to the visual engagement of the client – specific EMDR example.**

**Example of client feeling it was beneficial, but clinician more hesitant?**

**Why?**

Queried why clinician was ultimately more hesitant about doing processing work remotely

Clinicians’ preference for face to face contact based on confidence in ability to delivery EMDR remotely

Greater control in therapy room face to face vs uncertainty of remote setting, but knowing that could be a mental block rather than a necessity

Control = confidence? = power?

---

**Limited by context – dependence on technology**

**PROGRESSING THE Trauma Journey**

- ‘Distance, Confidence and Control – implications on power in the therapeutic process

---

[33:59]
Appendix H: Frequency and percentage of trauma models across participants

Table 2.5:

Frequency and percentage of trauma intervention models across participants.

<table>
<thead>
<tr>
<th>Model / Training</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma-focused CBT (tCBT)</td>
<td>25</td>
<td>86.21</td>
</tr>
<tr>
<td>Eye Movement Desensitisation and Reprocessing (EMDR)</td>
<td>6</td>
<td>20.69</td>
</tr>
<tr>
<td>Exposure Therapy – not specified</td>
<td>1</td>
<td>3.44%</td>
</tr>
<tr>
<td>Safety and Stabilisation</td>
<td>17</td>
<td>58.62%</td>
</tr>
<tr>
<td>Survive and Thrive Group</td>
<td>7</td>
<td>24.14%</td>
</tr>
<tr>
<td>Dialectical Behaviour Therapy (DBT)</td>
<td>2</td>
<td>6.89%</td>
</tr>
<tr>
<td>Acceptance and Commitment Therapy (ACT)</td>
<td>1</td>
<td>3.44%</td>
</tr>
<tr>
<td>Cognitive Therapy – Moral Injury</td>
<td>2</td>
<td>6.89%</td>
</tr>
<tr>
<td>Schema Therapy</td>
<td>2</td>
<td>6.89%</td>
</tr>
<tr>
<td>Compassion Focused Therapy (CFT) for Trauma</td>
<td>1</td>
<td>3.44%</td>
</tr>
<tr>
<td>Image Rehearsal Therapy (IRT)</td>
<td>1</td>
<td>3.44%</td>
</tr>
<tr>
<td>Training adapted for remote delivery</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: HISS Ethical Approval Letter

Re: Doctoral Thesis Ethics submission - Pearse Adams - CLIN881

HISS Research Ethics

Fri 23/04/2021 06:05

To: ADAMS Pearse
Cc: CLINICAL PSYCHOLOGY Research Ethics, HISS Research Ethics

1 attachments (190 KB)
Adams_hiss_ethics_application_form - 24.4.21_KGS.docx;

Dear Pearse

Thank you for your revised application. Based on your responses the application meets the standards for favourable opinion from the Clinical Psychology, University of Edinburgh Ethics Committee. The signed ethical response sheet/application on is attached – please note that this is fine to attach to your dissertation etc. If you require a formal letter of ethics approval (this is only required if you are approaching third parties, NGOs etc) then please contact the new ethics mailbox (ethics.hiss@ed.ac.uk) requesting this and a formal letter of approval will follow in due course. If you need to make any changes to the study, you should return your amendment to the new ethics email - ethics.hiss@ed.ac.uk, cc'd above with the changes clearly noted in the relevant section of the form.

Good luck with your project.

Best wishes,

Dr Karri Gillespie-Smith
Lecturer in Applied Psychology
Ethics & Integrity Lead
Appendix J: UoE Sponsorship Approval Letter

University of Edinburgh College of Arts, Humanities and Social Sciences Research Governance Office
55 George Square
Edinburgh EH8 9JU

7th April 2021

Pearse Adams
c/o School of Health in Social Science
University of Edinburgh

Dear Pearse

Study Title: Remote Trauma interventions following COVID-19

Sponsor number: CAHSS2012/01

Under the requirements of the UK policy framework for health and social care research, the University of Edinburgh agrees in principle to act as Sponsor for this project. Sponsorship is subject to you obtaining institutional ethics for the project.

As Chief Investigator, you must ensure that the study does not commence until all applicable approvals have been obtained. Following receipt of all relevant approvals, you should ensure that any amendments to the project are notified to the Sponsor.

Yours sincerely

Charlotte Smith
Research Governance Manager
22 February 2021

Mr Pearse Adams
Trainee Clinical Psychologist
NHS Tayside
NHS Tayside Psychological Therapies Services
15 Dudhope Terrace
Dundee DD3 6HH

Dear Mr Adams,

R&D MANAGEMENT APPROVAL – TAYSIDE

Title: Clinician’s perspectives of adapting to remote trauma interventions following the impact of COVID-19.

Chief Investigator: Dr Rachel Happer

Principal Investigator/Local Collaborator: Mr Pearse Adams/ Prof Kevin Power

Tayside Ref: 2021ID03 NRS Ref: N/A IRAS ID: 289512

REC Ref: 21/NRS/006

Sponsor: University of Edinburgh

Funder: N/A

Many thanks for your application to carry out the above project here in NHS Tayside. I am pleased to confirm that the project documentation (as outlined below) has been reviewed, registered and Management Approval has been granted for the study to proceed locally in Tayside.

Approval is granted on the following conditions:-
• ALL Research must be carried out in compliance with the UK Policy Framework for Health & Social Care Research, Health & Safety Regulations, GDPR & data protection principles, statutory legislation and in accordance with Good Clinical Practice (GCP).

• All amendments to be notified to TASC R&D Office via the correct amendment pathway. Either direct to the R&D Office or via the Lead Co-ordinating Centre depending on how the study is set up.

• All local researchers must hold either a Substantive Contract, Honorary Research Contract, Honorary Clinical Contract or Letter of Access with NHS Tayside where required (http://www.nihr.ac.uk/about-us/CCF/policy-and-standards/research-passports.htm).

• TASC R&D Office to be informed of change in Principal Investigator, Chief Investigator or any additional research personnel locally.

• Notification to TASC R&D Office of any change in funding or an extension to study timelines.

• As well as any obligations to your Sponsor, you are required to notify TASCgovernance@dundee.ac.uk of all serious breaches of GCP and Serious Unexpected Serious Adverse Reactions (SUSARs) for Hosted Clinical Trials of Investigational Medicinal Products (CTIMPs).

• As custodian of the information collated during this research project you are responsible for ensuring the security of all personal information collected in line with NHS Scotland IT Security Policies, until destruction of this data.

• All Eligible and Extended Review studies will be added to the Scottish Research Database (SReDA). Recruitment figures for Eligible and Extended Review studies must be recorded onto the Scottish Portfolio every month. It is the responsibility of Tayside Health board to ensure recruitment data is being routinely uploaded into SReDA by working closely with study teams across Tayside and gathering this information. For further information on how your study recruitment data will be captured and uploaded, please contact the local Portfolio team at tascportfolio.Tayside@nhs.net.

• Annual reports are required to be submitted to TASC R&D Office with the first report due 12 months from date of issue of this management approval letter and at yearly intervals until completion of the study.

• Notification of early termination within 15 days or End of Trial within 90 days followed by End of Trial Report within 1 year to TASC R&D Office.

• You may be required to assist with and provide information in regard to audit and monitoring of study.

Please note you are required to adhere to the conditions, if not, NHS management approval may be withdrawn for the study.

Approved Documents
May I take this opportunity to wish you every success with your project.

Please do not hesitate to contact TASC R&D Office should you require further assistance.

Yours sincerely

Elizabeth Coote
Head of Non-Commercial Research Services

Tayside medical Science Centre (TASC)

C.c. Dr Rachel Happer,

Mr Pearse Adams,
Appendix L: HISS Ethics Application

University of Edinburgh, School of Health in Social Science
Research Ethics, Integrity and Governance

The forms required when seeking ethical approval in the School of Health and Social Sciences have now been merged into this single electronic document. The sections you are required to complete will depend on the nature of your application. Please start to complete the form from the beginning and proceed as guided. On completion the entire document should be submitted electronically to your section’s ethics administrator using the email addresses detailed on the final page.

Applications submitted without appropriate documentation will be returned.

Please work your way through this form, reading the questions and accompanying information carefully. Sections highlighted in yellow are mandatory, so you must answer all the questions in these sections.

Aside from the mandatory questions you won’t always need to answer all of the questions in the form. Section 1 “your project details” includes a set of filter questions that determine the rest of the questions you need to answer. Please read the notes carefully to make sure you answer the right questions. The notes contain hyperlinks so you can jump directly to the relevant section.

Sections highlighted in yellow are mandatory. These must be completed for every application.

**Section 1**: Introduction
**Section 2**: Your project details
**Section 3**: Description of the research
**Section 4**: Potential risks to participants and researchers
**Section 5**: Participants and data subjects
**Section 6**: Participants or data subject information and consent
**Section 7**: Confidentiality and handling of data
**Section 8**: Security sensitive material
**Section 9**: Copyright
**Section 10**: Good conduct in collaborative research
**Section 11**: Good conduct in publication research

**SECTION 1: Introduction**

This is a:
New application for ethical approval – first submission
A resubmission following reviewer comments
A resubmission with requested amendments
Please select your School:

School of Health in Social Science
Please select your subject area

CPASS
Clinical Psychology
Nursing Studies

It is each researcher’s responsibility to check whether their project requires Sponsorship, Caldicott Approval, R&D approval, and/or IRAS. [https://www.ed.ac.uk/health/research/ethics/sponsorship-and-governance](https://www.ed.ac.uk/health/research/ethics/sponsorship-and-governance)

If the project requires any of these, these need to be secured prior to submitting this application.

Please tick the relevant box before proceeding:

I have checked and this project does not require Sponsorship, Caldicott, R&D and/or IRAS approval

My project requires Sponsorship  Sponsorship letter attached
My project requires Caldicott approval  Caldicott approval letter/e-mail attached
My project requires R&D approval  R&D approval letter/e-mail attached
My project requires IRAS approval  IRAS approval letter/e-mail attached

External Research Ethics Approval

Does your research project require the approval of any other institution and/or ethics committee, nationally or internationally?

Please state the name of the review body and the current status of your application (for example, submitted, approved, deferred, or rejected)? Please include any known submission/approval timelines.

N/A

SECTION 2: Your project details

2.1 Project details

Your name: Pearse Adams

Please enter your project title: Clinician’s perspectives of adapting to remote trauma interventions following the impact of COVID-19.

Proposed Project Start Date: 01/04/2021
Proposed Project End Date: 31/07/2021
Q1. Are you a member of staff or a student?

Staff member

Supplementary questions for staff members only:

List the names and institutions of any Co-Investigators working with you on the project.

Student

Supplementary questions for students only:

What type of student are you?

Doctorate / Postgraduate

Please provide your course title or programme name

Doctorate In Clinical Psychology

Who is your supervisor?

Dr Rachel Happer

Q2. Please indicate any external ethical guidance your project has to adhere to. For example, the British Psychological Society (BPS), the British Academy, the British Association of Sport and Exercise Sciences (BASES)

British Psychological Society (BPS), HCPC Standards of conduct, performance and ethics

2.2 Participants

Q3. Will you be collecting or generating any new data (including autoethnographic writings)?

Yes

No

Q4. Will you be extracting, re-coding or using existing data that contains sensitive information (i.e., identifiable information)?
Yes
No

If the answers to both Q3 and Q4 are ‘no’ you are not required to complete:

Section 4: Potential risks to participants and researchers
Section 5: Participants and data subjects
Section 6: Participant or data subject information and consent

2.3 Security-Sensitive Material

Q5. Does your research project fit into any of the following security-sensitive categories?
   Your research project is commissioned by the military.
   Your research project is commissioned under an EU security cell.
   Your research project involves the acquisition of security clearances.
   Your research project concerns groups which may be construed as terrorist or extremist

If you answer ‘yes’ to any of the questions above you must complete Section 8 Security Sensitive Material. You must answer all questions in the section.

2.4 Good Conduct in Collaborative Research

Q6. Will your research project involve collaborative work?

Yes
No

Selecting "Yes" to this question means you must complete Section 10 "Good conduct in collaborative research" later in the form. You must answer all questions in the section.

2.5 Project Funding

Q7. Is funding required for your research project? (To be completed by staff only)

Please indicate how the project will be financially supported.

2.6 Knowledge Exchange and Impact

Q8. Will there be any knowledge exchange and impact activities associated with this project? (To be completed by staff only)
2.7 Consultancy Potential

Q9. Could your research project lead to potential consultancy activities in the future? (To be completed by staff only)

SECTION 3: Description of the research

Q10: Please use the box below to describe your research; including a background summary, rationale, research questions and hypotheses, methodology, procedures. If you have identified ethical considerations that are not addressed in other parts of the form, please outline and discuss them here.

Scientific Rationale

Trauma:
Trauma can be defined as an event or circumstance that is physically or emotionally harmful to an individual. This can be experienced either as a single, unexpected adverse event such as a traffic accident which can result in Posttraumatic Stress Disorder (PTSD), or as repeated and persistent events such as domestic violence or child abuse which can result in Complex Trauma. Trauma can have a significant psychological and wider impact on individuals, contributing to increased psychological distress, addiction and physical health difficulties.

Therapeutic Interventions:
Individuals with complex trauma often engage in a stage-based intervention which includes establishing safety and stabilisation, processing of traumatic memories and reintegration. Recommended treatments for single incident or PTSD cases primarily include trauma-focused Cognitive Behavioural Therapy (CBT) or Eye Movement Desensitisation and Reprocessing (EMDR), as well as behavioural or cognitive-only and narrative techniques. However, a breadth of evidence suggests that different trauma interventions can produce similar positive effects and that components that distinguish interventions from one another may not be needed to produce this positive effect.

Remote therapy:
This has extended to the debate of face-to-face versus remote therapy. While various forms of non-face-to-face interventions exists such as computerised interventions and guided self-help, remote psychological interventions either via telephone or video conferencing with the present and active role of a clinician is the most comparable to face-to-face interventions. Despite being in its early stages, evidence suggests that remote therapy for trauma can produce similar treatment outcomes in comparison to face-to-face interventions. However, this evidence is limited, and there is still debate as to whether remote therapy for trauma can produce aspects such as a good therapeutic relationship as well as long term treatment effects in comparison to face-to-face therapy. Furthermore, a qualitative inquiry into this topic can provide a description of the nuanced processes of remote versus face-to-face therapy.

The impact of COVID-19:
The Covid-19 pandemic has resulted in drastic changes to public, health and economic policies while having significant impact on psychological well-being across society. Specifically, the impact of global emergencies such as this can result in traumatic symptoms such as loss of control, increased anxiety, and increased threat response. As this is a newly emerging phenomenon, there is a significant gap in research examining the general impact of COVID-19 on society as well as on those who may already be seeking psychological care.

Impact and perspective of clinicians:
There is considerable evidence suggesting that healthcare professionals experience increased vulnerabilities such as mood, anxiety and sleep difficulties during COVID-19 and indeed past viral outbreaks such as SARS. This evidence however has rarely examined the impact on mental healthcare professionals specifically. In addition, many health professionals who have been forced to adapt or limit their interventions can be left with a sense of moral injury in relation to those they provide care for. It is important therefore to consider whether the adaptations that mental health clinicians have had to make to their trauma interventions results in a sense that they cannot provide the optimal care to clients.

The COVID-19 pandemic has resulted in a need to examine the use and adaptation of remote therapy for trauma interventions. This study will help understand the challenges and opportunities that come with using remote therapy to help services improve the quality of remote psychological therapies that they can deliver to individuals with experiences of trauma. It is also hoped that psychological services for other types of mental health difficulties could also use this information to improve their quality of care.

Research Questions
Primary:
What are clinicians’ experiences of working remotely with trauma-based psychological interventions following the impact of the COVID-19 pandemic?

Secondary:
• What were clinicians’ perspectives on remote trauma working prior to COVID-19?
• How have clinicians had to adapt their interventions to work remotely?
• What have been the challenges and opportunities to the recent pivot in adapting clinician’s practice to working remotely with trauma interventions?
• What are clinicians’ perspectives on how future interventions for psychological trauma will be influenced by working in the context of COVID-19?

Design
This study consists of a mixed methods design employed to examine the experience of working remotely with trauma interventions among clinicians as a result of COVID-19. This will be initiated by using a questionnaire that will ask for background data on participants’ experience and training in trauma interventions and general remote working in the current climate.

This will then be followed by a more in-depth qualitative field study using semi-structured interviews to explore how clinicians make sense of and adapt to remote therapy working and the meaning drawn from specific incidences they have faced as trauma clinicians in the context of COVID-19.

Participation / recruitment
Participants will be qualified clinical staff delivering trauma-based psychological therapies to adults. Participants currently employed across NHS Tayside Adult Psychology Therapies Services will be recruited for this study. Several suitable psychology services have been identified by the research team. In line with research guidelines, it is intended that eight to twelve clinicians will be recruited to participate in both the questionnaire and interview components of the current study, while approximately fifty clinicians will be recruited for
participation in the questionnaire component only.

**Sampling**

Purposive sampling will be used to recruit clinicians who meet the relevant inclusion criteria for the study. Recruitment will be facilitated through specific psychology team leads for each service. Further details of the sampling and recruitment are outlined in later sections.

**Procedure**

Following ethical approval, appropriate psychology services will be contacted as stated previously. The lead researcher will offer to attend team meetings to outline the details of the study to each psychology team. The researcher will also provide services with information sheets and contact details for those who wish to participate or ask additional questions as well as a link to the initial online questionnaire. The information leaflet will include the reasons for and impact of the study, 'who' is suitable for the study and a general outline of topics explored throughout the interview and questionnaire. This information will be circulated electronically to allow for any potential participants who may not be able to attend their respective meetings. To enhance informed consent, information sheets will be provided to clinicians in advance of any service-wide discussions so as to allow clinicians time and space to consider participation.

Clinicians within each service that are considered eligible for participation will be invited to complete the questionnaire via the online link provided. The questionnaire will be hosted via Qualtrics software. After the research team has used the questionnaires to consider which services are particularly suitable for the interview component, these clinicians will be asked to contact the lead researcher directly to arrange an interview.

Consent for participation will be sought when clinicians complete their questionnaires and once again on the day of the interview. Participants will engage in individual interviews lasting approximately 40 to 60 minutes. Interviews will take place either face to face or via video conferencing.

**Obtaining consent**

Informed consent will be obtained on two occasions in line with the sampling process. The first occasion will obtain consent to complete the background questionnaire, while the second time will be on the day of the interview prior to any recordings taking place. The first consent form will appear at the beginning of the background questionnaire and participants will need to declare their consent before being allowed to complete the questionnaire. In relation to the interview, a digital copy of the information sheet and consent form will be sent in advance of the interview and participants will be asked to sign and scan this form to the lead researcher or to bring it / sign it in person at the interview. Participants will be allowed time to read both information sheets and consent forms and will be allowed to ask any questions prior to providing consent. Interviews will not take place until informed consent is obtained.

Obtaining informed consent will solely fall to the lead researcher (named student) in this study.

Following initial advertising through service team meetings and electronically circulating research information and questionnaire links, potential participants will be given at least two to three weeks to consider whether they wish to express interest in participation and to complete the questionnaire. This will likely extend if not all participants are recruited at the same time. Following this, participants who express interest in further participation and who are deemed eligible by the research team following the questionnaire screening process will be offered an interview slot at least one week in advance. During this time, they will be provided with participant information sheets and an additional copy of the consent form. Furthermore, on the day of the interview, a ten-minute slot will be allocated prior to the interview to discuss any concerns regarding participation.

**Data handling / confidentiality**

Participant’s questionnaires will be provided with unique 5-digit identifiers, while interviews will be pseudo anonymised. All data will be stored on a UoE OneDrive account exclusive to the lead researcher.
Personal data (consent forms, email address and names) will be password protected within this OneDrive account. Access to personal data will be granted exclusively to the lead researcher. Work email addresses will be requested at the end of questionnaires to express interest in interview participation. These work email addresses will be stored in an encrypted file separate to other research data. These email addresses will be deleted once recruitment for interview participation has been completed. Consent forms will be stored electronically separately to other study documentation, while physical copies of consent forms will subsequently be destroyed. Questionnaire data will be transferred to Raw SPSS datasets, while interviews will be transcribed by the Lead Researcher and transferred to NVivo. Audio files will be destroyed once transcribed.

Withdrawal:
Staff are under no obligation to participate in this study. If participants would like to withdraw following their participation, they are permitted to do so as long as their data has yet to be anonymized and collated together with the rest of the data. The researcher commits to having a two-week window after initial participation during which time their data will not be anonymized or collated, allowing participants to withdraw upon request. These details are outlined in the information sheet.

Data Analysis
For the qualitative component, Interpretative Phenomenological Analysis (IPA) will explore clinician’s experiences of using trauma therapy remotely in the context of COVID-19. IPA can be utilised to capture a specific subjective experience of being a trauma clinician during a global pandemic, while also gaining a detailed perspective from a population that has scarcely been examined in the current global context. Initial line by line coding as well as additional exploratory comments will provide a general account of participant experiences. A higher level of coding will allow the creation of emergent themes. This will then be developed to place a psychological lens on participants interpretations of their experience of working remotely with trauma. Emergent themes will then be compared and contrasted across transcripts to identify trends and differences. Where possible, themes may then be connected hierarchically at superordinate and subordinate levels.

For the quantitative component, descriptive and exploratory statistics (mean comparisons, standard deviations, frequencies, and ranges) of participants experience as clinicians over the course of COVID-19. Inferential repeated measures may be utilized to compare clinicians’ competence and confidence in intervention delivery as well as in their changes to intervention delivery prior to COVID restrictions and at the time of data collection. However, it is worth noting that this is not the primary analytic focus of the study and conclusions drawn beyond an exploratory and level may be limited.

SECTION 4: Potential risks to participants and researchers

Q11. Is your research project likely or possible to induce any psychological stress or discomfort in the participants or others, indirectly associated with the research?

Yes
No

If “yes” state the types of risk and what measures will be taken to deal with such problems

Clinicians may reflect on their recent work experiences and capacities. Given the universal impact of COVID-19, it is possible that the information shared may reflect different personal or professional impacts for participants.

For all clinicians recruited, the supervisory set up available to them at the time of interview will be clarified and encouraged as a first point of contact. Any differences in governance regarding supervision or access to managerial support resulting from clinicians.
working from home will be noted and the potential need for further support will be signposted.

The academic supervisor for this project is an expert in the field of trauma and has substantial experience in relation to staff and service training. As such, the academic supervisor has agreed to make their contact details available to discuss concerns raised by participants.

It is worth considering the burden of time spent participating in this study. The research team will consult with team leads to ensure that clinicians are permitted to participate in the study as part of and during their working hours outlined in their contracts. This reduces the pressure of clinicians who may feel pressured to use non-contracted time to participate. Furthermore, clinicians who participate in the interview will be given at least one weeks’ notice between being allocated a slot and the interview taking place.

Q12. Does your research project require any physically-invasive or potentially physically harmful procedures?

Yes
No

If “yes” give details and outline procedures to be put in place to deal with potential problems.

Q13. Does your research project require the use of privacy-invasive technology, such as CCTV, biometrics, facial recognition, vehicle tracking software?

Yes
No

If “yes” - Give details and outline procedures to be put in place to deal with potential problems.

Q14. Does your research project involve the investigation of any illegal behaviour or activities?

Yes
No

If “yes” - Give details of any illegal behavior or activities you may investigate

Q15. Is it possible that your research project will lead to awareness or the disclosure of information about child abuse or neglect?

Yes
No

If “yes” - Indicate the likelihood of disclosure and the procedures to be followed if you become aware that a child has been or may be at risk of harm
Q16. Is it likely that dissemination of research findings or data could adversely affect participants or others indirectly associated with the research?

Yes  
No

If “yes” - **Describe the potential risk for participants/data subjects of this use of the data. Outline any steps that will be taken to protect participants.**

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Q17. Could participation in this research adversely affect participants and others associated with the research in any other way?

Yes  
No

If “yes” - **Describe the possible adverse effects and the procedures to be put in place to protect against them.**

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Q18. Is this research expected to benefit the participants, directly or indirectly?

Yes  
No

If “yes” - **Give details of how this research is expected to benefit the participants.**

Participants of the current study will be among the first to reflect on the experiences of this change in service delivery and structure. The implications below represent benefits that participants can directly apply to their clinical work.

There are ongoing discussions relating to the long-term impact COVID-19 will have on the delivery of psychological interventions. While attempts to adapt to remote working have stemmed from urgency and necessity in the current climate, researchers have stressed the need and opportunity to gather knowledge on the effectiveness of remote psychotherapy in an age of sophisticated technological communication. The current study aims to contribute to that knowledge base with specific insight into the use of remote trauma interventions which may be generalisable to service provision post COVID-19.

Without appropriate resources, coordination and planning, this urgency for service provision in the current climate may result in an insufficient standard of implementation for psychological interventions across health professionals and services. Examining clinicians’ perspectives can provide insight into practical, service-based factors such as specific resources or relevant training which may be essential for the successful coordination and delivery of remote trauma work going forward. Furthermore, while this study focuses specifically on trauma interventions, the current findings may be generalisable to the application of remote versus face-to-face interventions across mental health presentations and services which participants may apply to their wider clinical work.

While psychological research related to COVID-19 is in its novel stages, the majority of literature findings related to trauma interventions to date consists of quantitative data focusing primarily
on clinical outcomes. The current study adds a qualitative and clinician's perspective which may compliment quantitative findings by examining the phenomenon of remote trauma working beyond the context of routine outcome data.

Participants and their psychology services will receive a report outlining the findings of this research once the project has been completed as detailed in section 52 below.

Q19. Will the true purpose of the research be concealed from the participants/data subjects?

Yes
No

If “yes” - Explain what information will be concealed and why.

Q20. Will participants/data subjects be debriefed at the conclusion of the study?

Yes
No

If “no” – Why will participants / data subjects not be debriefed?

Q21. At any stage in this research could researchers’ safety be compromised, or could the research induce emotional distress in the researchers?

Yes
No

If “yes” - Give details and outline procedures to be put in place to deal with potential problems.

Please tick to confirm you agree with the following:

I will adhere to School guidance on risk assessment and health and safety and will seek advice on project and travel insurance prior to project commencement.

I agree
I do not agree
Not applicable

SECTION 5: Participants and data subjects. For autoethnographic research also include those who may feature in your writings.

Q22. How many participants or data subjects are expected to be included in your research project?
The estimated total sample size is fifty participants. This relates to the total number of participants who will at least participate in the questionnaire component. However, a sub-sample of twelve will be the number of participants who will be recruited for both the quantitative (questionnaire) and qualitative (interview) component of the study.

The lead researcher will liaise with clinical leads of the suitable psychology services in NHS Tayside to provide an estimate number of clinical staff who meet this studies inclusion criteria. At the time of this submission, there is an estimated participant pool of approximately 60 to 70 clinicians working across different catchment areas who meet this criterion.

Q23. What criteria will be used in deciding on the inclusion and exclusion of participants/data subjects in your research project?

Inclusion:
Participants must be qualified NHS psychological therapy staff - including Clinical Psychologists, Counselling Psychologists, Health Psychologists, Clinical Associates in Applied Psychology and/or Accredited Therapists.

Participants must hold a recognised qualification with one of the above titles.

Clinicians must be employed and working within the branches of adult psychological therapies services across NHS Tayside as agreed by the research team. This includes Adult Primary Care, Community Mental Health, Eating Disorders, Forensic and Addiction services.

For the interview component, Clinicians are required to have a substantial trauma caseload and have worked with trauma-based interventions with adult populations both prior to and during COVID-19 service restrictions. As this is a difficult criterion to quantify, it is intended that the descriptive analysis collected from the questionnaires will help inform which services may possess the most appropriate clinicians in relation to their experience with trauma interventions.

Exclusion:
Clinicians who do not hold professional qualification or those currently enrolled in qualification training programmes will be excluded.

Clinicians who are employed in any of the branches/services named below will not be able to participate in the current study. These include clinicians working in Child and Adolescent Mental Health (CAMHS), Older Adults, Learning Disabilities (LD) or Neuropsychology services.

Clinicians who were in long-term absence from clinical work during the period of the study as well as in the year prior to data collection. Examples of such circumstances may include those who were on parental leave or those with long-term sickness.

Clinicians who have no experience in the delivery of one-to-one trauma therapy will also be excluded from the interview component of the study.

Q24. Are any of the participants or data subjects likely to be under 16 years of age?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.
Q25. Are any of the participants or data subjects likely to be children in the care of a Local Authority?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

Q26. Are any of the participants or data subjects likely to be known to have additional support needs?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

Q27. In the case of participants with additional support needs, will arrangements be made to ensure informed consent?

Yes
No

If “yes” – What arrangements will be made?

If “no” – Please explain why not

It is not anticipated that the current staff group will require any additional needs. However, initial advertisement of the study will encourage staff to contact the research team if they require any additional support needs should they express interest in participation. Researchers will liaise with the participants respective service to ensure additional needs to facilitate participation are fulfilled.

Q28. Are any of the participants or data subjects likely to be physically or mentally ill?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

Q29. Are any of the participants or data subjects likely to be vulnerable or likely exposed to harm in other ways?

Yes
No
If “yes” - Explain and describe the nature of the vulnerability and the measures that will be used to protect and/or inform participants/data subjects.

Q30. Are any of the participants or data subjects likely to be unable to communicate in the language in which the research is conducted?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

Q31. Are any of the participants or data subjects likely to be in a relationship (i.e., professional, student-teacher, other dependent relationship) with the researchers?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

The lead researcher is a trainee clinical psychologist employed by NHS Tayside. As such, there is a possibility that the lead researcher may have had professional interactions with participants throughout their training programme. At the time of data collection, the researcher will not be supervised or working directly within services from which participants will be recruited. It is anticipated that measures to ensure confidentiality as outlined in later sections will further enhance these considerations.

Q32. Are any of the participants or data subjects likely to have difficulty in reading and/or comprehending any printed material distributed as part of the study?

Yes
No

If “yes” - Explain and describe the measures that will be used to protect and/or inform participants/data subjects.

Q33. Describe how the sample will be recruited.

Participants will be qualified clinical staff delivering trauma-based psychological therapies to
adult clients. Purposive sampling will be employed to recruit participants currently employed across NHS Tayside Adult Psychology Therapies Services. This will include psychological therapies staff working in Primary Care, Community Mental Health, Eating Disorders, Forensic and or Addiction services. The research team has at present identified several psychology teams across different catchment areas who meet inclusion criteria.

There will a two-step process to the sampling method. Firstly, all suitable clinicians across these named services will be asked to complete the questionnaire online. Following this, questionnaires will be screened to identify which services possess the most suitable clinicians in relation to their experience and current trauma caseload as described previously. From this, individuals who have expressed interest in the interview component will be contacted individually and in confidence by the lead researcher using the work email address they will have provided at the end of their completed questionnaire. This tiered process allows data to be collected on a more general level while also refining the recruitment pool to further fit the inclusion criteria.

Following ethical approval, psychological therapies services named above will be informed about the research study. It is intended to contact the clinical leads of each service to discuss how best to facilitate recruitment. The lead researcher will offer to attend team meetings, either in person or via video conferencing to provide details of the study to potential participants.

For the first step of sampling, the lead researcher will provide services with relevant information leaflets as well as a link to complete the questionnaire via the Qualtrics website. The information leaflet will include the rationale and implications for the study, the inclusion criteria and an overview of topics explored during the interview and questionnaire components, the right to informed consent and confidentiality as well as how participant data will be processed and stored. This information will also be circulated electronically to allow for any potential participants who may not be able to attend their respective team meetings. To enhance informed consent, information leaflets will be provided to clinicians in advance of any service-wide discussions so as to allow clinicians time and space to consider participation. Clinicians will be asked to provide their email address at the end of the online questionnaire as a means to be contacted individually for later interviews.

For the second step of sampling, clinicians who meet inclusion criteria following the questionnaire screening will be contacted by the lead researcher via their NHS email and will be asked to contact the lead researcher for an opportunity to ask any questions, discuss the procedure and to allocate a suitable interview slot. Once participants have been allocated an interview slot, they will be sent a copy of the consent form with the intention of this being completed prior to the interview. Written consent for participation will be sought once again on the day of interview prior to any recording of conversations. This may be sent to the researcher electronically if interviews take place remotely, while physical copies will be used if preferred by those participating in person.

**Q34. Will participants receive any financial or other material benefits as a result of participation?**

Yes
No
Section 6: Participant or data subject information and consent

Q35. Will written consent be obtained from all participants or data subjects?

Yes  
No

If “yes” – attach participant information sheet and consent form  
If “no” – explain why not and how consent is obtained (e.g. orally), and/or if consent cannot or should not be sought for some reason, please provide a clear case and rationale for this

Attached with relevant documentation

Q36. Have you made arrangements to tell participants what information you will hold about them and for how long?

Yes  
No

If “yes” – what arrangements have been made?

Primary and related data as defined in GCP guidelines will be kept for a minimum of ten years. This includes raw interview and survey data as well as consent forms.  
https://mrc.ukri.org/publications/browse/good-research-practice-principles-and-guidelines/

Furthermore, participants work email addresses as required for follow up interview contact will be deleted as soon as correspondence between the researcher and the participant regarding their interview participation has been completed.

This information will be outlined in the attached Participant Information Sheet

Q37. Have you made arrangements to tell participants whether you will disclose the information to other organisations?

Yes  
No

If “yes” – What arrangements have been made?

No disclosure of information to other organizations will be necessary.

Q38. Have you made arrangements to tell participants whether you will combine that information with other data?

Yes
No
If “yes” - What arrangements have been made?

Q39. In the case of children participating in the research, will the consent or assent of parents be obtained?
Yes
No
If “yes” - Explain how this consent or assent will be obtained

If “no” – Please explain why you won’t be obtaining consent
N/A

Q40. Will the consent or assent of children participating in the research be obtained?
Yes
No
If “yes” - Explain how this consent or assent will be obtained

If “no” – Please explain why not
NA

Q41. In the case of participants who are not proficient in the language in which the research is conducted, will arrangements be made to ensure informed consent?
Yes
No
If “yes” – What arrangements will be made?
NA
If “no” – Please explain why not
As participants are qualified clinical staff working within services whereby a proficient level of English is required to engage in their work, it is assumed that participants will possess a level of English that allows them to understand all relevant information and expressions. However, all questionnaire and interview material and information related to the project will be piloted with a clinician in a similar role to potential participants to ensure instructions are understandable.
Potential participants will be encouraged to contact the lead researcher in advance if they have any specific communication needs. It is assumed that services participants are working in have the necessary resources to accommodate any individual communication needs that may arise.

Q42. Does the activity involve using cookies or tracking individual’s activity on a website or the Internet in general?

Yes
No

If “yes” – Describe the arrangements, you have put in place to obtain informed consent for the use of these tools?

SECTION 7: Confidentiality and handling of data

Q43. What information about participants/data subjects will you collect and/or use?

The following personal data will be collected as part of the research:
• NHS Work emails, years of qualified experience, current service, and job title
• Names (from consent form signatures)
• Audio recordings (participants voices)

Q44. Will you collect or use NHS data?

Yes
No

If “yes” – what NHS data will you collect or use?

NHS work email addresses – for the sole purpose of follow-up contact for the interview component of the study

Q45. What training will staff who have access to the data receive on their responsibilities for its safe handling? Have all staff who have access completed the mandatory data protection training on the self-enrolment page of Learn?

The Lead Researcher (student) has completed the required GCP online training which has been sent and verified by the local NHS R&D officer.

Q46. Will the information include special categories of personal data (health data, data relating to race or ethnicity, to political opinions or religious beliefs, trade union membership, criminal convictions, sexual orientations, genetic data and biometric data)

Yes
If “yes” – Explain what safeguards e.g. technical or organisational you have in place; including any detailed protocols if this requires special and/or external processing, storage, and analysis.

If you answered “no” to this question, please skip Q56 and continue answering the rest of the questions.

**Q47. Please indicate how your research is in the public interest:**

Your research is proportionate
Your research is subject to a governance framework
Research Ethics Committee (REC) review (does not have to be a European REC)
Peer review from a funder
Confidentiality Advisory Group (CAG) recommendation for support in England and Wales or support by the Public Benefit and Privacy Panel (PBPP) for Health and Social Care in Scotland
Other

**Q48. It is essential that you identify, and list all risks to the privacy of research participants. You will then need to consider the likelihood of the risks actually manifesting and the severity of harm if the risks actually manifest.**

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likelihood of risk manifesting</th>
<th>Severity of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remote</td>
<td>Possible</td>
</tr>
<tr>
<td>Identifiable due to data linkage</td>
<td>X</td>
<td>□</td>
</tr>
<tr>
<td>Identifiable due to low participant numbers</td>
<td>□</td>
<td>X</td>
</tr>
<tr>
<td>Identifiable due to geographical location</td>
<td>X</td>
<td>□</td>
</tr>
<tr>
<td>Identifiable due to transfer of data</td>
<td>X</td>
<td>□</td>
</tr>
<tr>
<td>Identifiable due to access of data</td>
<td>□</td>
<td>X</td>
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<tr>
<td><strong>Insert more rows as appropriate</strong></td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

*Please use this text box to record any other risks and the likelihood of them occurring, along with the severity of harm.*

**Risk associated with interviews taking place face-to-face in the context of COVID-19**

*Likelihood: Possible*
Severity of Harm: Significant (in the context of COVID-19)

Please identify measures you could take to reduce or eliminate risks identified as possible/significant or probable/severe.

Identifiable due to access of data / small numbers
The above concerns regarding access of data and small study numbers are in fact deemed low risk by the research team. However, it is worth detailing the contingencies put in place that reduce these risks. Given that the field supervisor for the current project is also the acting director of psychology services from which participants are being recruited, it is important to consider that even with pseudoanonymised data, the limited number of participants and services increases the risk of the field supervisor being aware of whether certain data points could be linked to specific known staff members. In addition, liaison with relevant psychology team leads may produce similar risks relating to the identification of staff who have or have not participated. As a result, a number of contingencies have been put in place to reduce the risk of this identification from occurring.

Recruitment:
The student researcher will liaise with psychology team leads from each approved centre / staff group to initiate advertisement for the study. This may be facilitated by attending relevant team meetings or by distributing relevant information via email. Participants will be sent relevant Information Sheets and a link to the questionnaire to their work email addresses which will be distributed by their team leads. However, after this point, the participants are not required to consult with their team leads with regards to their participation. The questionnaire link will be accessed on an individual basis and the outcome of their participation will not be known. Furthermore, participants will be asked to provide their NHS work email addresses at the end of this questionnaire if they are interested to participate in the interview. This information will only be available to the student researcher and will be handled as detailed below.

Anonymisation and access to data:
Once recruited, participants will be assigned a unique five-digit code to act as their identifier throughout the project. Interview consent forms containing participant signatures will be stored securely as detailed below. Participants who also partake in the interview component will be given a specific pseudonym for reports of interview data. These personal details will not be utilised for any other reason once all interviews have been pseudoanonymised. Participants’ interviews and questionnaires will be matched with the same pseudonym and code to ensure proper triangulation between data forms can be conducted. During this process, at no point will either the field or academic supervisor have access to any of the identifiable material produced by the recruitment and or participation process.

Supervisor Consultation:
These risks may also be apparent if and when the student researcher requires the consultation of their supervisors in relation to data analysis. As such, it has been decided that any statistical data presented to the research supervisors will be both anonymized and analysed in descriptive summary form, meaning no individual cases will be directly visible. In relation to the interviews, if any information provided in the audio recordings is deemed potentially identifying in nature, it will be omitted from resulting transcripts or appropriately anonymised to ensure confidentiality is not breached. Any uncertainty around these omissions will be consulted with the project supervisors to ensure omission / alteration is justified. More specifically, the student researcher will first liaise with the academic supervisor if there are any concerns that the presenting interview extracts may be potentially identifiable by the field supervisor.

Further details on confidentiality of identifiable information can be found below.

The generated anonymised data will be analysed on the University of Edinburgh OneDrive account owned by the lead researcher which may be accessed remotely via the lead researcher’s personal computer of NHS / University computers. As mentioned previously, anonymised data samples may be accessed by the project supervisors for consultation purposes.

The lead investigator will have exclusive access to a password-protected spreadsheet which will have the corresponding personal details (name and pseudonym, work email address) for each participant,
however this data will only be held for the duration of data collection and analysis and will not be utilised for any other reasons. Participants’ interviews and questionnaires will be matched with the same pseudonym and code to ensure proper triangulation between data forms can be conducted.

Once electronically scanned, access to the consent forms will only be granted to the lead researcher. Interview recordings will be transcribed and their audio files subsequently destroyed. The lead researcher will be the only transcriber with access to these original recordings.

The use of the NHS email is purely as a means to contact participants for interview participation and will not be utilized otherwise. As stated previously, access to these work email addresses will be granted solely to the lead researcher.

Any quotations taken from participant interviews will be coded to this pseudonym to ensure that accounts can be linked to specific participants where appropriate. Furthermore, the reason for utilising pseudoanonymisation as opposed to full anonymisation is that certain background information related to each participant will ideally remain as a means to draw further conclusions between participants backgrounds and their accounts as rationalised by a mixed methods approach. This includes specific job title, years of clinical experience and relevant training and approaches used for trauma interventions, all of which will be asked within anonymised questionnaires. No other personal or identifiable information will be collected.

**Risk associated with interviews taking place face-to-face in the context of COVID-19**

Participants may choose to engage in interviews in person. As such, it is important to take the appropriate steps to minimise the risk of exposure to the Coronavirus during the study by adhering to the Scottish Government guidance (https://www.gov.scot/coronavirus-covid-19/).

Participants will only be permitted to interact with the researcher face-to-face if they are in good health and have had no known contact with COVID-19 positive individuals for the past 14 days and are not experiencing any COVID-related symptoms. It is important to note that even with these control measures, some additional risk of exposure from participating in this study does remain. This is the primary reason for always offering the option of a video interview in the first instance.

As an initial precaution, the lead researcher will liaise with the team leads to ensure the space provided on staff sites is in adherence to COVID-19 regulations. Both the researcher and participant will be asked to commit to the usual on-site safety standards in relation to using physical space (social distancing, sanitization etc.).

If a participant is unwell or has been in contact with a COVID-19 positive individual in the 14 days prior to their interview, they will be asked to contact the researcher (Pearse Adams, ). From here, a decision will be made to postpone, cancel, or change the interview to a video format if deemed appropriate at the time. The lead researcher will adhere to the same standards and will inform participants if they themselves are a close contact or is experiencing symptoms. The lead researcher will also contact each participant via email on the day of their interview to ensure the interview can take place safely.

Q49. Will information containing personal, identifiable data be transferred to, shared with, supported by, or otherwise available to third parties outside the University?

Yes

No

*If “yes” - Please explain why this necessary and how the transfer of the information will be made secure. If the third party is based outside the European Economic Area please obtain guidance from the Data Protection Officer.*
Q50. Other than the use by third parties, will the data be used, accessed or stored away from University premises?

Yes
No

If “yes” - Describe the arrangements you have put in place to safeguard the data from accidental or deliberate access, amendment or deletion when it is not on University premises, including when it is in transit, and (where applicable) it is transferred outside the EEA.

All research data will be stored on a Microsoft OneDrive for Business online cloud storage. This account will unique and only accessible to the lead researcher as a University of Edinburgh student. This will allow the lead researcher to securely work on data from different sites, either via personal, NHS or University computers. At no point will this data be transferred outside the EEA.
Q51. Will feedback of findings be given to your research project participants or data subjects?

Yes
No

If “yes” - How and when will this feedback be provided?

Feedback will not be given directly to research participants, however they will be included in a service-delivered report of the findings that will be generated as outlined in section 52 below.

If “no” - Please provide rationale for this.

Q52. How do you intend to use/disseminate the results of your research project?

The project will be submitted as partial fulfillment for the lead researchers doctorate qualification in Clinical Psychology will subsequently be made freely accessible online via the Edinburgh Research Archives.

With regard to positive ethics, it is essential that data generated from the current study is disseminated to impact the both clinicians and their clients as much as possible. Following submission for academic examination, it is intended to submit the project for peer review to a relevant journal publication to attract maximum coverage in the academic space as well as among specialist audiences related to the delivery of psychological trauma interventions. Potentially suitable journals are listed below:

Journal of Psychotherapy Integration
https://www.apa.org/pubs/journals/int/ Impact Factor: 2.19

European Journal of Psychotraumatology (open access) –
https://www.tandfonline.com/toc/zept20/current Impact Factor: 3.48

Journal of Telemedicine and Telecare
https://journals.sagepub.com/aims-scope/JTT Impact Factor: 2.61

In addition, an online webinar and summarized reported of the project will be made accessible to adult psychological therapies services across NHS Tayside. This will facilitate immediate dissemination as well as an appropriate gesture to services that have been integral to the recruitment process.

The project will also be submitted for both national and international conference presentations in the future. It is intended that such conferences will include audiences within psychology in general as well as within the specific remit of therapeutic service development and adaptation within Clinical Psychology.
SECTION 8: Security-sensitive material

The Terrorism Act (2006) outlaws the dissemination of records, statements and other documents that can be interpreted as promoting or endorsing terrorist acts.

Q53. Does your research involve the storage on a computer of any such records, statements or other documents?

- Yes
- No

If “yes” - Please tick 'Yes' to indicate that you agree to store all documents on that file store

Q54. Might your research involve the electronic transmission (for example, as an email attachment) of such records or statements?

- Yes
- No

If “yes” - Please tick ‘Yes’ to indicate that you agree not to transmit electronically to any third-party documents stored in the file store

Q55. Will your research involve visits to websites that might be associated with extreme, or terrorist, organisations?

- Yes
- No

If “yes” - You are advised that such sites may be subject to surveillance by the police. Accessing those sites from University IP addresses might lead to police enquiries. Please acknowledge that you understand this risk by ticking ‘Yes’

- Yes
- No

By submitting to the ethics process, you accept that your School Research Ethics Officer and the convenor of the University’s Compliance Group will have access to a list of titles of documents (but not the contents of documents) in your document store. Please acknowledge that you accept this by ticking 'Yes'

Please confirm that you have contacted your School Research Ethics Officer to discuss security-sensitive material by ticking ‘Yes’

- Yes, I have contacted my School’s Research Ethics Officer
- No, I have not contacted my School’s Research Ethics Officer
Section 9: Copyright

Q56. Does your project require use of copyrighted material?

Yes
No

If “yes” please give further details

Section 10: Good conduct in collaborative research

Q57. Does your project involve working collaboratively with other academic partners?

Yes
No

If “yes” - Is there a formal agreement in place regarding a collaborative relationship with the academic partner(s)?

Yes, a supervisory agreement has been approved and signed by the academic supervisor named above. No other academic partnerships exist outside of the project supervisory team.

If “no” - Please explain why there is no formal agreement in place?

Q58. Does your project involve working collaboratively with other non-academic partners?

Yes
No

If “yes” - Is there a formal agreement in place regarding a collaborative relationship with the non-academic partner(s)?

Yes, this pertains to the field supervisor who has also approved and signed the supervisory agreement contract with the other members of the research team.

If “no” - Please explain why there is no formal agreement in place.

Q59. Does your project involve employing local field assistants (including guides/ translators)?

Yes
No
If “yes” - Is there a formal agreement in place regarding the employment of local field assistants (including guides and translators)?

If “no” - Please explain why there is no formal agreement in place

N/A

Q60. Will care be taken to ensure that all individuals involved in implementing the research adhere to the ethical and research integrity standards set by the University of Edinburgh?

Yes
No

If “no” - Please explain why care will not be taken

Q61. Have you reached agreement relating to intellectual property?

Yes
No

If “no” - Please explain why you have not reached agreement
**Section 11: Good conduct in publication practice**

In publication and authorship, as in all other aspects of research, researchers are expected to follow the University’s guidance on integrity.

By ticking yes, you confirm that full consideration of the items described in this section will be addressed as applicable

Yes
No

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Subsequent to submission of this form, **both the applicant and their supervisor should review any alterations in the proposed methodology of the project.** If the change to methodology results in a change to any answer on the form, then a resubmission to the Ethics subgroup is **required.**

The principal investigator is responsible for ensuring compliance with any additional ethical requirements that might apply, and/or for compliance with any additional requirements for review by external bodies.

**ALL forms should be submitted in electronic format. Digital signatures or scanned in originals are acceptable. The applicant should keep a copy of all forms for inclusion in their thesis.**

_Pearse Adams_  
**Applicant’s Name**  
Applicant’s Signature  
Date signed

_Rachel Happer_  
**Supervisor Signature**  
Supervisor Name  
Date

*NOTE to Supervisor: Ethical review will be based only on the information contained in this form. If countersigning this checklist as truly warranting all ‘No’ answers, you are taking responsibility, on behalf of the HSS and UoE, that the research proposed truly poses no ethical risks.*