FRANCES APPS  BSc Hons MSc


EXPLORING EXPERIENCES OF ONLINE GROUP COGNITIVE
BEHAVIOURAL THERAPY FOR OBSESSIVE COMPULSIVE DISORDER


Section A: Intervention effectiveness and exploring aspects of client

engagement for remote CBT for OCD: a meta-analysis.

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Section B: Facilitators and barriers to engagement within online group CBT for
OCD; staff and client perspectives.
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**Summary**

**Section A**

The meta-analysis explored remote CBT interventions for OCD by grouping types of remote interventions based on the level of therapeutic support clients received. Post-intervention outcome measure scores and aspects of "engagement" including drop-out rates, number of ERP tasks completed and the number of therapy sessions completed were analysed. Three moderators were used; remote intervention type, control group used and the qualification of the therapist. 24 studies were quality appraised and analysed. Remote CBT interventions were found to be favourable to control groups. Moderators were not significant. Not enough studies reported on ERP task completion or therapy session completion for an analysis to take place. Clinical implications are discussed. Recommendations include further exploration into engagement within remote CBT for OCD.

**Section B**

This studied explored facilitators and barriers to engagement within remote group CBT for OCD. Semi-structured interviews were carried out with 12 participants. A framework analysis was used. Five groupings were made within the data. The intervention being online meant clients practiced ERP tasks within their own home, where their OCD was most prominent. It was challenging reading body language online, and the online technology meant it was difficult to speak up during the sessions. Findings, limitations and clinical implications are discussed.

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# Section A

Intervention effectiveness and exploring aspects of client engagement

for remote CBT for OCD: a meta-analysis

Word Count:  8236

**Abstract**

**Background-**Exposure response prevention with or without cognitive strategies (CBT) is the recommended intervention for obsessive compulsive disorder (OCD) including delivered online. *Engagement* has not been explored for remote CBT for OCD. This meta-analysis explored the efficacy of this intervention delivered online either for individual or group based therapy. Post-intervention outcome measures, drop-out rates, ERP task completion and therapy sessions completed with the following moderators: remote intervention type, control group and therapist qualification were analysed.

**Methods:** A systematic search of 5 databases was carried out, identifying randomised controlled trials that evaluated remote CBT for OCD. The PRISMA protocol was followed. The Cochrane Risk of Bias Tool was used.

**Results:** 24 studies were included. A medium effect size was found, favouring remote CBT to control groups at post-intervention ($k$=24, $n$=2264, Hedge's g= -0.44, 95% CI [-0.73- -0.14] p=0.004). Moderating effects were not found.

**Discussion:** Remote CBT is an effective intervention for OCD, but moderators were not apparent. There was insufficient research on ERP task completion and session completion to explore this aspect of engagement. There was a lack of research on remote CBT for OCD groups. Future research should therefore explore facilitators and barriers to engagement with remote CBT for OCD in general and with remote CBT for OCD groups in particular.

# Introduction

Intrusive thoughts (unwanted, uncontrolled thoughts, images and impulses) and compulsions (purposeful, repetitive actions, including overt behaviours and internal mentalisations aimed at neutralising obsessions) can become what is referred to as obsessive compulsive disorder[1] (OCD) (American Psychiatric Association, 2013; World Health Organization, 2021).

The cognitive model for OCD postulates intrusive thoughts are common experiences within non-clinical populations; OCD occurs due to misinterpretations that intrusive thoughts are important and meaningful, which then become obsessions (Salkovskis, 2007). To counteract the obsessions and/or to manage the distress associated with them, individuals engage in compulsive behaviours (Salkovskis, 1989, 1999). Compulsions are time consuming and significantly impact daily living/functional impairment (Rachamallu et al., 2017).

Exposure and Response Prevention (ERP) involves the intentional triggering obsessions and actively not participating in the rituals (Meyer, 1966) leading to learning that obsessions are not important, as the feared outcomes do not occur. Contributing theories to understanding the mechanisms of ERP for OCD include emotional processing theory (EPT) and inhibitory learning theory (ILT) (Elsner et al., 2022).

According to EPT, during exposure to the feared stimulus, the emotional response to the stimulus will reduce naturally, referred to as habituation (Foa and Kozak, 1986). ILT suggests that exposure to the feared stimulus in absence of compulsions means new associations are learnt (hence, inhibiting the previous association) with the stimulus, referred

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[1] This reviews attempts to adhere to The British Psychological Society (BPS) guidelines on Language in Relation to Functional Diagnosis. As the research studies cited in the review use the diagnostic term "OCD" and this is usually a inclusion criteria for participants to be part of the research, it was felt that this term should be used within this review.

[2] throughout the rest of the review, CBT denotes CBT, ERP and a combination of both. Where research has used CBT or ERP only, this will be specified.

to as extinction (Craske et al., 2014). These theories mean ERP can include cognitive strategies. ERP with or without cognitive strategies is widely deemed the gold standard intervention for OCD (NICE, 2005; APA, 2013).

Many reviews indicate the effectiveness of CBT[2] for OCD in terms of change in intensity of obsessions and rituals for adults and children compared to waitlist control, pharmacological management, and psychological placebo interventions (Reid et al., 2021; Ferrando & Selai, 2021; Rosa-Alcázar et al., 2015).

**Within therapy barriers**

Whilst CBT is considered the gold standard for OCD, a comprehensive review of 37 RCTs found that only 59.2% of participants found their obsessions and rituals no longer had a significant impact on their lives post-intervention (Öst et al., 2015).

OCD research frequently uses the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) and Children's Yale-Brown Obsessive-Compulsive Scale Child and Parent Self-Reports (CY-BOCS) to measure severity of obsessions and rituals and to assess change with these difficulties throughout treatment (Goodman et al., 1989; Novara et al., 2020). The majority of studies report significant change in pre to post-intervention outcome measure score, rather than reporting when participants no longer meet criteria for an OCD diagnosis (Öst et al., 2015). Only 43%- 50% of participants no longer meet diagnosis, whereas 62%-68% participants experienced a significant change in post-intervention outcome measure score (Öst et al., 2015).

CBT interventions for OCD have a pooled drop-out rate of 15.9% (Leeuwerik et al., 2019). High drop-out rates and poor clinical outcomes may relate to the processes that occur within therapy, referred to as "within therapy barriers" throughout this review. People with OCD hold the belief compulsions keep themselves and other people safe (Veale, 2007). Therefore, when ERP tasks require actively not completing the rituals, the individual

experiences high levels of anxiety. Anxiety associated with ERP tasks has been found to lead to clients not fully participating in ERP (Huppert et al., 2006; Pence et al., 2010; Chu et al., 2015). Experiencing anxiety during ERP tasks is associated with overt or covert safety behaviours being carried out that provide alternative explanations for why the feared event did not occur (Salkovskis, 1996). An example of this could be for a client experiences contamination obsessions and the ERP task would involve touching a "contaminated" object and then not carrying out the ritual of handwashing. The safety behaviour could be the client keeps their hand entirely rigid and does not touch anything else until after the therapy session, when they could then carry out the handwashing. The client would hold the belief they are "safe" due to the safety behaviour, rather than the ERP task.

Individuals with OCD tend to hold beliefs they need absolute certainty the compulsion does not prevent the feared outcome, rather than accepting the idea that it is highly unlikely for the feared outcome to occur ([intolerance of uncertainty: IOU] Veale, 2007). Participants state ERP refusal as a reason for dropping out of therapy, supporting this notion (Leeuwerik et al., 2019).

**Accessibility barriers and remote interventions**

There are also accessibility barriers with individuals with OCD waiting on average 10 years to access CBT (Marques et al., 2010). Environmental and service barriers for accessing support for OCD, include long wait times (Frank et al., 2023) lack of trained therapists (Nair et al., 2015; Külz et al., 2009) and a lack of local health services (Mancebo et al., 2011). Long waiting times for interventions for OCD has an increasing impact for clients, as delays in accessing support are associated with increased distress and poorer post-therapy outcomes (Zheng et al., 2021).

One way to overcome accessibility barriers has been the implementation of telehealth

interventions. There are a range of remote interventions, including asynchronous communication, such as texts and emails sent between client and healthcare professionals and online apps. Synchronous forms of remote interventions involve the client and healthcare professional communicating in "real time". This includes phone appointments, live videoconferencing technology and instant messaging technology. This form of communication closely resembles a face-to-face conversation. These interventions have the advantages of physical distance no longer being a barrier (Haleem et al., 2021), are cost effective compared to waitlist and face-to-face interventions (Lenhard et al., 2017b; Osborne et al., 2019) and help with availability of trained therapists (Wright & Caudill, 2020). Remote interventions have equivalent efficacy to face-to-face interventions for a variety of mental health conditions (Berryhill et al., 2019;  Luo et al., 2020).

There remain drawbacks of remote interventions. There are accessibility barriers for individuals who do not have the technology for the intervention, which is more likely to impact on people from lower socioeconomic backgrounds (Aisbitt et al., 2022) and older people (von Humboldt et al., 2022). Healthcare professionals have raised concerns with establishing a therapeutic relationship online (Geller, 2021). This included difficulties with disruptions due to technology, hindering communication and therapeutic containment (Kotera et al., 2021). Considering that the therapeutic relationship is a key predictor for therapeutic success for a range of mental health conditions (Farrelly  et al., 2015; Cameron et al., 2018) these apprehensions should be explored with health services' increasing use of remote interventions.

Since the SARS-CoV-2 (Covid-19) pandemic, the usage of remote assessments and interventions have increased exponentially worldwide (Wind et al., 2020). Previous meta-analysis' before and after the Covid-19 pandemic have demonstrated the superiority of online CBT compared to waitlist control for OCD (Wootton, 2016; Hoppen et al., 2021; Salazar de

Pablo et al., 2023). There is a plethora of different types of remote therapy, and reviews have used different ways of grouping them. Wootton (2016) explored the differences between "therapist-guided" and "self-guided" remote CBT interventions for OCD. "Self-guided" included interventions where the participant did not have therapeutic contact during the intervention and "therapists-guided" included any remote intervention where there was "some contact". There was a significant difference in post-therapy outcomes, favouring "therapist-guided" interventions. Other meta-analyses have-grouped together types of remote CBT interventions for OCD based on the level of therapist time. Some reviews indicated increased therapist contact is associated with more positive therapeutic outcomes (Pearcy et al., 2016) but a more recent review has found no significant differences (Salazar de Pablo et al., 2023).

One way of grouping could include the ways that participants access the therapeutic material ( psychoeducation around OCD and ERP), and the amount of support offered for creating ERP "ladders" and carrying out ERP tasks. This could be referred to as "pure self-help" (PSH) where clients complete the intervention with no input from therapists. When clients complete the majority of the intervention by themselves, and speak with a healthcare professional periodically as a "check-in" for questions and encouragement to complete therapy tasks, this could be referred to as "mixed" therapy. "Live" online therapeutic interventions include what would be included in face-to-face therapy sessions with a therapist, but held on either an online platform or telephone. Arguably, there are distinct differences in these interventions, including the support the participant receives for ERP (Table 1). Other mental health conditions have found that the type of remote intervention experiences of the intervention (Rasing et al., 2020). Considering the mixed results within previous reviews surrounding type of remote therapy and the increase in remote interventions since Covid-19, exploring the type of remote CBT interventions for OCD could be useful.

**Table 1**

*Differences with remote interventions*

| Intervention type | Examples | Flexibility with the intervention | Support with ERP | | |
|---|---|---|---|---|---|
| | | | Creating the ERP ladder | ERP within session | ERP between sessions |
| Live | Videoconferencing technology, such as Microsoft teams or Zoom or over the phone. | The therapy session usually takes place at a set time and day. | This will be created collaboratively with the therapist. | The client will complete ERP tasks with the therapist in a session | The client completes the ERP tasks between sessions and reports back to the therapist for support. |
| Mixed | Client completes the ERP material alone, has a phone call with a therapist. | As the support phone call is usually shorter, there can be more flexibility as to when this happens. | The client usually completes this themselves, with support from the therapist in one of the phone calls. | The client will complete ERP tasks alone and have support afterwards. | The client will complete ERP tasks by themselves and can use the phone calls with the therapist as support. |
| Pure self-help | Client goes through the intervention material by themselves. | The client completes the intervention when they want. | The client will complete this alone. | The client completes ERP tasks alone. | The client will complete ERP tasks by themselves. |

**Therapeutic engagement**

One way to explore within-therapy barriers in CBT for OCD is to consider whether participants are engaged in the therapy. "Engagement" is a term commonly used and often mistaken with motivation, and adherence to treatment (Drieschner et al., 2004; Pullmann et al., 2013). Systematic reviews have identified 40 different measures of treatment engagement across interventions (Tetley et al., 2011). Deciding what is meant by "engagement" involved scoping the literature and reflections within supervision. Within a recent review, "engagement" represented adherence to medication and patient "self-efficacy" for managing their care (Marzban et al., 2022). This did not align with the barriers denoted for impacting "engagement" in CBT for OCD, including the observable behaviours of completing tasks within and outside of sessions (within this intervention, ERP tasks).

Holdsworth et al. (2014) reviewed 79 studies that examined "engagement" in psychotherapeutic interventions to explore how "engagement" was operationalised within psychotherapeutic interventions. Holdsworth et al. (2014) theorised that any actions the client takes part in that work towards therapeutic change demonstrates engagement. This includes the completion of within and between session tasks, attending therapy sessions and participation in therapy sessions. Their model is visualised below (Holdsworth et al., 2014).

**Figure 1**

*The Holdsworth et al. (2014) model of client engagement*
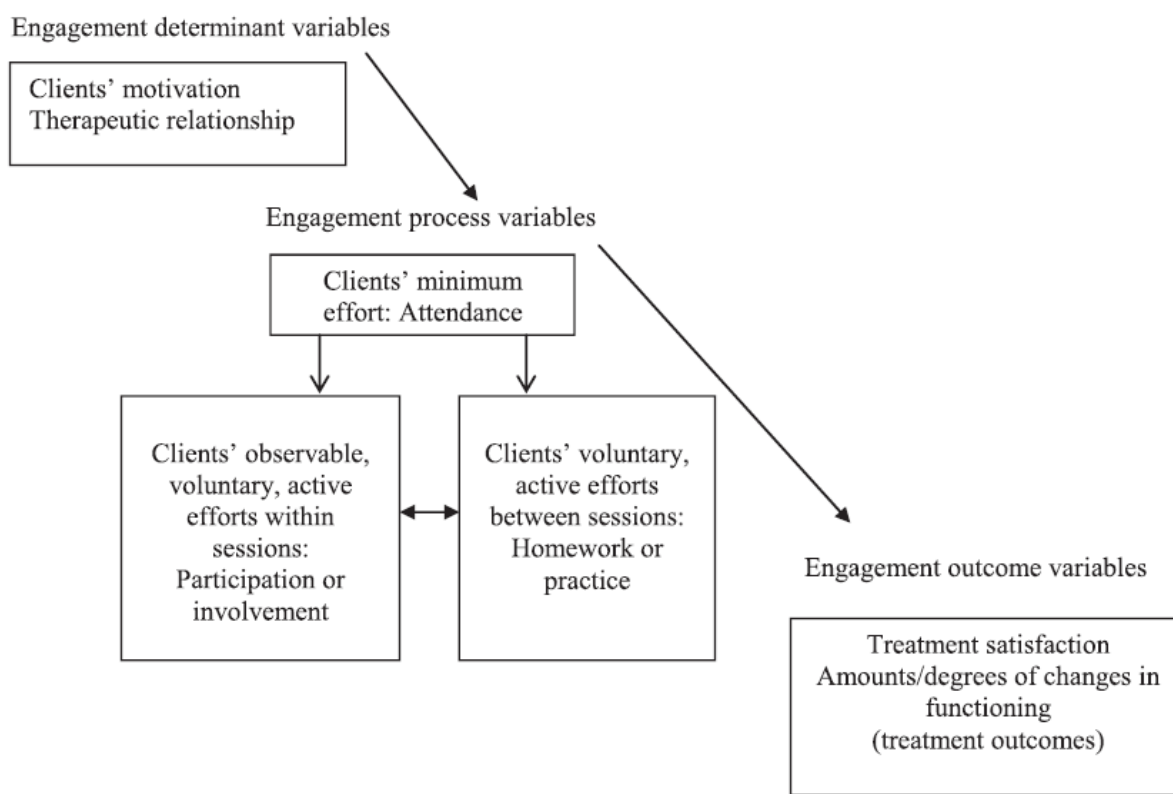


Note: This image was copied from "Client engagement in psychotherapeutic treatment and associations with client characteristics, therapist characteristics, and treatment factors" by Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). *Clinical Psychology Review, 34*(5), 428-450.

Including distinct determinant, process and outcome variables provides an understanding for why there might be barriers to engagement, and how these variables interact with one another. For example, if there are difficulties within the therapeutic relationship, this will impact on the process and outcome variables. Leeuwerik at al. (2019) explored these aspects of engagement with CBT for OCD, finding a medium to large association between completion of between session ERP tasks and post-therapy outcome measure score. Considering the differences with remote interventions outlined in Table 1

with support for within and outside of session ERP tasks, "engagement" as suggested by Holdsworth et al. (2014) could be explored with different types of remote CBT interventions for OCD.

**The therapeutic relationship and ERP**

Factors related to completing ERP include the strength of the therapeutic alliance (Wheaton et al., 2016). This aligns withs Holdsworth et al.'s (2014) model that the therapeutic relationship is important for engagement. Considering as engagement is associated with positive therapeutic outcomes, exploring the role of the therapeutic relationship is important.

Whilst a recent meta-analysis found that client and therapist rated therapeutic alliance has a positive relationship with therapeutic outcome of face-to-face CBT (Wolf et al., 2022), there is a lack of research exploring this within remote CBT interventions. Operationalising the therapeutic relationship has proven difficult within research, and often relies on self-reports from healthcare professionals and participants (Strappine et al., 2022). Self-reports for measuring the therapeutic relationship can be limiting. Capturing a relationship between two people with deductive outcome measures can mean that aspects of the therapeutic relationship are lost, and commonly used outcome measures have not been created in consultation with service users (Saxler et al., 2024).

Another way to explore the presence of a therapeutic relationship could be to consider the qualification of the therapist. Within clinical psychology (PhD) and CBT training, there are requirements outlined to ensure that trainees develop core CBT skills (Klepac et al., 2012; British Association for Behavioural and Cognitive Psychotherapies [BABCP], 2021). This involves meeting the CBT competency framework, which includes an accredited understanding of the therapeutic relationship and the CBT techniques to help develop this

(BABCP, 2021; Roth and Pilling, 2007). Considering the qualification of the therapist delivering the intervention is recorded within research trials, this could provide further evidence for the role of accredited skills for developing a therapeutic relationship with participants. In this review, the qualification of the therapist will be used as a proxy for demonstrating the therapeutic relationship.

To address gaps within previous research, this review will explore therapeutic differences with different types of remote CBT interventions for OCD and explore aspects of engagement that have previously been associated with positive therapeutic outcomes for face-to-face CBT for OCD. In this review, the following factors will be considered as engagement; i) therapy drop-out, ii) session attendance iii) completion of ERP tasks, both within and between therapy sessions. Considering as the Holdsworth et al. (2014) model for engagement identifies therapeutic relationship/alliance as a contributing factor for engagement, this meta-analysis will include therapist qualification as factors impacting on these elements of engagement.

### *Drop-out*

Intervention drop-out incurs when a participant attends at least one session of an offered therapeutic intervention but does not complete the intervention. This can occur when a participant chooses to stop attending an intervention. Meta-analysis indicates remote CBT interventions have equivalent drop-out rates to face-to-face CBT for OCD (Salazar de Pablo et al., 2023). Considering that remote interventions are supposed to increase accessibility as they are easier to attend, having equivalent drop-out rates to face-to-face therapy indicates that a within-therapy process barrier might be present, perhaps relating to the difficulties with establishing a therapeutic relationship.

Reasons for therapy drop-out for remote interventions has not been explored. Considering healthcare professionals have disclosed hesitance with this mode of working

(Kotera et al., 2021) it could be beneficial to see if participants share similar views and if this is a contributing factor for early termination from therapy.

*Session attendance*

Session attendance includes the number of therapy sessions participants attend or (specifically for remote interventions) the number of therapy modules completed. Leeuwerik at al. (2019) found therapy session completion varied significantly, including session completion was lower for remote interventions. This has not been broken down by remote intervention type.

There was a 522% increase in self-referrals for OCD interventions during Covid-19, however the amount of sessions completed was lower (Li et al., 2022). The increase in referrals places demands on services, so exploring whether participants complete the sessions could have important implications for healthcare service provision.

*ERP task completion*

Research indicates that repeatedly completing ERP tasks both within and between sessions helps the client to learn that their emotional responses reduce without the compulsions (habituation) and allows new associations to occur (extinction) (Wheaton & Chen, 2020, Simpson et al., 2012). Whether clients complete ERP tasks within or outside of therapy sessions has not been explored within remote interventions, nor have the factors that may influence this.

**Previous OCD research**

Limitations for previous reviews on remote CBT for OCD include only using quantitative outcome measures and there have been mixed responses as to whether the type of remote intervention impacts post-therapy outcomes (Wootton, 2016; Dèttore et al., 2015; Salazar de Pablo et al., 2023). Exploring post-therapy outcomes of remote interventions based on the remote interventions being classed as "PSH", "mixed" or "live" interventions

has not been explored.

Drop-out rates within remote CBT for OCD is equivalent to face-to-face interventions, despite increasing accessibility (Salazar de Pablo et al., 2023). The reasons behind drop-out rates in remote CBT interventions has not been explored recently and factors such as remote intervention type have not been considered.

Aspects of "engagement" remains sparse within CBT interventions. This could be measured by the completion of ERP tasks and the number of therapy sessions or online modules completed. Factors including remote intervention types have not been explored for these aspects of engagement.

Research on the experiences of the therapeutic relationship during CBT remains sparse and is based on small sample sizes (Herbst et al., 2014). Considering as the therapeutic relationship had a positive relationship with therapeutic outcomes and healthcare professionals' concerns that establishing a therapeutic relationship is hindered with remote therapy, exploring the role of the therapeutic relationship with remote therapy is pertinent. Considering the level of therapist qualification had not been explored as a substitute for therapeutic relationship with remote CBT interventions of OCD, nor the impact this has on post-therapy outcomes, drop-out rates, session/module completion or ERP completion.

### Aims for systematic review and meta-analysis

This systematic review primarily aimed to examine the efficacy and drop-out rates of remote CBT for OCD in comparison to control conditions. Secondly, it aimed to examine potential moderators of remote CBT for OCD intervention outcome and drop-out, specifically type of remote intervention, therapist qualification level and comparison group type.

The specific hypotheses for this systematic review were:

1.  Remote CBT for OCD will be more effective than control conditions at leading to

lower OCD outcome measure score at post-intervention and follow-up.

2. Effects of remote CBT for OCD on post-intervention and follow-up OCD symptom severity outcomes, drop-out rates, ERP task completion, and number of therapy sessions/modules completed will be moderated by; remote intervention type, therapist qualification level (accreditable vs non-accreditable), comparison group type (wait-list vs face-to-face CBT for OCD vs other).

## Methods

**Eligibility criteria**

The inclusion criteria were; i) randomised controlled clinical trials that involved participants who had an established diagnosis of OCD, using a structured clinical interview for DSM disorders (SCID) (APA, 2013) or validated outcome measure. ii) the study evaluated at least one remote CBT for OCD intervention (defined as ERP, cognitive therapy or their combination, in line with Ost et al. (2015), iii) the study reported either therapeutic outcome using a validated measure of OCD (e.g. Y-BOCS) and/or session attendance/drop-out rate. Exclusion criteria were; i) the comparison group only being another form of remote CBT for OCD, ii) an English language version of the study not being available.

**Literature search**

The meta-analysis was registered to Prospero (registration number CRD42023488382).

The following databases were searched from 1$^{st}$ January 2001 to 1$^{st}$ September 2024; OVID (including PsycINFO and Medline), PubMed, Web of Science, clinicaltrials.gov and ISRCTN. The following search terms were used: ("Obsessive Compulsive Disorder" OR "obsessive-compulsive disorder" OR "obsess*" OR "compuls*" OR "OCD") AND ("telemental*" OR "teletherapy" OR "telemedicine" OR "internet" OR "telecommunication"

OR "online therapy" OR "telephon*" OR "computer" OR "remote" OR "web based" OR "mobile" OR "email" OR "online" OR "videoconfer*" OR "iCBT" OR "distance" OR "internet-based" OR "telehealth" OR "telepsychiatry" OR "telepsychology" OR "app based therapy" OR "therapist guided iCBT" OR "therapist guided online therapy" OR "blended iCBT" OR "blended remote therapy" OR "blended online therapy" OR "online self help" OR "online self help CBT" OR "self help iCBT" OR "online self guided" OR "online self guided CBT" OR "self guided iCBT" OR "self help") AND ("randomi*" OR "RCT"). The first published study on online CBT was in 2001 (Lange et al., 2001) which provided a start date for the literature search.

**Selection process**

The screening process was carried out by one researcher, who consulted with supervisors throughout. Any duplicate articles based on identical titles were screened out. Abstracts of the identified articles were screened against inclusion/exclusion criteria, which started with using the PICO. The full text of the remaining articles was then reviewed against inclusion/exclusion criteria and the references of eligible papers were also screened. Some articles replicated data from previous research trials- for example, when further research was carried out on the cost effectiveness of an intervention, therefore these were removed. A summary of this is shown in Figure 2. Any papers that did not meet criteria but were still relevant to the review were saved for the discussion.

**Data extraction**

The data was extracted by the same independent researcher, who used supervision for reflection and support. The data extracted from the identified articles included: the research authors' names, the date of the study, sample size; demographic data including age, gender and duration of OCD distress, study type and the intervention type. The comparison group type (wait-list, face-to-face CBT or other comparison groups), the type of remote intervention

used (live, mixed or PSH as outlined previously) and the qualification of the therapist facilitating the intervention was extracted.

For the meta-analysis, the number of participants for each intervention arm, the post-intervention group means on OCD outcome measures, and standard deviations were collected along with any follow-up data if available. Intervention drop-out data was collected, including the number of participants who started and did not complete the intervention. The reasons for early intervention termination were collected along with the number of participants who provided that reason. Participants who completed the intervention but did not complete post-intervention outcome measures were not counted as dropped-out. If intervention drop-out rate data was not reported, the study drop-out rate was used.

For session attendance, the mean number of intervention sessions attended and the percentage of number of sessions attended out the total sessions offered as part of the intervention was recorded. For PSH interventions, the mean number of online module completed (or book chapters read for bibliotherapy) was recorded, along with percentages of this.

For ERP task completion, the mean number or proportion of ERP tasks completed, and any ratings given by participants or therapists on the amount of ERP tasks completed was collected where available.

**Data analysis**

Pre-planned between-group analyses were carried out for the following variables: post-intervention OCD outcomes, drop-out rates, ERP task completion and number of therapy sessions or modules completed. The following moderators were also analysed; type of remote CBT intervention, control group type and therapist qualification.

Given the diversity with the types of interventions, random effects meta-analyses were

conducted (Cumming, 2012). Following guidelines on meta-analysing different measurement scales, the standardized mean differences were used (Murad et al., 2019). The number of participants for each study arm with the means and standard deviations of the post-intervention scores were analysed, with participant numbers related to post-intervention means and standard deviations to take account of drop-out. Follow-up data was grouped according to the length of time on the follow-up, including 3- and 6-months post intervention.

Following guidance from the Cochrane Handbook (Higgins et al., 2023) the follow-up data was analysed separately at these specific time points. As some of the studies had small sample sizes, post-intervention (or follow-up) between-groups Hedge's g and 95% confidence intervals (CI) were calculated (Brydges, 2019).

Study dropout rates for the intervention and control groups were collected and analysed using an odds ratio analysis. All the data was collated in Excel and then entered and analysed using Jamovi version 2.4.11 (*Jamovi*, 2023). The *p* values were two-tailed throughout the analyses, with an alpha level of $p < .05$.

For the therapy sessions, modules or book chapters and ERP tasks completed a random effects model was utilised with the weighted effect sizes with logit-transformed proportions (Borenstein et al., 2009). For number of sessions/modules completed, a percentage of the mean number of sessions completed against the number of sessions offered was included. For ERP tasks, similarly the number of ERP tasks completed versus the amount planned as part of the intervention was calculated as a percentage. The same moderators outlined below were used for all of these outcomes.

Following guidelines by Fu et al. (2011), a minimum of four studies per moderator category was used, as there are concerns that reduced number of studies can lead to low statistical power within meta-analyses.

*Moderator: Type of remote CBT for OCD.*

Levels for the remote intervention type moderator is based on the levels from Table 1 pure self-help (no individualised therapist support), mixed (defined as interventions where participants have a combination of completing the intervention materials alone and receive some form of regular therapeutic support) and live interventions (defined as interventions carried out on the phone or VCT).

*Moderator: Control group.*

The control group used within studies will be categorised as face-to-face CBT for OCD, waitlist, treatment as usual or other.

*Moderator: Therapist qualification.*

Therapists delivering the interventions were categorised as 'accreditable CBT for OCD therapists', operationalised as meeting or likely to meet British Association of Cognitive and Behavioural Psychotherapies (BABCP) CBT therapist criteria or 'not accreditable CBT for OCD therapists' (i.e. falling below the BABCP accreditation criteria). 'Accreditable therapists' were those that had qualified as CBT therapists or Clinical Psychologists, otherwise therapists were classed as 'not accreditable' (including trainee CBT therapists/clinical psychologists).

**Publication Bias**

A visual evaluation of the funnel plots and the Eggers Test were used to assess for publication bias. As some of the studies may have small sample sizes, heterogeneity was measured using $tau^2$ and $I^2$ (Higgins & Thompson, 2002).

**Quality assessment**

The Cochrane Risk of Bias tool (RoB2) (Sterne et al., 2019) was used to assess the risk of bias within the studies included in the meta-analysis. This evaluated bias in 5 domains;

bias resulting from the randomisation process, bias due to differences from intended intervention groups, bias from omitted outcome data, bias in the outcomes used and bias in the selection of the reported result. The domains are rated and combined to provide an overall rating of "low risk of bias", "some concerns of bias" or "high risk of bias". The overall rating definition is provided in Table 2.

**Table 2**

*Overall rating of risk of bias using RoB2*

| Overall rating | Definition |
| --- | --- |
| Low risk | All of the domains were graded as low risk of bias. |
| Some concerns | Two or less of the domains were graded as low risk of bias. |
| High risk | Two or more of the domains were graded as low risk of bias, or one domain |

**Results**

**Study characteristics**

*Sample size and characteristics*

A total of 24 studies were identified (Figure 2). This included a total of 2264 participants, with an average age of 28.45 (SD =9.63), of whom 57.59% were female. Nine studies reported on duration of OCD distress, with the mean being 13.91 years. Three studies reported average age of onset of OCD distress, with a pooled mean of 13.60. The majority of the studies took place in Europe (n=9) and five took place in the United States. A summary of

the included studies' characteristics is displayed in Table 3, with a more detailed summary in

Appendix A.

**Figure 2** *Illustration of search strategy using PRISMA (Page et al., 2021)*



**Identification of new studies via databases and registers**

**Identification of new studies via other methods**

*Identification*

Records identified from:
Pubmed (n=318)
OVID (n= 205)
Web Of Science (n=762)
Clinicaltrials.gov (n= 0)
ISRCTN (n= 0)
Cochrane central register (n=0)

Records removed *before screening*:
Duplicate records removed (n =262)

Records identified from: Citation searching (n =4)

*Screening*

Records screened (n = 1023)

Records excluded during title and abstract screening (n = 795)

Reports sought for retrieval (n = 4)

Reports not retrieved (n =0)

Reports sought for retrieval (n = 228)

Reports not retrieved (n = 5)
-presentation article
- report not available

Reports assessed for eligibility (n =4)

Reports excluded (n= 0)

Reports assessed for eligibility (n = 223)

Reports excluded (n= 203):
- participants did not have OCD diagnosis
- explored working alliance
- only reported costs of intervention
-meta analysis or reviews
- replicated data
-comparison group was a form of remote CBT

*Included*

New studies included in review (n =4)

Total studies included in review (n = 24)

**Table 3** *Summary of included studies*

| Intervention type | Study | Year | Country | N | Age: mean (±SD) | Gender (% female) | Intervention | | Control | | Therapist qualification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | N | Support offered | N | Support offered | |
| Live | Lovell et al b | 2006 | UK | 72 | 31.9 (9.5) | 58.50 | 36 | Telephone delivered CBT | 36 | f2f | CBT therapists |
| | Storch et al | 2011 | US | 31 | 11.10 (2.59) | 39 | 16 | VCT CBT | 15 | WL | clinical psychology trainees |
| | Turner et al | 2014 | UK | 72 | 14.35 (2.12) | 45.80 | 36 | Telephone delivered CBT | 36 | f2f | clinical psychologist |
| | Vogel et al | 2014 | Norway | 30 | 33.1 (11.6) | 60 | 10 | VCT CBT | 10 | WL | psychologist |
| | Comer et al | 2017 | US | 22 | 6.65 (1.3) | 40.90 | 11 | VCT family CBT | 11 | f2f | master level trainee in clinical psychology |
| | Hollmann et al | 2022 | Germany | 60 | 13.24 (2.78) | 40 | 30 | VCT CBT | 30 | WL | trained psychotherapist |
| | Matsumoto et al | 2022 | Japan | 30 | 30.05 (12.8) | 57 | 14 | iCBT modules alongside therapist on imessage platform | 16 | WL | clinical psychologist |

| Mixed | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tolin et al b | 2011 | US | 34 | 33.91 (13.3) | 58.82 | 18 | Bibliotherapy CBT and phone calls once every two weeks | 12 | f2f | not recorded |
| | Andersson et al | 2012 | Sweden | 101 | 34.01 (13) | 66.30 | 50 | Bibliotherapy with asynchronous contact | 51 | online non directive therapy | psychology trainees |
| | Wootton et al a | 2013 | Australia | 52 | 37.56 (11.09) | 76.00 | 15 | Online CBT modules with twice weekly phone calls | 17 | WL | clinical psychologist |
| | Herbst et al | 2014 | Germany | 34 | 35.56 (13.53) | 64.93 | 16 | Online CBT modules with asynchronous contact | 18 | WL | CBT therapist |
| | Mahoney et al | 2014 | Australia | 67 | 39.14 (13.14) | 60.00 | 32 | Online CBT modules with scheduled calls | 42 | WL | not recorded |
| | Lenhard et al a | 2017 | Sweden | 67 | 14.60 (1.71) | 46.00 | 33 | Online CBT modules with asynchronous contact | 34 | WL | psychologists |
| | Lovell et al a | 2017 | UK | 475 | 33 (9.26) | 60.00 | 158 | Guided self-help book with scheduled phone calls | 158 | WL | PWP |
| | Kyrios et al | 2018 | Australia | 179 | 33.4 (9.9) | 65.70 | 89 | Online CBT modules with weekly emails | 90 | PRT | psychologist |

| | Author | Year | Country | N | Mean age (SD) | | | Intervention | | Control | Provider |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PSH | Aspvall et al | 2021 | Sweden | 152 | 13.4 (2.5) | 62.00 | 74 | Online CBT modules with contact | 78 | f2f | psychologist |
| | Lundstrom et al | 2022 | Sweden | 120 | 32.24 (9.64) | 67.00 | 42 | Online CBT modules with asynchronous messages | 38 | f2f | clinical psychologists |
| | Wu et al | 2023 | China | 99 | 28.99 (7.39) | 39.80 | 33 | iCBT with 15 minute phone calls | 33 | WL | registered therapist |
| | Greist et al | 2002 | US | 183 | 39 (12) | 42.00 | 57 | Online CBT modules | 59 | f2f | behaviour therapist |
| | Tolin et al a | 2007 | US | 41 | 38.18 (13.10) | 36.59 | 20 | Bibliotherapy | 21 | f2f | n/a |
| | Launes et al | 2019 | Norway | 48 | 30.4 (11.1) | 79.00 | 16 | Bibliotherapy | 16 | WL | trained OCD therapists |
| | Wootton et al b | 2019 | Australia | 140 | 33.69 (7.2) | 81.40 | 65 | Online CBT modules | 75 | WL | N/A |
| | Schroeder et al | 2020 | Germany | 128 | 40.30 (13.12) | 76.50 | 64 | PSH | 64 | CAU | N/A |
| | Hwang et al | 2021 | Korea | 27 | 25.14 (9.5) | 59.20 | 12 | Mobile App | 15 | f2f | N/A |

CAU= care as usual: f2f= face-to-face: iCBT= internet based CBT: iMessage= instant messaging technology: N= number of participants: N/A= non-applicable:  PRT=progressive relaxation therapy: PWP= psychological wellbeing practitioners: VCT= videoconferencing technology: WL=waitlist:

*Type of intervention*

Six studies used PSH interventions (computerised CBT=3, app=1, bibliotherapy=2). Eleven studies were mixed interventions, including asynchronous support with completing ERP tasks and CBT material in the form of texts and emails as well as scheduled phone calls for support. Seven studies were categorised as "live" remote therapy (videoconferencing=6, telephone=1).

*Therapist qualification*

Seventeen studies reported on therapist qualification. Eleven studies included facilitators who were clinical psychologists and trained CBT therapists and, therefore, categorised as "accreditable CBT for OCD therapists". A total of six studies included facilitators whose qualification did not meet this criterion including; psychological wellbeing practitioners, trainee therapists/psychologists, psychotherapists and behaviour therapists.

*Control group type*

Thirteen studies had a waitlist or treatment-as-usual control group (1 study included medication as treatment as usual), nine had face-to-face CBT and two used a different type of therapy (online non-directive therapy and progressive relaxation therapy), outlined in Table 3.

**Quality assessment and publication bias**

Using the RoB2 tool, three studies were identified as "high risk of bias" (Storch et al., 2011; Wootton et al., 2019b). A total of 14 studies were identified as "some concerns of bias" and eight studies were identified as "low risk of bias". A summary of the risk of bias is in Figure 3.

The domains that raised the main areas of concern were; bias due to differences from intended intervention groups and bias in the outcomes used. Some of the concerns raised in

the intended interventions groups (domain two) included the amount of contact participants in

PSH conditions had with clinicians during the intervention (for example, participants could

contact for support with a therapist if they would like support but it was not reported if every

participant used this support (Greist et al., 2002) For domain four, concerns were raised that

some of the outcome assessors were aware of study arm allocation.

**Figure 3-***Summary of risk of bias within the studies using RoB2*



Risk of bias domains

| Study | D1 | D2 | D3 | D4 | D5 | Overall |
|---|---|---|---|---|---|---|
| Andersson et al 2012 | + | + | + | + | + | + |
| Aspvall et al 2021 | + | + | + | + | + | + |
| Comer et al 2017 | + | + | + | + | + | + |
| Greist et al 2002 | + | + | + | + | + | + |
| Herbst et al 2014 | + | + | + | - | + | - |
| Hollmann et al 2022 | + | - | + | - | + | - |
| Hwang et al 2021 | - | + | + | + | + | - |
| Kyrios et al2018 | + | + | - | + | - | - |
| Launes et al 2019 | + | - | + | + | + | - |
| Lenhard et al 2017a | + | + | + | + | + | + |
| Lovell et al 2017a | + | - | + | + | + | + |
| Lovell et al 2006b | + | + | - | - | + | - |
| Lundstrom et al 2022 | + | - | - | + | + | - |
| Mahoney et al 2014 | + | + | - | - | + | - |
| Matsumoto et al 2022 | + | - | + | - | + | - |
| Schroeder et al 2020 | + | - | + | + | + | - |
| Storch et al 2011 | - | X | + | + | + | X |
| Tolin et al 2007 | - | + | + | - | - | X |
| Tolin et al 2011 | - | - | + | + | + | - |
| Turner et al 2014 | + | + | + | + | + | + |
| Vogel et al 2014 | + | + | + | + | + | + |
| Wootton et al 2013 | + | - | + | - | + | - |
| Wootton et al 2019 | + | - | - | - | + | X |
| Wu et al 2023 | + | + | - | + | + | - |

Domains:
D1: Bias arising from the randomization process.
D2: Bias due to deviations from intended intervention.
D3: Bias due to missing outcome data.
D4: Bias in measurement of the outcome.
D5: Bias in selection of the reported result.

Judgement

X High
- Some concerns
+ Low

The funnel plot for the analysis comparing Y-BOCS and CY-BOCS scores for interventions vs control was symmetrical (Figure 4). The Eggers Test was statistically significant ($t= -2.15$, $p=0.031$) indicating publication bias within the studies.

**Figure 4**

*Funnel plot for 24 studies reporting treatment efficacy*



Study result
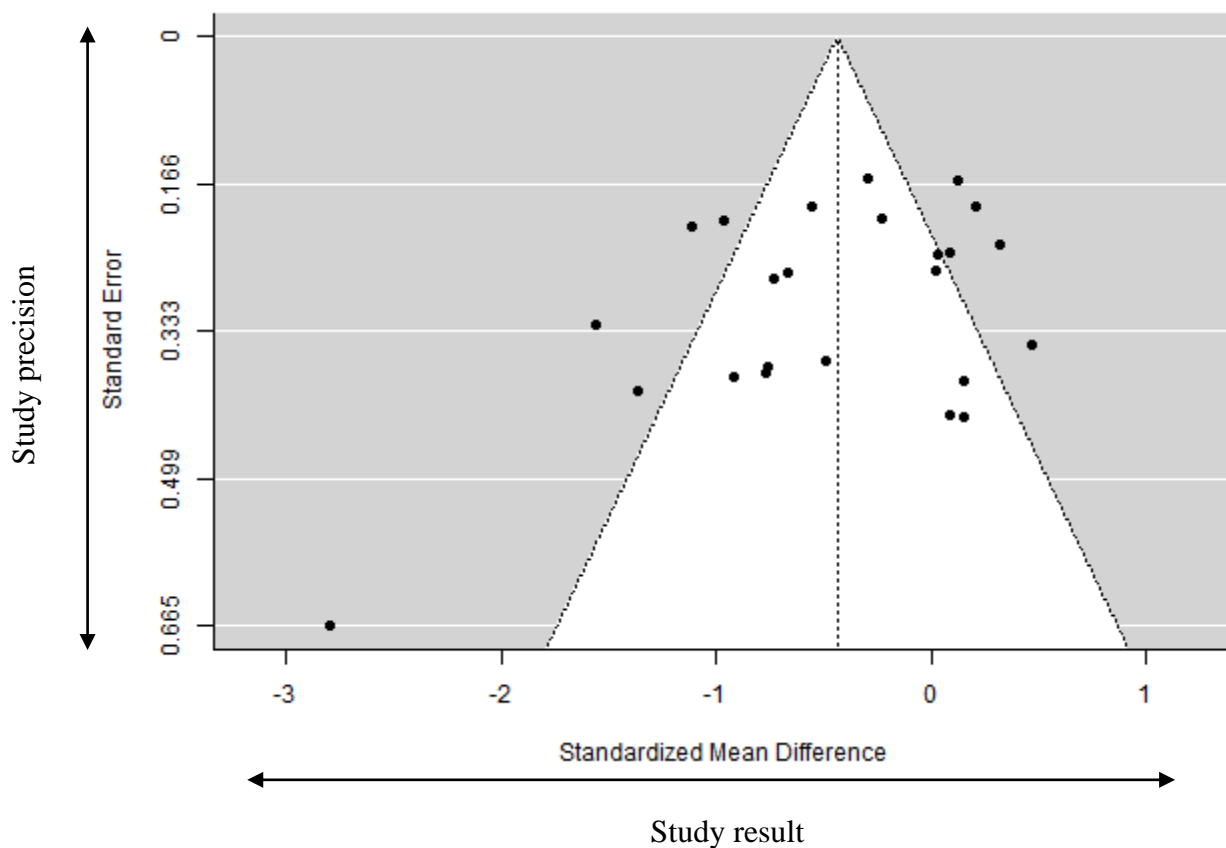
| Key | |
|---|---|
| • | Study |

**Meta-analysis findings**

*Efficacy of different types of remote CBT for OCD*

A total of 24 studies reported on intervention efficacy using post-intervention outcome measures (Figure 5). All studies used the Y-BOCs or CY-BOCs, apart from one

which used the Dimensional Obsessive-Compulsive Scale (DOCs) (Mahoney et al., 2014).

Similar to Y-BOCs/CY-BOCs, with the DOCs a lower score indicates less distress associated

with the obsessions and rituals, and this outcome measure demonstrates good validity and

reliability (Abramowitz et al., 2010).

A full outline of the data used including the post-therapy means and standard

deviations are included in Appendix B. The meta-analysis found that participants receiving

remote CBT for OCD showed significantly lower OCD symptom severity at post-

intervention compared to control participants (Z= -2.9, p=0.004) with a medium effect size

(k=24, n= 2264, Hedge's g= -0.44, 95% CI [-0.73- -0.14]). High heterogeneity was found,

indicating diversity within the studies (tau$^2$= 0.45, I$^2$= 87.09%, p < 0.001) and suggesting that

moderator analyses should be used.

**Figure 5**- *Forest plot showing OCD symptom severity outcomes for remote CBT for OCD in comparison to control conditions at post intervention*
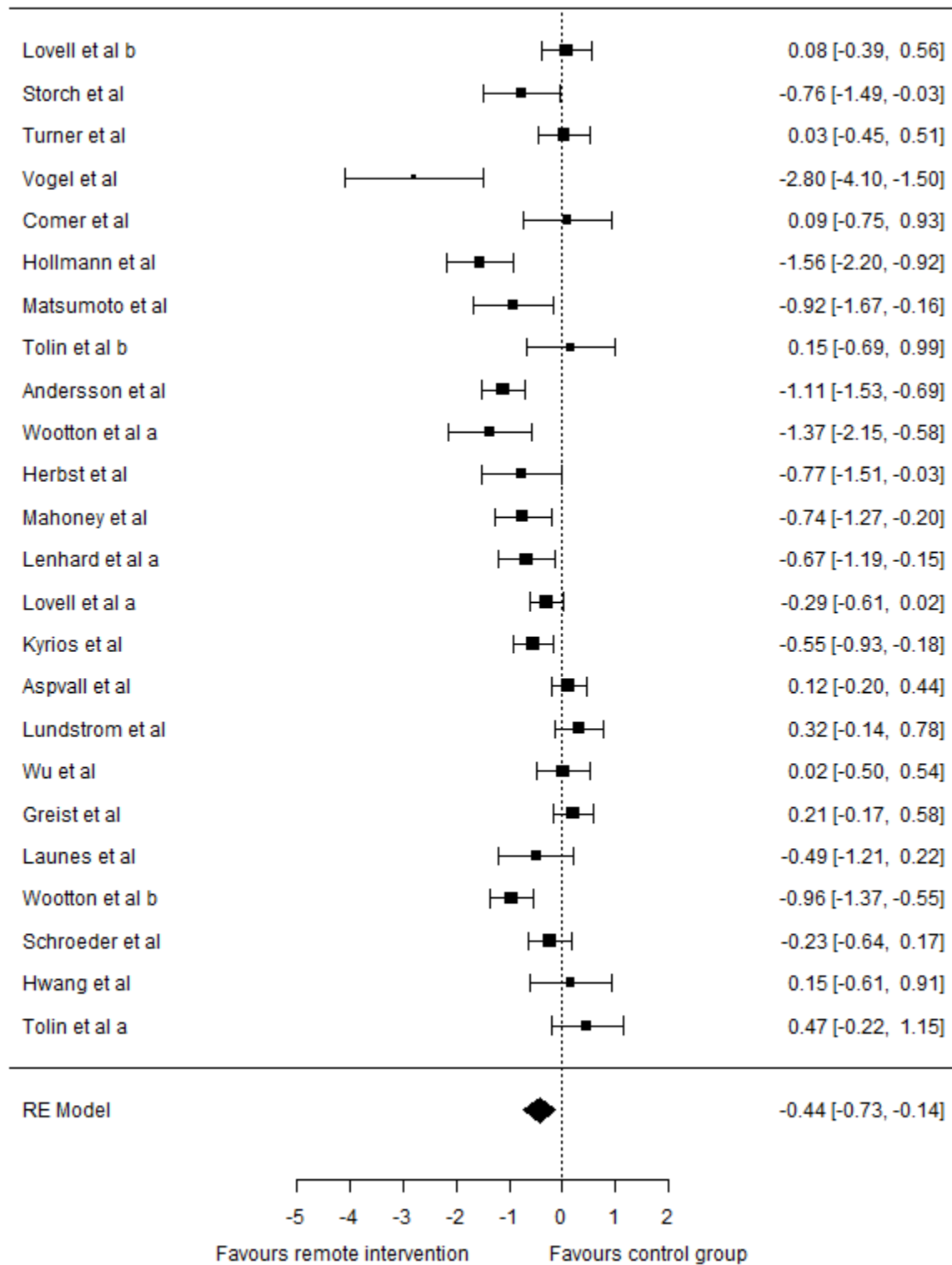


For the remote CBT interventions, post-treatment effect size was not moderated by

type of intervention (Z= 1.37; g=0.27; p= 0.17; tau$^2$= 0.98; $I^2$= 89.55%; p < 0.001). Therapist

qualification level was found to be a non-significant moderator (k=17; g= -0.14, p= 0.75)

with significant heterogeneity (tau$^2$= 0.6; $I^2$= 90.2%; p < 0.001). There were not enough

studies to carry out a moderator analysis for control group type, as there were only two

studies were labelled as "other" for control group type.

Therefore, remote CBT for OCD was found to be more effective in leading to lower

OCD symptom severity than control conditions at post intervention. Heterogeneity was high

and pre-planned moderation analyses showed that intervention type nor therapist qualification

level did not moderate outcomes or reduce heterogeneity. This suggests that other factors

may account for heterogeneity.

**Follow up findings.** A total of 12 studies reported follow-up data, some of which

collected data at multiple time points. Data were collected at four months post-intervention

by one study (Hollmann et al., 2022). In order to include this, the first follow up time point

was 3±1 months.

Eight studies collected 3±1 month follow-up data. This included three live

interventions and five mixed interventions (Table 4). The control groups were six face-to-

face interventions and two waitlist. For therapist qualification level, four studies included

facilitators coded as accreditable qualifications for therapeutic relationship competencies, two

did not meet criteria and qualification level was not recorded for the other two studies.

There were no significant differences between remote CBT for OCD and comparison

groups at the 3±1 month follow-up (Z=0.04, p= 0.71) and the heterogeneity analysis

indicated that there was similarity within the studies (tau$^2$= 006, $I^2$= 20.1%, p= 0.03). There

were not enough studies per group to perform a moderator analysis based on intervention

type, control group or therapist qualification.

One study collected data at 8-month follow-up (Hollmann et al., 2022) so the second

time point was changed to 6 month+ follow-up. Six studies collected 6 month+ follow-up

data. This included three live interventions, two mixed and one PSH (Table 4). The control

groups were all face-to-face interventions. For therapist qualification level, four studies

included facilitators coded as accreditable qualifications for therapeutic relationship

competencies, one did not meet criteria and qualification level was not recorded for the other

study.

**Table 4**

*Summary of studies that collected follow up data at different time points*

| Study | Intervention type | Control group | Therapist qualification level | Follow-up time point |
| --- | --- | --- | --- | --- |
| Lovell et al b | Live | F2f | CBT therapists | 3 months, 6 months |
| Turner et al | Live | F2f | Clinical psychologist | 3 months, 6 months |
| Aspvall et al | Mixed | F2f | Psychologist | 3 months, 6 months |
| Lundstrom et al | Mixed | F2f | Clinical psychologist | 6 months |
| Tolin et al a | PSH | | Not recorded | 3 months, 6 months |
| Holmann et al | Live | WL | Trained psychotherapist | 4 months, 12 months |
| Tolin et al b | Mixed | F2f | Not recorded | 3 months |
| Comer et al | Live | F2f | master level trainee in clinical psychology | 6 months |

There were no significant differences between remote CBT for OCD and comparison

groups at the six-month+ follow-up (Z=0.16, p= 0.11) and the heterogeneity analysis

indicated that there was similarity within the studies (tau$^2$= 0, $I^2$= 0%, p= 0.98). There were

not enough studies per group to perform a moderator analysis based on intervention type,

control group or therapist qualification.

*Dropout rates*

A total of 24 studies reported on dropout rates for remote CBT interventions for OCD, with 19 reporting intervention dropout and the other five reporting study drop-out. The pooled dropout rate was 11.18%. A summary of the dropout rates by remote intervention type are in Table 5.

**Table 5**

*Summary of pooled drop-out rates by remote intervention type*

| Intervention Type | Intervention group | Control group | Total |
| --- | --- | --- | --- |
| Live | 7.19% | 12.34% | 9.77% |
| Mixed | 9.96% | 7.43% | 8.65% |
| PSH | 23.13% | 18.80% | 20.38% |
| Total | 12.12% | 10.31% | 11.18% |

The log odds ratio found there was no significant difference between the dropout rates for intervention and control groups (k=24, Hedge's g= 0.03, 95% CI [-0.40 – 0.71], p= 0.58). High heterogeneity was found ($I^2$= 57.96%, tau$^2$= 0.90, p<0.001).

The type of remote CBT intervention was found to be a non-significant moderator for drop-out rates (Hedge's g=0.34, p= 0.41). Heterogeneity was found to be non-significant, indicating similarity between the studies (tau$^2$= 0.99, $I^2$= 59.36%, p<0.001). The type of control group was found to be a non-significant predictor for drop-out rates (Hedge's g= 0.26, p= 0.60). Heterogeneity was found (tau$^2$= 0.91, $I^2$= 58.03%, p<0.001). Therapist qualification was found to be a non-significant predictor on drop-out rates (k=16, Hedge's g= 1.42, p= 0.09). Heterogeneity was found (tau$^2$= 1.43, $I^2$= 58.69%, p=0.002). In summary, there were no differences in intervention drop-out rates between remote CBT and OCD and comparison

conditions with no moderation effects found.

**Drop-out reasons.** The reason participants gave for terminating the intervention early was included in 12 studies, as outlined in Table 6. The number of participants reporting the reason for the drop-out and the percentage of participants for that reason (out of 129) are outlined. One study provided the reasons for participant drop-out before the intervention started (Lovell et al., 2017) which is included within Appendix C. For live interventions, the most common reason for study drop-out was no reason given and other reasons included needing support with other mental health difficulties. For mixed interventions, the most common reason for drop-out was no reason given followed by the participants accessed/requested another treatment. For PSH interventions, one study reported drop-out reason (physical illness).

**Table 6**

*Reasons given for drop-out*

| Drop-out reason | Live (N, %) | Mixed (N, %) | PSH (N, %) |
|---|---|---|---|
| Mental health related | Increase in suicidal ideation (1, 0.78) Needed other support for mental health (1, 0.78) OCD symptoms increased (1, 0.78) | Experienced a mental health crisis (1, 0.78) Increase in obsessions and rituals (1, 0.78) | Physical illness (1, 0.78) |
| Personal reasons | | Lack of female participants in the group (1, 0.78) Family difficulties (2, 1.55) | |
| Physical health related | Health reasons (1, 0.78) | | |
| OCD subsided | OCD improved (1, 0.78) | Distress reduced (1, 0.78) No longer needed intervention (2, 1.55) No longer had OCD (1, 0.78) | |
| Practical reasons | Psychosocial reasons (1, 0.78) | Reached top of waiting list for f2f intervention (16, 12.40) Natural disaster (1, 0.78) Lack of time (5, 3.88) Unable to attend (5, 3.88) | |
| Therapy related reasons | No perceived benefit (1, 0.78) Found other therapeutic support | Unwilling to continue (6, 4.65) Requested another treatment (11, 8.53) | |

| | | |
|---|---|---|
| | (1, 0.78) | Did not like the online format of the therapy (3, 2.33) |
| | | Started another treatment (3, 2.33) |
| | | Found the intervention did not help (2, 1.55) |
| | | Not interested in online therapy (1, 0.78) |
| | | Dissatisfied with treatment (1, 0.78) |
| | | Not interested in control intervention (4, 3.10) |
| | | Non-compliance (1, 0.78) |
| Medication related | | Medication purposes (3, 2.33) |
| | | Wanted to start medication (1, 0.78) |
| Reason not given | No response (7, 5.43) | Unable to contact (12, 9.30) |
| | Reason not given (4, 3.10) | No reason given (20, 15.50) |

**Session/module completion**

Eight studies reported on session or module completion. Of these, one was a live intervention, six were mixed and one was PSH. On average, 6.70 (p=0.003; 95% CI [-0.42- -0.08]; k=8; $tau^2$= 0.02; $I^2$=46.2%) of sessions or modules were completed by participants, with an average of 73.77% of offered sessions completed . Two studies reported session completion for the interventions used for control groups, both of which were face-to-face CBT interventions. The average number of sessions completed for the control groups was 8.55 (SD 3.25). Table 7 outlines the number of therapy sessions or modules offered and average

sessions completed for the studies. The mean of therapy sessions completed was broken
down by intervention type in Table 8.

**Table 7**

*Mean and pooled % of completed remote sessions/modules*

| Intervention type | Study | Number of sessions or modules offered | Mean number of remote CBT for OCD sessions or modules completed (% of offered sessions completed) |
|---|---|---|---|
| Live | Comer et al | 12 VCT sessions | 10.91 (90.97) |
| Mixed | Andersson et al | 10 online CBT modules (or book chapters) | 7.28 (72.8) |
| | Wootton et al a | 5 online CBT modules | 4.30 (86) |
| | Mahoney et al | 6 iCBT sessions online | 4.47 (74) |
| | Lenhard et al a | 12 Book chapters | 8.52 (71) |
| | Lovell et al a | 11 online sessions | 4.11 (37.3) |
| | Aspvall et al | 14 online modules | 10.49 (87.42) |
| PSH | Wootton et al b | 5 online CBT modules | 3.54 (70.8) |
| Total | | | (73.77)% |

**Table 8**

*Average number of therapy sessions completed.*

| Intervention type | Mean number of sessions completed (mean number of sessions offered) |
|---|---|
| PSH | 3.54 (5) |
| Mixed | 6.53 (10.5) |
| Live | 10.91 (12) |

There were not enough studies to perform a moderator analysis.

**ERP completion**

Not enough studies reported on the completion of ERP (within or between sessions) for a statistical analysis to be carried out. No studies included the number of ERP tasks completed versus amount of ERP tasks planned. Two studies study reported the participants' effort on completing ERP using the Clinician-Rated Effort Scale (CREF) which is a 5 point rating scale where clinicians assess the effort participants are putting into the ERP tasks, and the amount of the book chapters which had been read (Tolin et al., 2007; Tolin et al., 2011).

**Table 9**

*Mean Clinician-Rated Effort Scale scores*

| Study | Intervention type | Mean CREF scores for remote interventions (SD), label | Mean CREF scores for f2f interventions (SD), label |
| --- | --- | --- | --- |
| Tolin et al a | PSH | 1.5 (1.15) "minimal to some effort" | 2.76 (1.15) "some to much effort" |
| Tolin et al b | Mixed | 2.54 (0.71) "some to much effort" | 2.56 (0.87) "some to much effort" |

Tolin et al. (2011) also gathered self-report data from participants on the amount of effort they put into ERP tasks for the PSH intervention using a 5 point scale (0= no effort, 5=best effort) and on the amount of time spent on ERP tasks. They also reported that participants in the face-to-face intervention spent on average 60-90 minutes daily on ERP tasks and putting in an "average to a lot" of effort into the ERP tasks, whilst participants in the PSH intervention spent on average 30-60 minutes daily on ERP tasks and putting in an

"average" of effort into the ERP tasks. Additionally, in the PSH condition participants reported reading "half to most" of the reading of the intervention material. Greist et al. (2002) found that the completion of ERP tasks (mean=7.9. SD=35.2) was a significant predictor for reduction in Y-BOCSs score (r= 0.27, p=0.049).

**Discussion**

This review examined the effectiveness of and engagement with remote CBT for OCD by conducting a meta-analyses of RCTs. It also considered whether the type of remote intervention (live, mixed or PSH), type of control group (waiting list, face-to-face or other) or the qualification status of the therapist (accreditable or non-accreditable) moderated post-intervention between-group outcomes or drop-out rates.

Participants receiving remote CBT for OCD showed significantly lower OCD symptom severity at post-intervention compared to control participants with a small-medium effect size. However, between-group differences at 3±1 month and 6+ months follow-up (albeit for a much smaller number of studies) were not statistically significant, to the control groups. For the follow-up data, the majority of the control groups were face-to-face groups, so potentially this highlights the lack of difference with post-treatment scores.

Heterogeneity was high, however the moderators did not moderate post-intervention outcomes (moderation analysis at follow-up was not conducted due to the limited number of studies).

Type of control group did not moderate post-intervention between-group outcomes. This differs to a recent review which included control group type as a moderator (Salazar de Pablo et al., 2023) . Potentially, the small number of studies included within the sub-groups for the meta-analysis explains why the heterogeneity remained high.

The pooled dropout rate in this meta-analysis (11.18%) was less than the pooled drop-out rates found for remote self-guided (39%) or therapist-guided (27%) CBT interventions

reviews (Machado-Sousa et al., 2023) and less than the 15.9% pooled drop-out rates reported for face-to-face CBT interventions for OCD (Leeuwerik et al., 2019). Whilst this review found intervention type was not a moderator for drop-out rates, the average drop-out rates for the different types of interventions with increased contact (live and mixed) having smaller drop-out rates than PSH interventions. Potentially, the presence of the therapist supports participants to continue with the intervention. No significant moderator effects were found however for control group type, intervention type or therapist qualification level moderators, suggesting that other factors may be contributing towards the dropout rates which were not explored within this review.

Only 12 studies reported reasons for intervention drop-outs, making it difficult to establish conclusions behind the reasons why participants drop-out of remote CBT interventions. Within the reasons given for participant drop-out, the therapy being facilitated online was cited by four participants, all who were in "mixed" interventions. This means that for some participants, the therapy being facilitated online can become a barrier for treatment. This could emphasise some of the previous concerns highlighted with remote therapy, such as telehealth interventions are inaccessible for people who cannot afford the digital technology required for the interventions (Aisbitt et al., 2022) and the accessibility difficulties for people from older generations (von Humboldt et al., 2022) or the concerns highlighted by healthcare professionals about the difficulties with establishing a therapeutic relationship online (Geller, 2021). On the whole, reasons for early termination from therapy for live interventions centred on mental or physical health reasons, including increase in suicidal ideation or improvements in OCD. For the mixed interventions, there were a lot more reasons related to the therapy given as reasons for drop-out. Potentially, this indicates that there is something specific with mixed intervention types which participants find difficult to continue with, such as they do not receive the same level of support as what participants did in the live interventions, but

they also did not have the same level of freedom with engaging with the therapeutic material when they chose to that you can experience with pure self-help interventions.

Not enough studies reported on ERP task completion to conduct a meta-analysis. Two studies reported on the level of participants "effort" put into the ERP tasks, with one study finding a significant difference between participants who were in a face-to-face intervention over a PSH intervention (Tolin et al., 2007). This could highlight some within-therapy barriers located in remote interventions for OCD, as participants in the face-to-face intervention would have had more support. Tolin et al. (2007) also found that participants in the face-to-face intervention reported on average longer periods of time doing the ERP tasks, which aligns with some of the behaviours recognised as displaying therapeutic engagement in the Holdsworth at al, (2014) model of engagement. The finding that ERP task completion correlates with reduction in Y-BOCs score (Greist et al., 2002) aligns with some of the factors considered important with client engagement within previous reviews on face-to-face CBT for OCD (Leeuwerik et al., 2019). However, these results must be tentatively viewed due to the lack of statistical analysis carried out.

The pooled mean percentage for completed sessions was lower than face-to-face CBT interventions for OCD (Leeuwerik et al., 2019). This indicates that being face-to-face for CBT interventions may be beneficial for attending therapy sessions. This potentially indicates the presence of a therapist helps participants to complete remote CBT for OCD. Attending therapy sessions is considered the minimum effort required for engagement according to Holdsworth et al. (2014). It could be considered that participants in therapeutic interventions who have contact with a therapist are more likely to attend therapy sessions. Research suggests that clients were more likely to attend therapy when they perceived that their therapist was interested in them and when the therapist demonstrated increased understanding of the client's psychological distress (Tryon, 1986). It could be that similar sort of

perceptions are more apparent within live remote interventions, as the therapists in these interventions spend more time with the client and therefore have a better understanding of the client.

Furthermore, recent research found that remote CBT session completion for OCD was significantly lower during the covid-19 pandemic than before the pandemic (Li et al., 2022). This research suggested that poor session adherence may relate to increased contamination obsessions and concerns with following government guidelines meant that clients struggled to engage with the intervention. Considering some of the studies included in this review includes research carried out during the covid-19 pandemic, similar concerns may have arisen for the participants. Further research is needed examine the effects of therapist versus client-initiated contact for remote CBT for OCD.

**Strengths and limitations with the review**

The strengths of this meta-analysis include that it is the first review to our knowledge to explore different types of remote CBT interventions for OCD categorised as pure self-help, mixed and live therapy. This is also the first meta-analysis to consider the qualification for the healthcare professional delivering the therapy for intervention efficacy, drop-out and number of therapy sessions completed. This has important economic ramifications for healthcare providers, considering the costs of training and hiring certain qualified roles. Additionally, this is the first meta-analysis to collect data on ERP completion and therapy session completion for remote CBT interventions for OCD. Considering as completing ERP is key for reducing obsessions and rituals, understanding ERP completion with online interventions will have clinical utility and help clinicians with delivering remote CBT for OCD. By considering a wider focus of what constitutes "engagement", more studies could be included in this meta-analysis than in other research.

This meta-analysis did not explore specific the effects of the therapeutic relationship on therapy outcomes. However, the present review did consider other factors that are important for establishing a therapeutic relationship, including session attendance and completing within and between session ERP.

There could have been drawbacks with using the qualification of the therapist as a proxy for the therapeutic relationship. Focusing on the qualification of the therapist based on UK accreditation overlooks what other countries outside may use for skills with forming a therapeutic relationship with clients. This meant the review favoured UK-centric studies. Also, other "non-accredited" qualifications for therapists may nonetheless have the skills for developing a therapeutic relationship with a client, especially considering as the therapeutic relationship is often cited as the most important factor for therapeutic outcomes (Ardito & Rabellino, 2011). This may explain why there were no significant differences between accredited vs non-accredited therapists for the post-intervention outcomes or drop-out rates. Another factor which may have contributed to this finding was behaviour therapists were categorised as "non-accreditable" therapists- considering as ERP is based upon behavioural theories, their expertise on ERP will be at least equivalent to the therapists categorised as "accreditable". Future reviews could explore expertise on ERP as a moderator could be helpful for understanding this further. Another moderator which could have been used as proxy for the therapeutic relationship is the client's belief in the therapist and the intervention, as believing that ERP is helpful may help with overcoming the anxiety with completing ERP.

Another factor that could be important to consider is severity of OCD, as research suggests that this is an important determinant of engagement in remote CBT for OCD (Salazar de Pablo et al., 2023). Some of the moderation analyses resulted in small sub-groups. Although moderation analysis was limited to sub-groups of at least four studies to partially

mitigate this issue, this means that non-significant moderation effects may simply reflect underpowered analysis and therefore lack of moderation effects should not be taken to mean that no moderation is present and the meta-analyses presented here should be repeated in the future once more studies are available that will allow moderation analyses to be conducted with greater statistical power.

The use of the Holdsworth et al. (2014) model of engagement (MOE) meant this review explored aspects of "engagement" that were identified based on an extensive review of the literature. The MOE has been used within reviews of face-to-face CBT interventions for OCD (Leeuwerik et al., 2019) and was also considered to be the most appropriate model for this review, as other models for engagement with mental health research have focused upon psychiatric inpatient settings (Bogenschutz & Siegfreid, 1998) whereas the MOE explores behaviours both within and outside of therapy sessions. However, there are limitations to using the MOE in this review; by using a deductive approach for what constitutes "engagement", other aspects of engagement may have been overlooked. A more inductive approach for "engagement" within the studies may have discovered new aspects of engagement, which was beyond the scope of this review. For example, Korfmacher et al. (1998) suggest the term "emotional engagement" for exploring mother's engagement with home visits, and suggested that understanding the program material and disagreeing with the material influenced engagement. Both of these factors could contribute towards understanding engagement with CBT for OCD; understanding ERP or disagreeing with the concepts of ERP may influence completion of ERP tasks.

**Strengths and limitations with the included studies**

Bias was detected in many of the studies used, especially within Domains Two and Four. This included the level of contact participants in PSH conditions had with clinicians during the intervention, despite the plan being for no contact during this. By having contact

with a therapist during this it becomes unclear whether the participants continued with the intervention due to the CBT material being supportive and "engaging" enough or whether the support from the therapists influenced this. With concerns being raised that assessors were aware of which interventions groups participants were in (Domain Four) this may increase the chance of assessors reporting differences favouring intervention groups.

For a number of studies, intervention drop-out was used instead of therapy drop-out. This means that some of the drop-out rates may be inflated as they capture broader reasons for drop-out rather than exclusively treatment related drop-out. This means that for these studies may not be accurately capturing the difficulties related to why participants drop-out of these interventions.

Another element of engagement which could have been explored is, specifically in PSH interventions, if the participants read through the CBT material or not. This was considered in one of the studies (Tolin et al., 2007). This has been identified as a potential indicator for engagement with remote CBT interventions for OCD (Launes et al., 2019). Pence et al. (2010) identified that "sufficient" psychoeducation and understanding about ERP is required for the intervention to have sufficient impact, so exploring ways of measuring this within PSH interventions would have important clinical implications.

**Clinical implications**

This review has demonstrated that remote CBT interventions for OCD are effective for reducing obsessions and rituals, demonstrated with the post-therapy outcome measures. However, given the small amount of studies reporting follow-up data it is difficult to tell whether these effects are sustained over time.

Some of the findings from the drop-out reason data can have important implications for healthcare professionals working with clients with OCD. Exploring the suitability of online interventions with the client could be done by services to ensure that clients are not

being offered interventions that do not meet their needs. As participants have stated the

therapy being online as a reason to withdraw from treatment, healthcare professionals can

explore with clients any hesitancies about online therapy and offer support to help them

continue with the intervention, or look for a alternative therapy for them. Other reasons for

drop-out included increase in psychological distress, including increase in obsessions and

rituals or suicidal ideation. This could relate to some of hesitancies with completing ERP

tasks, including IOU. With this knowledge, healthcare professionals can discuss this with

clients and explore ways of supporting clients during this stage of therapy whilst also

emphasising the importance of completing ERP tasks.

**Directions for future research**

The lack of studies reporting on follow-up data means it is difficult to establish the

long-term benefits of remote CBT for OCD and future RCTs should ensure that follow-up

effects are measured. However, there are ethical ramifications for extending the period of

time for control group participants to access therapeutic support.

Future research should ensure that ERP task completion is adequately measured to

establish whether this is a significant factor in remote CBT for OCD. Exploring the client's

beliefs that ERP is useful could be an important factor for completing ERP, future research

capturing this before, during and at the end of the intervention would be beneficial.

Whilst examining engagement quantitatively allows comparison of CBT for OCD

engagement between face-to-face and remote interventions, it does not elucidate reasons for

engagement and drop-out. This is an important omission as better understanding reasons for

engagement and drop-out in remote CBT for OCD could lead to more effective remote

interventions being developed. Future qualitative research should therefore explore barriers

and facilitators to engaging in remote CBT for OCD.

Another research gap is exploring remote CBT for OCD delivered with online group

support. Whilst NICE (2005) recommend that face-to-face CBT for OCD can be delivered as a group-based approach, there is lack of research evaluating remote 'live' CBT for OCD groups. Future research should therefore evaluate remote CBT for OCD groups both quantitatively and qualitatively.

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**Section B**

Facilitators and barriers to engagement within online group CBT for OCD: a framework analysis

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**Abstract**

**Introduction:** Currently, exposure response prevention (ERP) with or without cognitive strategies is considered the gold standard therapy for obsessive compulsive disorder (OCD) and increasingly online CBT has been implemented. However, there remains considerable barriers to therapeutic recovery. It has been highlighted that there could be difficulties with engagement with the therapeutic process, partly due to how anxiety provoking ERP can be. What constitutes as "engagement" within therapy has debated widely, with some definitions including that engagement captures any behaviour towards the therapeutic goal, and has been found to have positive associations within ERP for OCD. However, this has not been explored within remote group ERP for OCD.

**Method:** Cognitive behaviour therapists and clients were interviewed on their experiences of remote group CBT for OCD. A framework analysis was used to analyse the interview data, based upon the Holdsworth et al. (2014) model for engagement.

**Results:** A total of five groupings were found in the framework analysis; clients' motivation, relationships formed within the group, client's minimum effort: attendance, clients' observable, voluntary, active efforts within sessions and clients' voluntary active efforts between sessions. A comparison between the therapists' and clients' experiences were made.

**Discussion:** There were a mixture of ways that the CBT intervention being online enabled and disabled aspects of engagement. Completing ERP tasks within the client's own home was broadly found to be helpful, as this was the environment where the client's OCD tended to be more prominent, and it was easier to practice the ERP between sessions. There were concerns with completing ERP online, specifically that if the ERP felt too overwhelming clients could withdraw and not complete the ERP, and this would not always be visible to therapists if cameras were turned off and due to difficulties reading body language. Whilst there are

limitations within the research, there are practical clinical implications of the research, and

this is one of few qualitative types of research within this particular research field.

Key words: OCD, online group CBT/ERP, engagement

**Introduction**

**Obsessive compulsive disorder and treatment recommendations**

"Obsessive compulsive disorder" (OCD) denotes the combination of obsessions (persistent intrusive thoughts, images, or impulses that are spontaneous or non-deliberate, provoking anxiety or other emotions including shame) and compulsions (repetitive ritualistic behaviours or mental acts such as suppression carried out to prevent the outcome of the intrusive thought or to reduce the psychological distress) (World Health Organisation, 2022). The distress caused by the intrusive thoughts and time spent completing compulsions significantly impact quality of life for the individual (Rachamallu et al., 2017).

Exposure response prevention (ERP) with or without cognitive strategies offered face-to-face or remotely, either individually or in a group setting is the recommended intervention for OCD (National Institute for Health and Clinical Excellence [NICE], 2005). Stemming from behavioural theories, ERP involves intentionally triggering intrusive thoughts and attempting not to complete the compulsions (Meyer, 1966).

The addition of cognitive strategies to ERP were implemented following cognitive theories for OCD (Salkovskis, 2007). These strategies address the misinterpretations that intrusive thoughts imply something meaningful about the individual and inflated responsibility beliefs, such as harm occurring due to the intrusive thoughts.

There is extensive evidence supporting ERP with or without cognitive strategies (now referred to as CBT) for OCD, including a meta-analysis finding large between-group post-therapy effect sizes favouring CBT to waitlist control (Öst et al., 2015).

**Growing evidence base for remote CBT for OCD**

Practical barriers for accessing CBT for OCD include shortage of trained therapists (Külz et al., 2009; Nair et al., 2015) meaning long waiting times and clients having to travel

long distances to attend therapy (Mancebo et al., 2011). Teletherapy, delivered via videoconferencing technology (VCT), on the phone or through asynchronous messaging have been implemented to address these barriers (Wootton, 2016). Meta-analyses indicate remote CBT interventions for OCD have equivalent post-therapy outcomes and drop-out rates to face-to-face CBT (Salazar de Pablo et al., 2023).

Qualitative studies have explored client's experiences of online therapy, although this has been sparsely researched within online CBT for OCD. Therapists highlighted concerns with establishing a therapeutic relationship online (Geller, 2021) which is thought to relate to difficulties with reading body language online (Kotera et al., 2021). Clients have expressed mixed views about remote therapy, including appreciating the convenience of telehealth whilst also concerned it can be difficult to discuss emotional topics online (Liberati et al., 2021). Outcome measures research has found clients experienced no difference with the therapeutic relationship within 1:1 online psychotherapy (Eichenberg et al., 2022). Online communication have been found to create barriers to the therapeutic alliance within grounded theory research for online counselling (Hanley, 2012).

**Therapy engagement**

Around 50% of participants who receive CBT for OCD still experience significant distress with their obsessions and compulsions at the end of therapy (Öst et al., 2015). These outcomes may relate to engagement. Despite often being cited within healthcare research (Albaum et al., 2023), there is a lack of a clear definition of what constitutes engagement in psychological therapies. Adherence to medication have been explored as components of engagement within physical health care (Schwappach, 2010). Within mental health, the ward being a safe environment have been highlighted as promoting engagement (Polacek et al., 2015). These definitions of engagement do not align with the difficulties with engagement in CBT interventions for OCD.

Holdsworth et al. (2014) suggested a model of engagement (MOE) based upon a review of empirical studies within a broad range of therapeutic models, client groups and service contexts. The MOE suggests that engagement characterizes all types of effort a client makes towards achieving the therapeutic outcome during the course of the intervention (Holdsworth et al., 2014). Completing ERP tasks aligns with the MOE for what constitutes "engagement".

As outlined in Figure 1, there are prerequisites for client engagement including an established *therapeutic relationship* and *client's motivation*. These prerequisites are recognised as determinant variables that influence engagement, rather than representing engagement itself.

Engagement process variables characterise the behaviourally based efforts clients make towards accomplishing change both outside and within therapy sessions. This includes *Client's minimum effort: Attendance,* postulated as minimum action required to constitute engagement. Clients can attend sessions without engaging with the therapeutic process, or "going through the motions" of therapy (Yatchemenoff, 2005). Holdsworth et al. (2014) suggest that attendance represents the minimum action required for engagement, and it is the interaction with other process variables that means it holds any meaning towards engagement.

*Clients' observable, voluntary, active efforts within sessions: Participation or involvement* represents observable efforts a client may make within therapy sessions. *Clients' voluntary active efforts between sessions: homework or practice sessions,* such as completing homework tasks and applying therapeutic techniques within day-to-day life, integrates techniques to achieve therapeutic change beyond the therapy session.

*Treatment satisfaction* captures the conclusion a client may have of therapy and *Amounts/degrees of changes in functioning* captures the reduction of psychological distress and increase in psychological functioning, both which are outcome of engagement processes.

**Figure 1**

*Holdsworth et al. 2014 model of engagement.*
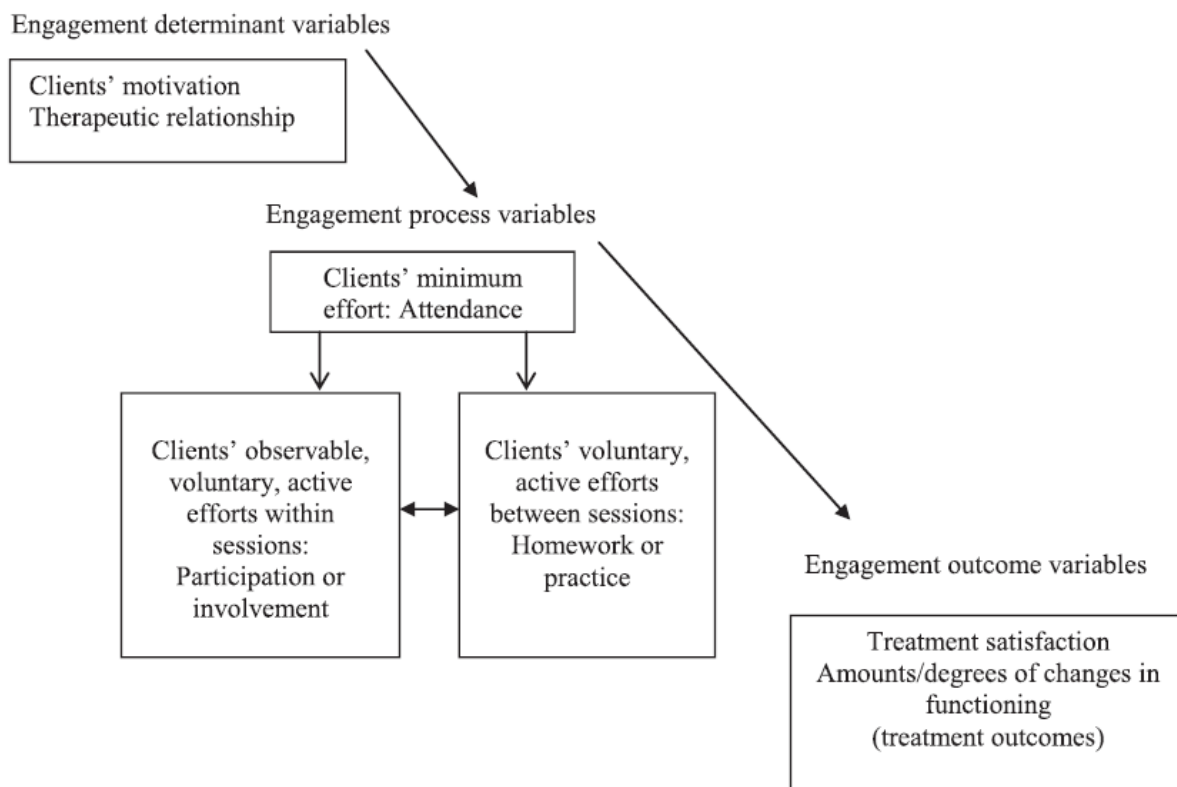
Engagement determinant variables

| Clients' motivation<br>Therapeutic relationship |
| --- |

Engagement process variables

| Clients' minimum<br>effort: Attendance |
| --- |

| Clients' observable, voluntary, active efforts within sessions: Participation or involvement | Clients' voluntary, active efforts between sessions: Homework or practice |
| --- | --- |

Engagement outcome variables

| Treatment satisfaction<br>Amounts/degrees of changes in functioning<br>(treatment outcomes) |
| --- |

Note: This image was copied from "Client engagement in psychotherapeutic treatment and associations with client characteristics, therapist characteristics, and treatment factors" by Holdsworth, E., Bowen, E., Brown, S., & Howat, D. (2014). *Clinical Psychology Review, 34*(5), 428-450.

**Aspects of engagement within online group CBT**

Remote group CBT has been explored for other psychological conditions. Online technology can lead to poor experiences of online group therapy, by creating barriers for emotional connections between participants for CBT stress management (Zhou et al., 2016).

In comparison to face-to-face group CBT, participants in VCT interventions were less likely to complete between session tasks (Frueh et al., 2007). VCT interventions were associated with poor acceptance of the facilitator, reduced agreement on therapy goals and experienced less group cohesion (Batastini & Morgan, 2016)

These aspects are highlighted as components of "engagement" within the MOE. Group processes are not explored within this model, however forming an effective working relationship with other group members has been cited as key for engagement (Tetley et al., 2011).

**How engagement can be explored within CBT interventions for OCD**

There has been little exploration of engagement in relation to CBT for OCD. Research demonstrates the importance of within and between session ERP task completion for overcoming OCD (Maher et al., 2012; Wheaton & Chen, 2021). Therefore, understanding what promotes engagement with ERP has important clinical utility. Rituals reduce unpleasant emotions and maintain the belief that the rituals have kept the individual and other people "safe"( Foa et al., 2012). Not carrying out the rituals means the client experiences the distress associated with the intrusive thought. It would make sense that experiencing these emotions is difficult to tolerate.

Motivational interviewing incorporated into CBT and a good working alliance have been shown to be associated with ERP completion (Wheaton et al., 2016; Marker & Norton, 2018), suggesting the MOE determinant variables contribute towards ERP completion. It is not clear how this varies within the process variables.

**Qualitative research exploring engagement with group CBT for OCD**

Research exploring engagement in group CBT group for OCD is sparse. In qualitative studies, participants reference support from the group as being important for completing ERP

tasks (Black et al., 2018). Being in a group encouraged clients with completing their ERP tasks, as they knew they would be feeding back to other group members (Leeuwerik et al., 2023). Group therapy can create enablers and barriers to self-disclosure and therefore within-session participation, with some participants finding discussing their OCD reduced their feelings of shame, whereas other participants feared judgement from group members (Spragg & Cahill, 2015).

**Qualitative research exploring engagement with online individual CBT for OCD**

To date, a few qualitative studies have explored the experiences of individual remote CBT for OCD. Being online felt easier for adolescents to self-disclose, thereby encouraging engagement (Lenhard et al., 2016). However, adults engaging in remote CBT for OCD have revealed that being online meant it was easier to avoid carrying out ERP tasks (Knopp-Hoffer et al., 2016).

**Rationale**

CBT for OCD is an evidence-based psychological therapy recommended for OCD (NICE, 2005). Modest recovery rates could relate to therapy engagement.

There are contrasting views on establishing a therapeutic relationship online from therapists and clients (Geller, 2021; Eichenberg et al., 2022). This has not been explored within remote group CBT interventions or for OCD. Considering that the therapeutic relationship is viewed as a precursor for engagement (Holdsworth et al., 2014) it seems clinically relevant to explore this.

Aspects of engagement (such as the completion of within and between session ERP tasks) have been shown to be associated with positive therapeutic outcomes. Exploring engagement as outlined within the Holdsworth et al. (2014) MOE could provide further

insight into the barriers and facilitators of engagement with remote ERP interventions for OCD.

**Aims**

The aims of this study were to explore the experiences of clients and CBT therapists participating and delivering online group CBT for OCD with a view to understanding views on what facilitates and hinders engagement in online group CBT for OCD. The specific research questions are:

1) How do CBT therapists and clients experience group CBT for OCD being facilitated online?

2) What do CBT therapists and clients perceive to be the facilitators and barriers to engagement in group CBT facilitated online?

**Methods**

**Design**

This study utilised a qualitative design that involved a framework analysis of semi-structured interviews with CBT therapists and clients involved in remote group CBT for OCD.

Framework analysis is flexible within its epistemological stance (Gale et al., 2013). A critical realist position was adopted as this research upholds that the knowledge is influenced by the participant's and the researcher's normative judgements located within specific cultural and social positions whilst maintaining that the reality shapes the experiences of the online CBT groups (Alderson, 2021). The researcher's interpretive resources facilitate this understanding, so should be reflected on to bring observability to the interpretative act.

Framework analysis is recognised as a suitable method for analysing interview data. A preconceived framework can be used from the beginning of the research, however the

categories within the framework can be adapted, dependent on the data, allowing an inductive-deductive approach (Gale et al., 2013). This research had a model for "engagement" with the MOE. Remaining flexible with the inductive-deductive approach was beneficial, considering as this is the first time the MOE has been used for remote CBT.

Framework analysis provides a structured way of working with qualitative data, where comparisons can be made within and between the participant data (Gale et al., 2013). This meant comparisons between the CBT therapists and clients could be made the discrepancies in healthcare professionals and clients' views on remote therapy could be explored.

Framework analysis is suitable for exploring the following questions: i) contextual, in terms of exploring the nature of a phenomena, ii) diagnostic, in terms of exploring the causes of something, iii) evaluating the effectiveness of, for example, an intervention and iv) strategic; identifying new policies, actions or plans (Ritchie & Spencer, 1994). This research explored participant's experience of engagement with online group CBT (contextual), and the facilitators and barriers for engaging in remote CBT (diagnostic). Exploring facilitators and barriers to engagement informs future policies (strategic).

**Participants**

A purposive sampling method was used. CBT therapists and clients were recruited. The inclusion criteria for the CBT therapists were that they had facilitated an online CBT group for clients with OCD in NHS or non-NHS services. For clients, the inclusion criteria were that they were 18 or over, had a diagnosis of OCD and had attended at least one online group CBT for OCD therapy session in the last 12 months, to ensure recollections of the intervention were not too distant to comment on.

Eight CBT therapists and four clients participated in the study. The mean age of the clients was 46 (SD= 14.76). The clients had experienced symptoms of OCD for a mean of 24

years (SD=15.23). This data was not collected for the CBT therapists. All of the CBT

therapists had worked within the NHS for several years.

**Table 1**

*Demographic information for clients.*

| Client number | Age | Gender | Ethnicity | Duration of OCD symptoms (years) | Previous experiences of CBT | Previous experiences of online therapy |
|---|---|---|---|---|---|---|
| 1 | 25-30 | Female | White Other | 22 | Yes | No |
| 2 | 55-60 | Male | White British | 40 | Yes | No |
| 3 | 55-60 | Female | White British | 4 | No | Yes |
| 4 | 40-45 | Female | White British | 30 | Yes | Yes |

**Procedure**

The researcher introduced the study to CBT therapists in a NHS service that routinely

facilitated online group CBT for OCD, and attended one of the online group CBT sessions to

introduce the study to clients. Clients informed the CBT therapists if they would like to

participate in the study, ensuring they did not feel pressured to participate. Emails were sent

to the participants who had expressed an interest (Appendix D) with participant information

sheets (Appendix E). Clients were paid £10 for participation. Consent forms were emailed to

participants prior to the interviews (Appendix F and G). The interviews took place online and were recorded using an NHS trust owned encrypted digital recorder.

The research aimed to recruit eight CBT therapists and eight clients. After recruitment difficulties, it was decided that clients who participated in previous online CBT group for OCD could take part in the research (Appendix H). CBT therapists contacted previous clients (Appendix I). Evidence suggests that 12 participants is acceptable within qualitative research (Fugard & Potts, 2015) therefore after consultation in supervision the analysis continued with 12 participants.

**The intervention**

The intervention is a ten-session group consisting of weekly two-hour sessions with maximum ten clients per group. The first two sessions involve psychoeducation and learning based on a CBT formulation for OCD. The remaining sessions focus on in-session ERP, with each session emphasising ERP completion outside of therapy sessions and having a focus on a specific cognitive strategy. The intervention takes place via Zoom.

**Interview Protocol**

The semi-structured interview schedules were developed collaboratively with the experts by experience (EBE) who worked for the NHS trust that recruitment took place in (Appendix J). The determinant and process variables of engagement in the Holdsworth et al. (2014) MOE informed the questions, with additional questions which the EBE consultants felt would influence engagement, including the perceived severity of the client's obsessions and rituals. The mean length of the interviews was 31:52 minutes. After the interviews, the participants were offered debriefing time.

**Data analysis**

Framework analysis was used to analyse the interview data. Considered a thematic approach, framework analysis involves the development of a matrix output containing all the data, enabling researchers to compare and contrast the data systematically (Gale et al., 2013).

Framework analysis involves the following stages; familiarisation, coding, identifying a framework, indexing, charting and mapping and interpretation (Ritchie and Spencer, 1994).

*Familiarisation*

This stage allows researchers to build a strong understanding of the data (Ritchie and Spencer, 1994). It is recommended to make notes and early interpretations of the data from the start of analysis. The researcher listened to and transcribed verbatim the recordings of interviews and kept separate notes of ideas or interpretations of the data (Appendix K and L).

*Coding*

Coding involves identifying any data that seems meaningful ("codes"). Codes can be predetermined as part of a framework, or they can be obtained inductively (Gale et al., 2013). Any data that was incorporated under the Holdsworth et al. (2014) MOE were highlighted, as was any data that seemed pertinent towards engagement.

*Identifying a framework*

A framework is developed through a twofold process of previously decided upon concepts and the newly created codes (Gale et al., 2013). The framework provides a meaningful way of summarising the data. Extensive research on "engagement" and reflection within supervision contributed towards the decision making on which framework to use. As previously outlined, other models of engagement did not capture completing ERP. Components of the MOE are associated with positive therapeutic outcomes for ERP OCD (Leeuwerik et al., 2019).

The MOE was used as a starting point for the framework. The determinant variables for engagement and process variables (Figure 1), were used as the pre-determined categories or groupings for the data analysis (Table 2). Coded data that fell under the category for the determinant or process variables were grouped together to form sub-categories. After the eighth interview the data had reached saturation, and no new categories or sub-categories were identified.

**Table 2**

*Groupings for framework analysis based upon Holdsworth et al. (2014) MOE*

| Pre-determined groupings for framework analysis | |
| --- | --- |
| Determinant variables | Clients' motivation |
| | Therapeutic relationship |
| Process variables | Client's minimum effort: Attendance |
| | Clients' observable, voluntary, active efforts within sessions: Participation or involvement |
| | Clients' voluntary active efforts between sessions: homework or practice sessions |

The framework is altered as the analysis continues. The framework did not capture the interactions between group members. After reflections within supervision, it was agreed that the "therapeutic relationship" could represent the relational aspects between the group members and the CBT therapists, so this category became "relationships formed within the group". As all behaviours within the therapy sessions occurred within a remote therapy session, the term "online" was added to *Clients' observable, voluntary, active efforts within sessions*.

*Indexing*

Indexing involves applying the identified framework to the data (Ritchie & Spencer, 1994). This research used Nvivo12 (2017) to group the codes into the framework, highlighting relevant information into either the categories in the Holdsworth et al. (2014) MOE and making notes for future groupings.

*Charting*

Charting involves summarising the data into charts, (Gale et al., 2013). This step enables a review of the coded data so that the codes can be ordered by the different categories, allowing within and between case (participant) comparisons. The participant was categorised based upon whether their quotes mainly highlighted facilitators, barriers, or a combination of both for engagement.

*Mapping and interpretation*

This step involves exploring relationships between the groupings, and mapping these onto theoretical concepts (Gale et al., 2013). This includes making comparisons between groupings involved within the charting stage as well as comparisons within the dataset (Goldsmith, 2021).

**Quality assurance and researcher reflexivity**

Gale et al. (2013) emphasises the importance of keeping a transparent audit trail from raw data to the final categories (Appendix M).

Due to the reliance on researcher judgements, it is important to reflect upon personal and contextual factors which may influence the study, referred to as reflexivity (Olmos-Vega et al., 2023). This was carried out within supervision sessions between the researcher and supervisors.

The researcher was a white British, cis-gendered female with experience with qualitative research. They had experience of CBT and a good working understanding of the online CBT intervention. By keeping a research diary (Appendix N) and reflecting within supervision, the researcher critiqued and appraised their own subjective views.

**Ethical considerations**

The study received Integrated Research Application System (IRAS) Health Research Authority (HRA) and Health and Care Research Wales (HCRW) ethics approval (Appendix O) and Capacity and Capability (formerly Research and Development) approval from the NHS Trust that the research recruited participants from (Appendix P).

The participant information sheet outlined: the right to withdrawal, debriefing after the interviews and how identifiable information will be anonymised. Participants were informed that participation was voluntary and would not impact their current or future treatment under the service. Participants were informed that if they disclosed information that may indicate risk to themselves or others, relevant services would need to be contacted.

The client's demographic information was stored along with the transcripts and recordings of the interviews on the NHS trust secured file space.

<div align="center">

**Results**

</div>

There were five categories and 15 sub-categories in the framework analysis, (Table 3). The full matrix containing all of the quotes for the sub-categories is included in Appendix Q.

**Table 3**

*Summary of categories and sub-categories in the final framework*

| Category | Sub-category |
| --- | --- |
| Clients' motivation | Understanding the theory behind ERP |
| | The impact OCD has on my life |
| Relationships formed within the group | Using break-out rooms |
| | Support from other group members |
| | No informal space together |
| | Difficulties reading body language online |
| | Shared experiences of OCD |
| | Establishing trust with the therapists |
| Client's minimum effort: attendance | Being online is more accessible |
| | Decreased effort to attend therapy |
| Clients' observable, voluntary, active efforts within sessions: Participation or involvement | Being on a screen |
| | Navigating online communication |
| | Being in own home for ERP tasks |
| Clients' voluntary active efforts between sessions: homework or practice sessions | Adjusting ERP tasks to meet client's needs |
| | Accountability to completing between session ERP tasks |

Most of the sub-categories related to the therapy being online (*No informal space together; Difficulties reading body language; Using break out rooms; Being online is more accessible; Decreased effort to attend therapy; Being on a screen; Navigating online communication; Being in own home for ERP tasks*). Some sub-categories specifically related

to the group format (Sh*ared experiences of OCD, Support from other group members; Accountability to completing between session ERP tasks*) and some about ERP (*understanding theory behind ERP*, *Adjusting ERP tasks to meet client's needs*). A map of the categories and sub-categories is shown in Figure 2. Within the original MOE, the determinant variables influences the process variables, but not vice versa. This research found that these variables influenced one another bi-directionally, therefor the arrows were altered to demonstrate this. The arrows show how the researcher perceived the categories and sub-categories to influence one another. Table 4 captures whether sub-categories were experienced as enablers, barriers or a combination for engagement for the participants.

**Figure 2**

*Thematic map of framework analysis*

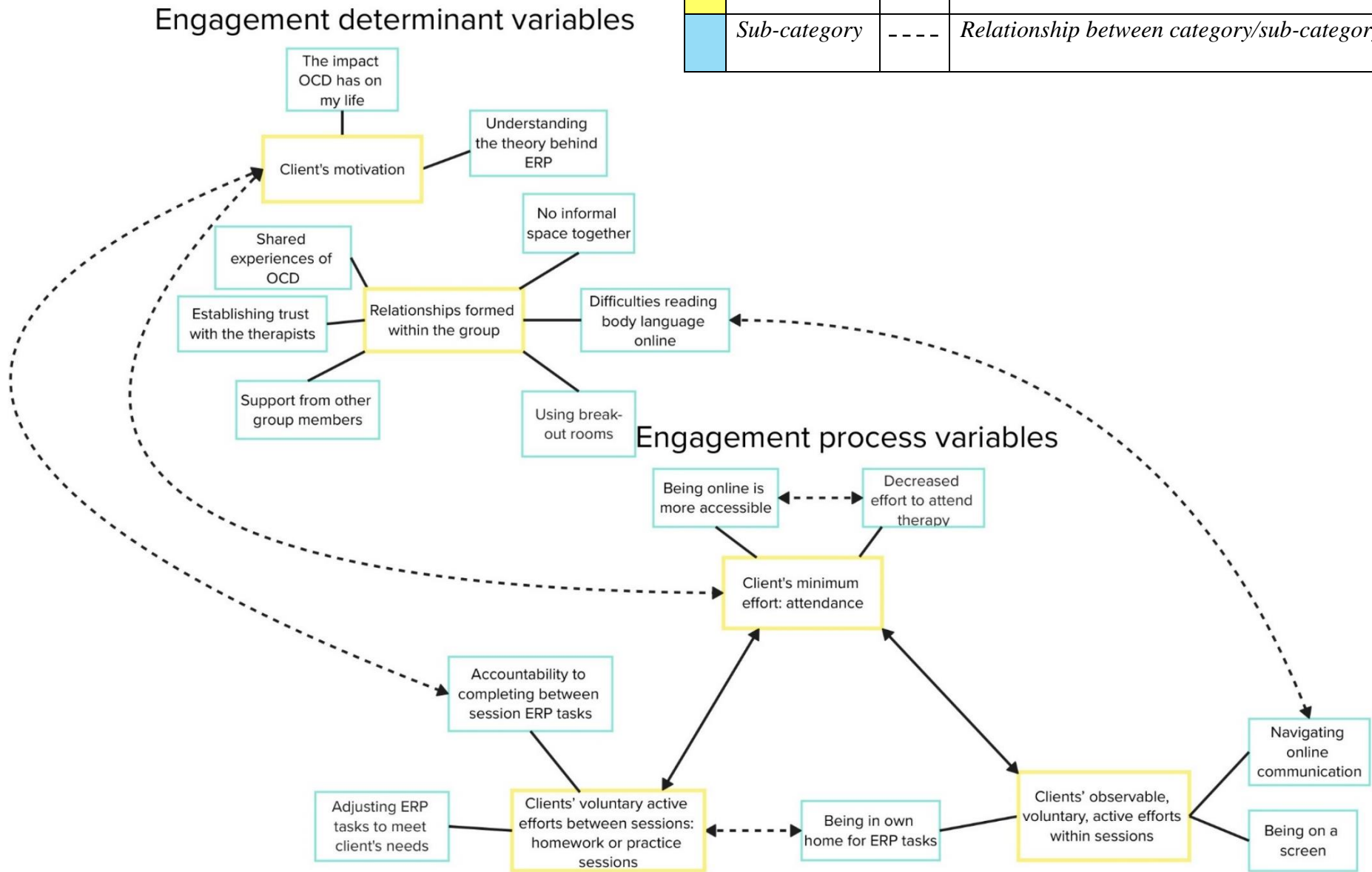| Key | | | |
|---|---|---|---|
| <span style="color:yellow">■</span> | *Category* | —— | *Which category the sub-category is in* |
| <span style="color:cyan">■</span> | *Sub-category* | - - - - | *Relationship between category/sub-category* |

**Table 4**

*Summary of sub-categories being experienced as facilitators, barriers or both for engagement comparing CBT therapists and clients*

| Category | Sub-category | CBT Therapists | | | | | | | | Clients | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 |
| Clients' motivation | Understanding the theory behind ERP | | | | | O | G | | | G | G | | G |
| | The impact OCD has on my life | | | | | | | | | G | G | | G |
| Relationships formed within the group | Using break-out rooms | O | O | G | G | G | | G | G | G | G | B | B |
| | Support from other group members | O | O | G | | G | G | G | G | G | G | | G |
| | No informal space together | B | B | B | B | B | B | B | | B | | B | B |
| | Difficulties reading body language online | B | B | B | O | B | B | B | B | B | B | | B |
| | Shared experiences of OCD | G | G | G | | B | B | B | B | G | G | | O |
| | Establishing trust with the therapists | G | | | G | G | | G | | G | G | | G |
| Client's minimum effort: attendance | Being online is more accessible | G | | G | | G | G | | | G | G | | G |
| | Decreased effort to attend therapy | | | | | B | | | | G | G | | G |
| Clients' observable, voluntary, active efforts within sessions: Participation or involvement | Being on a screen | O | B | B | G | | B | B | | G | O | G | O |
| | Navigating online communication | B | O | O | O | B | | O | | G | O | | O |
| | Being in own home for ERP tasks | B | O | O | G | O | O | B | | G | G | | |
| Clients' voluntary active efforts between sessions: homework or practice sessions | Adjusting ERP tasks to meet client's needs | | | | | | | | | G | G | G | |
| | Accountability to completing between session ERP tasks | G | | | | G | | G | | G | G | G | G |

| Key | |
|---|---|
| Quotes were mainly barriers of engagement | (blue) |
| Quotes were a mixture of enablers and barriers of engagement | (orange) |
| Quotes were mainly enablers of engagement | (green) |

**Categories and sub-categories**

*Motivation*

This sub-category encapsulates what participants perceived to influence a client's drive to start/continue the intervention.

**Understanding the theory behind ERP.** Participants referenced the importance of clients understanding the function of ERP for helping break the OCD cycle. Some participants became more motivated when they saw the benefits of the ERP tasks:

"I think when I discovered that I could do a couple of things and the world sort of carrying on spinning it that kind of kept me going " (Client 4).

**The impact OCD has on my life.** Clients mentioned the impact OCD had on their lives and wanting this to change.

"I had the um think was it called like a nocturnal panic attack and then I was like, ok, this is quite severe I should go and get help for it" (Client 1).

*Relationships formed within the group*

This category captures the experiences of the connections formed between group members and the CBT therapists.

**Using breakout rooms.** Therapists tried to help group members feel more comfortable with one another, including using breakout rooms so they could have conversations with one other group member.

"we do you think people into breakout rooms early on just so that you know just talking to one person for a few bits" (CBT 3).

Most clients found the breakout rooms helpful, as it meant they felt more at ease with one group member, making it easier to talk within the larger group. One client found it jarring going from the large group to a 1:1 conversation

> "you'd suddenly be put into a room with someone where you'd seen their face, but you haven't spoken to them" (Client 4).

**Support from other group members.** Clients commented on encouraging one another, and knowing they could bring things to the group and other people would be supportive:

> "I did say what the most distressing of my issues was everyone was so supportive and they always gave lots of help and advice" (Client 1).

Support from group members helped clients with completing their ERP tasks, which contributes towards behaviours within online therapy sessions.

> "that power of quite a few people saying come on you can do it and the shared humour and the cheering when you did it" (CBT6). (NB "doing it" was referring to completing an ERP task during the session).

**No informal space together.** There were references made about the group members not having time together outside of therapy. This included not spending time together in the waiting room, and not spending the therapy break together. CBT therapists viewed this informal space as time for clients to bond:

> "the break times are very very important, they're extremely social and they break down barriers really quickly. You get everyone in the kitchen, the kettles boiling you get the biscuits out, and you get a group of very nervous people start to chat" (CBT6).

**Difficulties reading body language online.** This sub-category summarises understanding other group members in terms of non-verbal cues including facial expressions, posture and eye contact. Participants reported that this was difficult to do online

"face to face with people (pause) you can read the body language and you can you know you're looking into their eyes as you say stuff" (Client 2).

CBT therapists highlighted that it was difficult to tell if someone was upset in the group, or to know how people were responding to other group members.

**Shared experiences of OCD.** Group members sharing their experiences with OCD helped them feel less isolated and identify with one another. Clients thought that other group members would benefit from hearing their experiences.

"you could see what other people are going through um not that it was great to see them and the fact that we going through it but (pause) the fact that (pause) you know it wasn't alone" (Client 2).

Some clients felt initially concerned that other people would not understand. One CBT therapist spoke of clients seemed more willing to share personal experiences in face-to-face groups, identifying that clients having a better knowledge of one another when they meet face-to-face.

**Establishing trust with the therapists.** Clients spoke about the trust they built up with the therapists. This included how approachable they were.

"it was easy to talk to them it was easy to ask questions um (pause) they made you feel comfortable they didn't no answer was silly type thing" (Client 1).

*Clients' minimum effort: attendance*

Attendance captured the experiences around attending the online therapy group and the efforts this entails.

**Being online is more accessible.** Participants perceived that the therapy being online meant it was easier to attend, including no longer having to travel:

"it's much more accessible because you can be a home if I had to travel an hour away, I probably wouldn't have gone" (Client 3).

Sessions being easier to attend meant that it was then easier to keep on attending, suggesting a link with *Clients' motivation*

"I think it's then easier for people to come back the following week while than feeling like they didn't have a clue what was going on" (CBT3)".

**Decreased effort to attend therapy.** CBT therapists were concerned without having to physically attend the therapy sessions, there was no preparatory time or debrief time

"it's easier maybe just not to come because it's online it's not that sort of commitment of um (pause) getting up, getting out, getting dressed" (CBT5).

*Clients' observable, voluntary, active efforts within sessions: Participation or involvement*

**Being on a screen.** There were conflicting views about cameras being turned off during sessions. The perceived benefits of cameras being turned off were only identified by the clients, whereas the therapists had concerns with cameras being turned off. Cameras being turned off seemed to link with feeling anonymous and a sense of control of being able to turn off the camera if they felt upset within the therapy sessions.

"you can turn off the video 'cause if you do get upset" (Client 4)

Therapists were concerned of not knowing what the person with their camera off was doing, or other people listening in to the therapy session. It was also highlighted that cameras off could be off-putting, giving the impression that clients were not listening.

> "so somebody talking about something um maybe they're describing an OCD cycle and there's there's a blank camera there that is incredibly uncomfortable" (CBT6).

**Navigating online communication.** Participants spoke about concerns with interrupting each other, meaning there were long silences during the sessions. This seemed to link with *Difficulties reading body language online*, because if they had been face-to-face there would be non-verbal signals that someone was about to speak. Participants did not know the "etiquette" around talking online. One way of managing this way using group rules

> "we had the ground rules and everything and people (pause) didn't interrupt each other, people would generally put a hand up" (CBT 7).

The experience of being "muted" with the mic button was mentioned, with one CBT therapist comparing it to telling people to be quiet and the impact this may have on group members.

> "I think because everyone is invited to be muted unless they're feeding back in order to reduce background noise, which can be distracting, we wouldn't say to somebody in a room when it's face-to-face can you just not say anything, because you know, so therefore there is an implied shh hush, isn't there?" (CBT8).

With the CBT therapists, there was a narrative of having to put more "effort" in with online group therapy in order to increase engagement

"it's a little bit uncomfortable at times it's almost like you've becoming the

teacher and going well whether you put your hand up or not, I'm gonna come

around and ask you for an answer to that question and that doesn't feel great"

(CBT6).

**Being in own home for ERP tasks.** Being in your own home for therapy could feel

safe and comforting. Participants perceived practicing ERP tasks within the home as useful,

as this was where clients' OCD was more likely to be triggered and where they carried out

safety behaviours. One CBT therapist identified that completing in-session ERP tasks at

home may make it easier to complete outside of session, showing how this sub-category

influenced behaviours outside of therapy.

"They're able to really put themselves in that environment if we've got it on

zoom (…) So it's really having them in in their own environment, and I think

it also makes them more aware of what their safety behaviours are. Because

they'd be engaging in a lot more of those safety behaviours when they're at

home" (CBT4).

There were concerns raised about not knowing if group members had completed the

ERP tasks.

"they would have to like go off camera to do the task in the kitchen or

something for example, and then they'd come back so um there is obviously a

disconnect between er I don't exactly know what's going on" (CBT2).

*Clients' voluntary active efforts between sessions: homework or practice sessions*

**Adjusting ERP tasks to meet client's needs.** Some participants spoke of altering the

between session ERP tasks in order to better meet their needs. One client spoke about an ERP

task where she had to prevent herself from separating out different items of laundry:

"I did use some vanish oxy action, so it might have been cheating, but it felt

like the next step to being able to put some things in together" (Client 4).

**Accountability to completing between session ERP tasks.** Completing ERP tasks between

sessions was influenced by being in a group, (shown in Figure 2). Clients knew they would

have to feedback to the group about between session ERP tasks

"we would agree at the end of the session what each of us was going to do and

I almost felt like because we'd agreed it that I felt able to do it" (Client 4).

This included noticing when over group members did not complete the between

session ERP tasks:

"I did notice that there were other people like I said in the first few weeks, that

didn't [complete between session ERP tasks] and I could tell that that it was

their OCD and that motivated me more because I think "ok, don't let your

OCD do that to you you keep doing it" um and again I kept thinking "well, I

can always then feedback to the group next week" which was really helpful"

(Client 1).

Both of these experiences contributed towards feeling motivated to complete the

between session ERP tasks.

## Discussion

**Summary of key findings**

This research explored (purposively sampled) CBT therapists' and clients'

perspectives on facilitators and barriers to engagement within online group CBT for OCD.

There was consensus between therapists and clients on the sub-categories in *Motivation* (*The*

*impact OCD has on my life, Understanding the theory behind ERP*) helped client's with completing ERP tasks.

There were a mixture of enablers and barriers within *Relationships formed within the group*. *Shared experiences of OCD* and *Support from other group members* promoted feelings of togetherness, and allowed clients to support each other. The clients found it easier to trust the therapists than other group members, which seemed to relate to their job role. *Using break-out rooms* helped group members get to know each other but were also experienced as awkward. *Difficulties reading body language* and *No informal space together* prevented clients bonding with one another, with therapists making contrasts to face-to-face groups.

*Being online is more accessible* meant attending the group was easier, and reinforced *Motivation*. CBT therapists worried the quick transition with online therapy meant there was *Decreased effort to attend therapy*.

*Navigating online communication* prevented spontaneous contributions within a group session. Therapists and clients were divided on *Being on screen*, with therapists being concerned about confidentiality, whilst clients experiencing being able to turn off their cameras as giving them more control.

*Being in own home for ERP tasks* was a unique feature of the intervention. It was helpful when a client's OCD was more prominent at home, and practicing between-session ERP was easier. There were concerns about avoiding ERP tasks.

Clients adjusted their ERP tasks outside of sessions, which seemed to enable engagement. *Accountability to completing between session ERP tasks* promoted engagement, due to the awareness of feeding this back to the group.

**Clients' motivation**

*Understanding the theory behind ERP* seemed to encourage motivation. It helped clients to understand that experiencing the unpleasant emotions in the short term would help

them long term, as they could learn to tolerate the emotions and realise the feared event associated with the intrusive thought did not occur or was not influenced by the compulsions. This aligns with research showing that understanding the rationale for ERP is a predictor of completing between-session ERP (Wheaton & Chen, 2020).

*The impact OCD has on my life* captured that obsessions and rituals prevented clients from doing the things that they wanted to in life. This aligns with previous research on the interaction between psychological distress and readiness to change enhances client engagement (Boswell et al., 2012).

### *Relationships formed within the group*

There were a mixture of facilitators and barriers that influences the group members relationships with other group members and the therapists. Moving beyond the emphasis on the therapeutic relationship between the client and therapist, peer relationships also appeared to tie into determinant factors of engagement. The quality of the relationships within the group itself, and how the online environment impacted this was critically important in all participant's accounts. *Using break-out rooms* was mixed for clients, one stating experiencing the break-out rooms as anxiety provoking while others reported the opportunity to speak more intimately peers which enabled them to contribute more to within group discussions. Similar techniques have been cited as useful within online dialectical behaviour therapy (Lopez et al., 2020).

*Support from other group members* facilitated building relationships between group members. Receiving and giving support with within group therapy is thought to be therapeutic as it allows clients to benefit others (Yalom, 2005). This is also pertinent within group interventions for OCD, as people with OCD often feel isolated (Ociskova et al., 2013).

There were concerns raised by the CBT therapists that the clients did not have informal space together during therapy breaks. This time together during the therapy break creates time for informal bonding and has been cited as important for building group cohesion (Bryde Christensen et al., 2021) therefore losing this time together may impact group cohesion. This may mean online therapy is more process oriented; potentially, some aspects of group therapy translate well to remote therapy, such as psychoeducation however aspects such as space together not focussing on the task of therapy does not translate so well.

*Difficulties reading body language online* is often highlighted as a concern with online therapy (Kotera et al., 2021). It is possible to imagine why body language is lost when therapy is delivered over a screen. On a screen there is generally much of the body that would be lost.

The *shared experiences of OCD* references universality, which is pertinent for client groups who are isolated or experience difficulties with talking about their psychological distress (Yalom, 2005). The realisation that other people have similar experiences can create a sense of belonging, helps clients feel less alone with their psychological distress and can help clients be more accepting about their psychological distress and engage in support (Malhotra & Baker, 2022) highlighting that shared experiences of OCD facilitates building relationships between group members. Experiencing universality seems particularly important for this client group, given the stigma associated with OCD often means clients with OCD feel isolated (Glazier et al,. 2015). Some clients  raised concerns with sharing information about their OCD. This aligns with previous research exploring the use of self-disclosure within group therapy (Spragg & Cahill, 2015). Further research in this area would contribute to understanding self-disclosure with this intervention.

*Establishing trust with the therapist* helped clients ask questions during the sessions and understanding the theory behind ERP tasks, which influenced *motivation* and *behaviours within online therapy sessions*. This sub-category aligns with research about the importance of the therapeutic relationship within therapy as trust is often cited as a component of the therapeutic relationship (Peschken & Johnson, 1997). Research has shown correlations between the therapeutic relationship and post-therapy outcome measures for CBT for OCD (Wolf et al., 2022) which aligns with the concept that the therapeutic relationship is part of engagement. Whilst no research so far has explored the relationship between therapeutic relationship and ERP completion, it makes sense that being able to trust the therapist would help with completing anxiety inducing ERP tasks.

### Client's minimum effort: attendance

*Being online is more accessible* captured how the lack of travel makes attendance easier and is often cited as a strength of tele-healthcare (Fairburn & Patel, 2017). This contrasts with the *decreased effort to attend therapy*. The travel involved for attending therapy face-to-face requires physical and mental effort Qualitative studies of online group therapy, suggests the effort in physically attending a therapy group is congruent with the effort put into therapy as a whole (Lee & Antonio, 2023). Whilst there were no comments made about the decrease in effort to attend impacting efforts within other parts of therapy, some therapists expressed concerns on what this meant for the client's commitment to therapy. Potentially, the travel time for attending face-to-face therapy helps clients to "get in the zone" for therapy, as they will have certain associations with the healthcare building where therapy takes place.

### Clients' observable, voluntary, active efforts within sessions: Participation or involvement

For clients it seemed that not having a camera on meant having control over whether other people could see them getting emotional. Within what Suler (2004) refers to as the

disinhibition effect, feeling invisible in online environments amplifies disinhibition, partly due to the perception that behaviours cannot be associated with the individual if other people cannot see them. It could be that feeling anonymous allows clients to engage in the intervention to a greater extent, as concerns about stigma and judgement are reduced.

*Navigating online communication* seemed to be a barrier to engaging within therapy sessions. Pressing the mute button adds another step to the action, and potentially if someone is already feeling anxious about contributing to a therapy session this extra step goes beyond their threshold to participate.

One way of managing this anxiety was clients wanting an "etiquette" for how to speak during the sessions. The use of rules provided structure for clients to speak. Potentially, these rules make the conversation more formal, and keeps the conversations remaining solely about the therapy, which has been identified as beneficial within online therapy (Vinci et al., 2022). However, this may create barriers to informal or "less important" talking points, which may preclude feeling relaxed in the group, which might explain why there was less contribution overall from clients.

Being at home (*being in own home for ERP tasks*) was a source of comfort and familiarity for the clients. This aligns with face-to-face research exploring ways in which a therapist can make the therapy "room" more comforting encourages engagement (Taiwo et al., 2023). While previous research has located this as a therapist-related factor of engagement, within the context of remote therapy it becomes a client-related factor, for example clients reported setting up their safe space to attend therapy.

It seemed that being within the "real" environment where the client's OCD was more pronounced was helpful. Remote therapy bridges the gap between completing ERP tasks at the clinic and at home; this offers clients the chance to complete ERP tasks in the

environment where the OCD rituals were more likely to occur with the support of the therapy group. Multiple exposures both within and between sessions are important for successful treatment (Foa & Kozak, 1986). Inhibitory Learning Theory (ILT) suggests that within ERP, the exposure between the conditioned stimulus and unconditioned response (CS-UR) means the client learns new associations with the conditioned stimulus (referred to as CS-noUS) which competes with the original CS-UR association (Jacoby & Abramowitz, 2016). With face-to-face ERP, the client has to take the new associations and practice it within a different environment (ie, at home) whereas being able to practice ERP in the home context potentially accelerates learning, as these associations have already started to be made. However, it is also recommended within ILT to practice ERP in multiple contexts, so that the new pairing of CS-noUS can be accessed within different contexts and different associations (Craske et al., 2008). This means that it is also important for clients to practice the ERP tasks in someplace other than the home environment.

Given how anxiety provoking ERP is, therapists can offer guidance to help clients to complete the ERP tasks. This may be more difficult when not in the same room as the client, therefore CBT therapists may be concerned that without support it can be difficult for clients to complete ERP tasks.

### Clients' voluntary active efforts between sessions: homework or practice sessions

Holdsworth et al. (2014) suggests clients may not always have the means or resources to complete therapy homework despite being engaged in the intervention, so adapting between-session tasks may be a way of overcoming this. However, from a ERP perspective, altering the ERP tasks could be viewed as unintentionally incorporating safety behaviours, rather than carrying out "true" exposures (Pence et al., 2010).

It seemed *accountability to completing between session ERP tasks* encouraged clients to complete their ERP tasks. This aligns with previous group CBT for OCD research (Black et al., 2018). Clients were motivated to do ERP tasks due to the knowledge that they would feedback to the group showing how the presence of other group members had a positive impact on engagement with ERP. Clients realised the OCD prevented group members from engaging in the ERP, and wanting to instil hope for them, which related to the *Support from other group members* sub-category. Similar experiences were found within face-to-face group CBT for OCD (Leeuwerik et al., 2023) suggesting that the presence of other group members, face-to-face or online, influences completing ERP tasks.

**Strengths and limitations**

The framework analysis approach provided a structured approach for exploring the data. This research highlights some unique perceptions into how, within the context of remote therapy, the client being within their own home may both facilitate and hinder engagement with ERP tasks. By interviewing both therapists and clients, this research could explore the discrepancies found within previous research between therapists' and clients' perspectives on the therapeutic relationship within online therapy.

By incorporating the Holdsworth et al. (2014) MOE, this research took a holistic multifaceted view that explored many different aspects of engagement. There remains limited qualitative research on OCD and experiences of the interventions offered. Broadening this research field with information rich data will offer further insights into OCD, which can support the implementation of CBT interventions which is particularly useful given the within treatment barriers. The framework was adapted to capture the experiences of the intervention being a group, as experiences of group members seemed to be influential in understanding OCD (*shared experiences of OCD*) and completing ERP (*accountability to completing between session ERP tasks*). Apart from this adaptation, the framework aligned

closely with the MOE. Using the MOE as the starting point may have meant other aspects of engagement may not have been considered, which may have influenced the completion of ERP tasks.

The interviews took place online. Some of the barriers for engagement (such as difficulties reading body language) may have occurred within the interviews, potentially leading to loss of information of the experiences of the intervention.

The sample size used in this research was small, and all the clients were white. Clients who declined to take part in the online group CBT interventions were not invited to take part in the study, and clients who terminated the intervention early did not take part, meaning that clients who potentially experienced even more barriers for taking part in the intervention were not included.

Due to not being outlined in the ethics application, demographic information on the CBT therapists was not collected. This meant the transferability of the research was difficult as it was unclear whether the sample represented the population.

Potentially, participants who took part in the interviews might not disclose about not completing ERP tasks. Clients may feel they cannot disclose the impact the rituals have on their lives, or the fear of something bad happening if they do complete the ERP is so intolerable it feels safer to continue with the rituals. Additionally, participants who choose to take part in research are more likely to have a positive experience of therapy. More therapists took part in the research which means the client's perspectives may be underrepresented. These factors impact the transferability of the findings to other clinical contexts. The interviews relied upon the participants' retrospective accounts of the online therapy groups, meaning the data may be influenced by recall bias.

**Clinical implications**

The findings suggest several ways services and therapists could support client engagement in remote group CBT for OCD. Healthcare services should suggest to clients they have a dedicated safe space for attending online therapy, which could be outlined within therapy guidelines.

The finding that being at home where triggers for OCD are more prominent and the avoidance of ERP could be considered when assessing clients for CBT interventions for OCD. For example, clients who experience more triggers within their home may benefit from a remote intervention. Likewise, client's who present with high levels of avoidance could potentially be prioritised for face-to-face interventions, or offered a combination of face-to-face therapy with some remote sessions so they can increase the contexts for carrying out ERP tasks, which would be beneficial from a ILT perspective. Assessment of avoidance could be captured within the gold standard assessment for OCD- Yale-Brown Obsessive Compulsive Scale, which assesses avoidance (Rapp et al., 2016).

Therapists can address with clients anxieties about talking within online therapy, including the "etiquette". This could be included within guidelines set out at the beginning of the intervention. Therapists can contribute towards creating a group culture within group therapy (Yalom, 2005) which includes creating a safe environment for clients to contribute. Other norms which therapists could aim to create include encouraging client-to-client interactions, such as asking someone to offer advice to other group members.

In this study, it was found that therapists encouraged clients to participate by naming individual group members. This could help normalise speaking within the group, but it could raise anxieties due to the uncertainty about who will be chosen. Ways to manage this include being tentative to the client's responses, giving positive feedback to client's contributions and

offering reassurances when interruptions occur. Therapists also used technology, such as the hands-up function, to help encourage participation. Checking the group member's preferences on this could promote collaboration, which may encourage participation.

This study found polarising views from therapists and clients about having cameras on during sessions. Therapists can explore clients' perspectives on having cameras on. Careful consideration would be needed when discussing turning cameras off, given confidentiality concerns about other people listening in on the session. Clients who are not willing to have a camera on during sessions could be offered face-to-face or 1:1 remote therapy, which could be assessed before starting the intervention.

One client found the break-out rooms increased their anxiety. Therapists can encourage normalisation around OCD to encourage discussions about OCD so clients can experience universality. Whilst this is not cited within other research, it does have clinical implications in terms of exploring individual preferences, which therapists can explore during therapy sessions or during assessment procedures.

**Directions for future research**

Future research could include exploring experiences of participants who have terminated the intervention early and people from ethnically minoritised backgrounds, as their voices were not captured within this research. It would be beneficial to hear the views from people who could not attend remote interventions due to socioeconomic reasons such as lack of access to the required technology for remote therapy or due to caring responsibilities. This is important considering the NHS long-term plan to increase usage of remote telehealth interventions, as services could adapt to meet the needs of these populations (Alderwick & Dixon, 2019). Previous research has suggested remote CBT interventions are less effective for individuals with more severe OCD (Salazar de Pablo et al., 2023), so research exploring

participants in secondary or tertiary care services experiences of remote interventions would be useful.

**Conclusion**

This research explored facilitators and barriers to engagement with online group CBT for OCD. Practicing ERP tasks at home meant clients had support with the ERP tasks whilst also experiencing ERP where their OCD affected them most was a prominent finding, considering that completing ERP tasks is often cited as important for therapeutic success. This could be considered within services offering remote therapy for OCD by assessing client's suitability for remote therapy against whether avoidance levels may indicate face-to-face interventions being more helpful.

Barriers to engagement included not knowing when to speak and not getting to form closer bonds with the other group members. Future research could explore some of these experiences of engagement from people whose voices were not included in the research, such as participants from diverse backgrounds or clients who dropped out of the therapy group prematurely.

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## Section C: Appendices of supporting information

## Appendix A- Detailed summary table of included studies

| Int. type | Study | Year | Country | N | Age: mean (SD) | Gender (% female) | Intervention group | | Control group | | Therapist qualification | Intervention duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | N | Support offered | N | Support offered | | |
| Live | Lovell et al b | 2006 | UK | 72 | 31.9 (9.5) | 58.5% | 36 | Telephone delivered CBT | 36 | f2f | CBT therapists | 10 sessions over 10 weeks |
| | Storch et al | 2011 | US | 31 | 11.10 (2.59) | 39% | 16 | Videoconferencing technology CBT | 15 | WL | Clinical psychology trainees | 14 sessions over 12 weeks |
| | Turner et al | 2014 | UK | 72 | 14.35 (2.12) | 45.8% | 36 | Telephone delivered CBT | 36 | f2f | Clinical psychologist | 14 sessions over 17 weeks |
| | Vogel et al | 2014 | Norway | 30 | 33.1 (11.6) | 60% | 10 | Videoconferencing technology CBT | 10 | WL | Clinical psychologist | 15 sessions over 15 weeks |
| | Comer et al | 2017 | US | 22 | 6.65 (1.3) | 40.9% | 11 | Videoconferencing technology family delivered CBT | 11 | f2f | Master level trainee in clinical psychology | 12 sessions across 14 weeks |
| | Hollmann et al | 2022 | Germany | 60 | 13.24 (2.78) | 40% | 30 | Videoconferencing technology CBT | 30 | waitlist | Trained psychotherapist | 14 sessions across 16 weeks |
| | Matsumoto et al | 2022 | Japan | 30 | 30.05 (12.8) | 57% | 14 | Online CBT modules completed alongside a therapist on a video chat platform | 16 | TAU | Clinical psychologist | 12 modules over 12 weeks |
| Mixed | Tolin et al | 2011 | US | 34 | 33.91 | 58.82% | 18 | Bibliotherapy CBT | 12 | f2f | Not recorded | 3 sessions |

| | Year | Country | N | Mean age (SD) | % | Int n | Intervention | Con n | Control | Therapist | Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|
| b | | | | (13.3) | | | and phone calls once a fortnight | | | | across 6 weeks |
| Andersson et al | 2012 | Sweden | 101 | 34.01 (13) | 66.3% | 50 | Bibliotherapy (paper or online CBT materials) with asynchronous therapist contact | 51 | online non-directive therapy | Clinical psychology trainees | 10 modules (or chapters) over 10 weeks |
| Wootton et al a | 2013 | Australia | 52 | 37.56 (11.09) | 76% | 15 | Online CBT modules with twice weekly phonecalls with therapist | 17 | WL | Clinical psychologist | 5 online modules |
| Herbst et al | 2014 | Germany | 34 | 35.56 (13.53) | 64.93% | 16 | Online CBT modules with asynchronous therapist contact | 18 | WL | CBT therapist | 14 sessions over 14 weeks |
| Mahoney et al | 2014 | Australia | 67 | 39.14 (13.14) | 60% | 32 | Online CBT modules with scheduled phone calls or emails with therapist | 42 | TAU | Not recorded | 6 sessions over 10 weeks |
| Lenhard et al a | 2017 | Sweden | 67 | 14.60 (1.71) | 46% | 33 | Online CBT modules with asynchronous messages or phone calls with therapist | 34 | WL | Psychologists | 12 sessions over 12 weeks |
| Lovell et al a | 2017 | UK | 475 | 32.4 (2.6) | 60% | 158 | Guided self-help book with scheduled phone support | 158 | WL | PWP | 11 modules over 12 weeks |
| Kyrios et al | 2018 | Australia | 179 | 33.4 (9.9) | 65.7% | 89 | Online CBT modules with scheduled weekly emails from therapist | 90 | progressive relaxation therapy | Psychologists or Trainees | 12 online modules over 12 weeks |
| Aspvall et al | 2021 | Sweden | 152 | 13.4 (2.5) | 62% | 74 | Online CBT modules with asynchronous therapist messages | 78 | f2f | Psychologists | 14 online modules over 16 |

| | Author | Year | Country | N | Mean age (SD) | % female | n | Intervention | n | Comparison | Provider | Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | and phone calls when requested | | | | weeks |
| | Lundstrom et al | 2022 | Sweden | 120 | 32.34 (9.64) | 67% | 42 | Online CBT modules with asynchronous messages from therapists | 38 | f2f | Clinical psychologists | 14 weeks |
| | Wu et al | 2023 | Cina | 99 | 28.99 (7.39) | 39.8% | 33 | Online CBT modules with scheduled messages from therapists | 33 | TAU | Registered therapist | 6 weeks |
| PSH | Greist et al | 2002 | US | 183 | 39 (12) | 42% | 57 | Online CBT modules | 59 | f2f | Behaviour therapist | 10 weeks |
| | Tolin et al a | 2007 | US | 41 | 38.18 (13.10) | 36.59% | 20 | Bibliotherapy | 21 | f2f | Psychologist | 6 weeks |
| | Launes et al | 2019 | Norway | 48 | 30.40 (11.1) | 79% | 16 | Self-administered bibliotherapy | 16 | WL | Trained OCD therapists | 12 weeks |
| | Wootton et al b | 2019 | Australia | 140 | 33.69 (7.20) | 81.4% | 65 | Online CBT modules | 75 | WL | N/A | 5 online modules over 8 weeks |
| | Schroeder et al | 2020 | Germany | 128 | 40.30 (13.12) | 76.5% | 64 | Online CBT modules | 64 | CAU | N/A | 8 weeks |
| | Hwang et al | 2021 | Korea | 27 | 25.14 (9.50) | 59.2% | 12 | Mobile App | 15 | In person 1:1 CBT | N/A | 6 weeks |

**Appendix B- Post therapy outcomes for meta-analysis**

| Study name | Post intervention outcome measures | | | | | |
|---|---|---|---|---|---|---|
| | Intervention group | | | Control group | | |
| | Participants | Mean | SD | Participants | Mean | SD |
| Lovell et al b | 35 | 14 | 6.9 | 33 | 13.4 | 7.7 |
| Storch et al | 16 | 11.13 | 10.53 | 15 | 18.53 | 8.11 |
| Turner et al | 33 | 6.24 | 4.23 | 33 | 6.12 | 3.1 |
| Vogel et al | 10 | 11.5 | 4.8 | 8 | 23.4 | 2.8 |
| Comer et al | 11 | 14.9 | 7.3 | 11 | 14.2 | 7.8 |
| Hollmann et al | 28 | 10.52 | 9.15 | 22 | 22.74 | 5.32 |
| Matsumoto et al | 14 | 14.71 | 5.65 | 16 | 20.87 | 7.23 |
| Tolin et al b | 12 | 15.16 | 5.4 | 10 | 14.25 | 6.19 |
| Andersson et al | 49 | 12.94 | 6.26 | 51 | 18.88 | 4.18 |
| Wootton et al a | 10 | 12.38 | 5.27 | 16 | 20.49 | 5.07 |
| Herbst et al | 16 | 14.44 | 5.9 | 14 | 19.33 | 6.46 |
| Mahoney et al | 24 | 19.83 | 12.71 | 35 | 29.11 | 12.21 |
| Lenhard et al a | 32 | 16.97 | 6.29 | 28 | 20.64 | 4.11 |
| Lovell et al a | 130 | 20.19 | 6.83 | 112 | 22.18 | 6.54 |
| Kyrios et al | 52 | 15.26 | 5.01 | 63 | 18.49 | 6.35 |
| Aspvall et al | 74 | 13.6 | 5.9 | 77 | 12.8 | 7.1 |
| Lundstrom et al | 41 | 13.93 | 4.88 | 33 | 12.21 | 5.79 |
| Wu et al | 32 | 13.28 | 5.33 | 28 | 16 | 4.96 |
| Greist et al | 55 | 19 | 7.2 | 55 | 17.6 | 6.2 |
| Tolin et al a | 17 | 18.95 | 7.22 | 17 | 15.57 | 6.95 |
| Launes et al | 16 | 24.63 | 6.18 | 16 | 27.32 | 4.14 |
| Wootton et al b | 44 | 15.42 | 7.2 | 61 | 21.61 | 5.74 |
| Schroeder et al | 47 | 17.38 | 7.35 | 49 | 18.98 | 6.17 |
| Hwang et al | 12 | 16.7 | 5.4 | 15 | 15.9 | 4.7 |

**Appendix C- Drop-out reason table**

| Study | Intervention type | Number of drop-outs | | Reason given for drop-out (number of participants to cite this reason) | |
|---|---|---|---|---|---|
| | | Intervention | Control | Intervention | Control |
| Launes et al | PSH | 0 | 1 | | Physical illness (1) |
| Lovell et al a | Mixed | Treatment drop-out: 6 | Treatment drop-out:1 | Unwilling to continue with intervention (6) <br> No longer required intervention (2) <br> Opted out of therapist phone calls (2) <br> Participant no longer had OCD (1) | Accessed another treatment (1) |
| | | Study drop-out:33 | Study drop-out: 6 | Therapist unable to contact (12) <br> Participant requested another treatment (11) <br> Reached top of waiting list for f2f intervention within the service (10) | Reached top of waiting list for f2f intervention within service (6) |
| Wu et al | mixed | 7 | 5 | Withdrew due to medication purposes (3) <br> Withdrew as did not like the online format of the therapy (3) | Withdrew due to medication purposes (1) <br> Withdrew due to lack of other females participants in the group (1) |
| Mahoney et al | mixed | 8 | 7 | Experienced a mental health crisis (1) <br> Caught in natural disaster (1) <br> Withdrew no reason given (5) | Withdrew due to family difficulties (2) <br> Withdrew no reason given |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Started other treatment (1) | (5) |
| Andersson et al | mixed | 8 | 0 | Increase in obsessions and rituals (1)<br>Withdrew no reason given (7) | |
| Herbst et al | mixed | 0 | 4 | | \|Found another intervention (1)<br>Distress subsided (1)<br>Reason not given (2) |
| Kyrios et al | mixed | 6 | 9 | Found the intervention did not help (2)<br>Lack of time for the intervention (3)<br>Not interested in online therapy (1) | Lack of time for the intervention (2)<br>Lack of motivation (2)<br>Not interested in control intervention (4)<br>No reason given (1) |
| Tolin et al b | mixed | 6 | 2 | Unable to attend sessions (4)<br>Withdrew due to non-compliance (1)<br>Dissatisfied with treatment (1) | Unable to attend sessions (1)<br>Wanted to start medication (1) |
| Matsumoto et al | Live | 2 | 0 | Health reasons (1)<br>No response (1) | |
| Lovell et al b | Live | 1 | 3 | Increase in suicidal ideation (1) | No reason given (3) |

| Storch et al | live | 2 | 0 | No perceived benefit (1) Reason not given (1) | |
|---|---|---|---|---|---|
| Hollmann et al | Live | 2 | 9 | Needed other support for mental health (1) Psychosocial reasons (1) | OCD symptoms increased (1) OCD improved (1) Found other therapeutic support (1) Withdrew no reason given (6) |

**Appendix D- Emails sent out to participants who had shown an interest**

03/02/2023          Exploring experiences of online group CBT for OCD          Version 1

Dear [insert name]

Thank you for responding that you would be interested in taking part in this research. Further information about this research is outlined below and in the information sheet.

This research aims to explore the experiences of online group CBT for OCD run in the OCD Clinic and is interested in exploring what is helpful and what is unhelpful for engaging in this intervention. To do this, I will be conducting interviews with people involving questions about their experiences in the intervention.

If you decide to take part in this study, I would be grateful if you could read and sign the consent form attached to this email and send it to me fa251@canterbury.ac.uk. I will then contact you via email to arrange a time and date to conduct the interview. The interview will take place via the same online platform used for the CBT group (Attend Anywhere) and you will be sent a link on the day of the interview. The interview will take approximately 60 minutes.

If I haven't heard from you in the next 2 weeks, I will assume you are no longer interested in taking part in the research.

If you have any further questions about the research, you are welcome to contact me on fa251@canterbury.ac.uk

Thank you for taking your time reading this.

Kind regards,

Frankie Apps

Trainee Clinical Psychologist

**Appendix E- Participant information sheet for clients and CBT therapists**

Canterbury
Christ Church
University

Salomons Institute for Applied Psychology. One Meadow Road, Tunbridge Wells, Kent TN1 2YG

### Participant Information Sheet- Service Users

My name is Frances Apps, and I am a trainee clinical psychologist. As part of my training, I am completing some research supervised by Dr Tamara Leeuwerik (tamara.leeuwerik@canterbury.ac.uk) and Dr Clara Strauss (clara.strauss@nhs.net) which is sponsored by Canterbury Christ Church University. You have been invited to take part in this research. **Before you decide whether you would like to participate, please read the following information.**

### What is the purpose of this study?

During the COVID-19 pandemic, the majority of mental health services have started to offer all psychological interventions remotely, including via videoconferencing online technology. This research aims to explore the experiences of individuals who participated in online group CBT for OCD. This research is interested in exploring facilitators and barriers for engaging in online CBT.

### Why am I being asked to take part?

You have been invited to take part in this study as you attended the online group CBT intervention facilitated by the OCD Clinic in Sussex Partnership Foundation Trust.

### What will participating in this research involve?

If you decide you would like to take part in this research, your contact details will be forwarded on myself, and I will contact you to arrange a time and date for approximately 1 hour. Your contact details will not be shared with anyone else. The

meeting will take place via the same online platform used for the CBT group- Attend Anywhere, and you will be sent a link to access the meeting. During the meeting, you will be asked some questions about your experiences of the online group intervention and explore any enablers and barriers you faced for engaging in the therapy.

### What are the benefits to taking part?

Whilst taking part in the research does not directly benefit you, it is hoped that this research may help to increase our understanding of what does and what does not help individuals to engage in online group therapy.

Your contribution and time would be greatly appreciated. As a token of appreciation for your participation you will receive £10.

### Are there any disadvantages to taking part?

As this study involves talking about your therapy intervention, there is potential that this can be distressing topic to talk about. If this happens at all during the interview, you will be offered support by myself and signposted to access further support. Whilst the interview will be held in private, it might be helpful to have a supportive friend or family member to talk to after the interview, but this is entirely up to you.

### Do I have to take part?

You do not have to take part in this research. Your decision of whether or not to take part will not impact on the care you are already receive or future care you receive through the OCD clinic in any way. If you do decide to take part in the research, you are still free to withdraw your participation up to two weeks after the interview without having to provide a reason for doing so and any data you have provided will be withdrawn.

### What will happen to the information I provide?

In this research study we will only use information provided by you. We will only use information that we need for the research study. We will let very few people know your name or contact details, and only if they really need it for this study.

Everyone involved in this study will keep your data safe and secure. We will also follow all privacy rules. Data gathered during the research will be entered into a computer program. This data will be anonymous which means that it will not include your name or any other information which could be used to identify you.

At the end of the study The results of the research will be written up and submitted to Canterbury Christ Church University as part of the clinical psychology doctorate training programme and may also be submitted to a journal for publication. These reports will not include identifiable information about any of the participants. You will be sent a short summary of the overall results of the whole study from June 2024. We will make sure no-one can work out who you are from the reports we write.

This information will include the following:

- Age (number)

- gender (option – male female non-binary, other, prefer not to say)

- ethnicity (open question)

- how long you have experienced symptoms of OCD (number- years/months)

- previous experience of CBT (yes/no)

- previous experience of online therapy (yes/no).

This information helps make sure the research represents the population the study is relevant to.

We will keep all information about you safe and secure and will not access your medical records.

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.

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

- You can stop being part of the study at any time, without giving a reason, up to the point that data analysis has begun, which is approximately 2 weeks after the interviews without providing a reason and without any consequences for my continuing care.

## 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/
- by asking one of the research team as described below.

## What should I do if I have any questions about how the research is conducted?

If you have any concerns or questions about this study, you can contact me, and I will do my best to address your concerns. You can contact me by:

- emailing me on fa251@canterbury.ac.uk
- by leaving a message on the 24-hour voicemail phone number 01227 927070. Please leave a contact number and say that the message is for me [Frankie Apps] and I will get back to you as soon as possible.
- If you remain dissatisfied and wish to complain formally, you can do this by contacting Dr Fergal Jones, Clinical Psychology Programme Research Director, Salomons Institute for Applied Psychology fergal.jones@canterbury.ac.uk

You can also obtain advice from the Patient Advice and Liaison Service (PALS):

- Patient Advice and Liaison Service, Swandean, Arundel Road, Worthing, West Sussex, BN13 3EP
- Telephone: 0300 304 2198
- Email: pals@spft.nhs.uk

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**Has this research been approved?**

This study has been approved by Canterbury Christchurch University and has also been reviewed by the NHS Research Ethics Committee.

If you have any further questions, you can contact me via fa251@canterbury.ac.uk

Thank you for reading this information.

Frances Apps

Trainee Clinical Psychologist

Canterbury
Christ Church
University

Salomons Institute for Applied Psychology. One Meadow Road, Tunbridge Wells, Kent TN1 2YG

### Participant Information Sheet- CBT Therapists

My name is Frances Apps, and I am a trainee clinical psychologist. As part of my training, I am completing some research supervised by Dr Tamara Leeuwerik (tamara.leeuwerik@canterbury.ac.uk) and Dr Clara Strauss (clara.strauss@nhs.net) which is sponsored by Canterbury Christ Church University. You have been invited to take part in this research. **Before you decide whether you would like to participate, please read the following information.**

### What is the purpose of this study?

During the COVID-19 pandemic, the majority of mental health services have started to offer all psychological interventions remotely, including via videoconferencing online technology. This research aims to explore the experiences of individuals who participated in online group CBT for OCD. This research is interested in exploring facilitators and barriers for engaging in online CBT.

### Why am I being asked to take part?

You have been invited to take part in this study as you facilitated the online group CBT intervention facilitated by the OCD Clinic in Sussex Partnership Foundation Trust.

### What will participating in this research involve?

If you decide you would like to take part in this research, your contact details will be forwarded on to myself, and I will contact you to arrange a time and date for approximately 1 hour. The meeting will take place via the same online platform used

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for the CBT group- Attend Anywhere, and you will be sent a link to access the meeting. During the meeting, you will be asked some questions about your experiences of the online group intervention and explore any enablers and barriers for engaging in the intervention.

## What are the benefits to taking part?

Whilst taking part in the research does not directly benefit you, it is hoped that this research may help to increase our understanding of what does and what does not help individuals to engage in online group therapy.

Your contribution and time would be greatly appreciated.

## Do I have to take part?

You are not obliged to take part in this research. Your decision of whether or not to take part will not impact on any future interventions you facilitate at the OCD Clinic. **If you do decide to take part in the research, you are still free to withdraw your participation at any point without having to provide a reason for doing so and any data you have provided will be withdrawn.**

## How will we use information about you?

We will need to use information from you for this research project.

This information will include your contact details. People will use this information to do the research.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead.

We will keep all information about you safe and secure.

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

## What will happen to the information I provide?

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No identifying information needs to be stored about you for the research.

**The information you provide while participating in this study will be kept confidential.** The only time when I would be obliged to pass on information from you to another healthcare professional is if as a result of something you told me, I were to become concerned about your safety or the safety of someone else. The interviews will be recorded and transcribed by the researcher, and will be stored in a secure location and destroyed following completion of the research. Data gathered during the research will be entered into a computer program. This data will be anonymous which means that it will not include your name or any other information which could be used to identify you. The results of the research will be written up and submitted to Canterbury Christ Church University as part of the clinical psychology doctorate training programme and may also be submitted to a journal for publication. These reports will not include identifiable information about any of the participants. You will be sent a short summary of the overall results of the whole study from June 2024.

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

You can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have.

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

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

You can find out more about how we use your information

- at www.hra.nhs.uk/information-about-patients/
- our leaflet available from [X]
- by asking one of the research team
- by sending an email to fa251@canterbury.ac.uk or
- by ringing us on [phone number].

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**What should I do if I have any concerns about how the research is conducted?**

If you have any concerns or questions about this study, you can contact me, and I will do my best to address your concerns. You can contact me by:

- emailing me on fa251@canterbury.ac.uk
- by leaving a message on the 24-hour voicemail phone number 01227 927070. Please leave a contact number and say that the message is for me [Frankie Apps] and I will get back to you as soon as possible.
- If you remain dissatisfied and wish to complain formally, you can do this by contacting Dr Fergal Jones, Clinical Psychology Programme Research Director, Salomons Institute for Applied Psychology fergal.jones@canterbury.ac.uk

You can also obtain advice from the Patient Advice and Liaison Service (PALS):

- Patient Advice and Liaison Service, Swandean, Arundel Road, Worthing, West Sussex, BN13 3EP
- Telephone: 0300 304 2198
- Email: pals@spft.nhs.uk

**Has this research been approved?**

This study has been approved by Canterbury Christchurch University and has also been reviewed by the NHS Research Ethics Committee.

If you have any further questions, you can contact me via fa251@canterbury.ac.uk

Thank you for reading this information.

Frances Apps

Trainee Clinical Psychologist

**Appendix F- Client consent form**

Salomons Institute for Applied Psychology. One Meadow Road, Tunbridge Wells, Kent TN1 2YG

Canterbury Christ Church University

**Consent Form- Service Users**

Title of project: Experiences of online group CBT for OCD in the context of COVID-19

Name of researcher: Frances Apps

**Please read each of the following statement and tick the corresponding boxes:**

- I confirm that I have read the information sheet (Date: 17/11/22) relating to the study named above and have had the opportunity to ask questions. ☐

- I am aware that my participation is voluntary and that I am free to withdraw from the study up to the point that data analysis has begun, which is approximately 2 weeks after the interviews without providing a reason and without any consequences for my continuing care. ☐

- I understand that the information I provide will be stored securely and that data will be made anonymous. ☐

- While the information I provide will be treated as confidential, I am aware that if I disclose any information which may indicate a risk to my safety or the safety of another individual, this information may need to be shared with relevant professionals including my GP. ☐

- I agree for the interview to be audio recorded. ☐

- I agree that verbatim quotes from my interview and other data may be used in published reports of the study findings. Pseudonyms will be used to hide your identity ☐

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- I agree for the data I provide to be stored (after it has been assigned a pseudonym for

  anonymity purposes) for up to 10 years after the research project.

- I agree to take part in the study named above

Once you have signed the consent form, please email it to me fs251@canterbury.ac.uk and I will send you a countersigned copy.

Name of Participant:

Participant Signature:

Name of Researcher:

Researcher Signature:

Date:

### Demographic Information

Please complete this along with signing the consent form:

| Age (years) | | | | | |
|---|---|---|---|---|---|
| Gender (please circle) | Male | Female | Non-binary | Other | Prefer not to say |
| Ethnicity | | | | | |
| How long have you experienced symptoms of OCD? (years/months) | | | | | |
| Have you experienced cognitive behavioural therapy before? | Yes | | No | | |
| Have you experienced online therapy before? | Yes | | No | | |

# Appendix G- CBT therapist consent form

**IRAS ID 319443** Internet-based group cognitive behavior therapy for individuals with obsessive compulsive disorder during the COVID-19 pandemic; staff and service users' perspective Version 4 23/08/23

Canterbury
Christ Church
University

Salomons Institute for Applied Psychology. One Meadow Road, Tunbridge Wells, Kent TN1 2YG

Consent Form- CBT Therapists

Title of project: Experiences of online group CBT for OCD in the context of COVID-19

Name of researcher: Frances Apps

**Please read each of the following statement and tick the corresponding boxes:**

- I confirm that I have read the information sheet (Date: 17/11/22) relating to the study named above and have had the opportunity to ask questions.

- I am aware that my participation is voluntary and that I am free to withdraw from the study within 2 weeks after the interviews without providing a reason

- I understand that the information I provide will be stored securely and that data will be made anonymous.

- I agree for the interview to be audio recorded.

- I agree that verbatim quotes from my interview and other data may be used in published reports of the study findings. Pseudonyms will be used to hide your identity

- I agree for the data I provide to be stored (after it has been assigned a pseudonym for anonymity purposes) for up to 10 years after the research project.

**IRAS ID 319443** Internet-based group cognitive behavior therapy for individuals with obsessive compulsive disorder during the COVID-19 pandemic; staff and service users' perspective Version 4 23/08/23

- I agree to take part in the study named above

Once you have signed the consent form, please email it to me fa251@canterbury.ac.uk and I will send you a countersigned copy.

Name of Participant:

Signature:

Name of Researcher:

Researcher Signature:

Date:

**Appendix H- Approval from Integrated Research Application System for amendment**

This has been removed from the electronic copy.

# Appendix I- Emails sent from CBT therapist to clients

Version 3
IRAS ID 319443 Internet-based group cognitive behavior therapy for individuals with obsessive compulsive disorder during the COVID-19 pandemic; staff and service users' perspective
22/02/2024

Dear [Service user's name]

This is [CBT therapist's name] from the [NHS trust]. I facilitated the CBT group that you attended on [start date-end date of the group].

A clinical psychology doctorate student (Frances Apps) is currently conducting some research into the experiences of online group CBT for OCD. As part of the research, Frances is interviewing service user's and clinicians on their experiences of the group. Any confidential information provided by yourself or the CBT therapists taking part will be omitted from the interviews. Please note, **participation in the research is entirely voluntary and this will not impact on any current or future care you have with [NHS trust].** I have attached further information on the research to this email [copy of participant information sheet attached to email].

If you would like to take part, you can email Frances on fa251@canterbury.ac.uk and she will organise the date and time for the interview with you.

Any information about you will be provided by you, we will not have access to any of your medical records. We will keep all information about you safe and secure.

Best wishes,

[CBT therapist name]

**Appendix J- Interview schedule**

**Client interview schedule**

Introduce myself and remind them of the aims of the study.

Say how long the interview will take and that there will be a debrief at the end.

Discuss confidentiality

Ask if they have any questions

Reminder that they do not have to answer a question or can stop the interview at any time.

Check in on how participants are finding the interview intermittently

Check consent form.

Check what voucher they'd like, and if its okay to give their email address to admin team.

Motivation

1) How did you feel about starting therapy?

Prompt: how did you feel about starting therapy online?

2) What were your thoughts about starting therapy?

Prompt: Did you have any hesitancies about starting therapy?

3) What influenced your motivation over the course of therapy? Prompt: were there times when your motivation increased or decreased? What impacted on this?

Attendance

4) How did you find attending the therapy sessions online?

Prompt: did you have any difficulties with attending sessions from your home?

5) What influenced your decision to not attend a therapy session?

Prompt: Did anything happen/did something change which influenced your decision?

Symptom Severity

**6)** How severe were your OCD symptoms before starting the online therapy?

Prompt: compared to 6 months before starting therapy, how were your OCD symptoms before starting therapy?

Therapeutic relationship

**7)** How did you experience the relationship with the therapists who facilitated the group?

Prompt: how did you feel about establishing trust with someone online? How did you feel about opening up during the therapy sessions?

**8)** How did you feel about discussing distressing/triggering topics?

Prompt: did anything impact on your ability to talk about distressing topics?

Participant Involvement

**9)** How did you experience taking part in group discussions?

Prompt: what was it like for you to participate in group discussion?

**10)** How did you experience support from the other group members?

Prompt: did you have any thoughts about other group members? Did the online technology impact on discussions?

ERP

**11)** How did you experience doing ERP in the session?

Prompt: What, if anything, made it easy to do the ERP tasks? What, if anything, made it difficult to do the ERP tasks?

**12)** How did you experience doing the ERP tasks between sessions?

Prompt: What, if anything, made it easy to do the ERP tasks? What, if anything, made it difficult to do ERP tasks?

**13)** How, if at all, was it saying that the ERP tasks felt too overwhelming?

Prompt: Is it hard to say "no" when given ERP tasks?

Treatment satisfaction

**14)** How, if at all, do you think that the sessions being online may have affected your experience of the therapy?

Prompt: Would you have preferred the therapy to be facilitated face to face?

**15)** How, if at all, did Covid-19 affect your experience of the therapy?

Debrief

Check in with how they are feeling

Remind them who they can contact if needed

Check if they have any questions

**CBT Therapist interview schedule**

Introduce myself and remind them of the aims of the study.

Say how long the interview will take and that there will be a debrief at the end.

Discuss confidentiality

Ask if they have any questions

Reminder that they do not have to answer a question or can stop the interview at any time.

Check in on how participants are finding the interview intermittently

Check consent form.

**1)** How did you feel about delivering group CBT for OCD online?

Prompt: did you have any concerns about facilitating the group online?

Therapeutic relationship

2) How did you find establishing a therapeutic relationship with the clients online?

Prompt: what, if at all, made it easier/more difficult to establish a therapeutic relationship online?

Group dynamics

3) Did you notice any change with the group dynamics with the therapy being facilitated online?

Prompt: Did you notice if the participants bonded with each other in the online groups?

ERP

4) How did you find supporting clients with the ERP tasks online?

5) Did you perceive any differences with clients completing the ERP tasks between sessions compared to when the intervention was delivered face to face?

Prompt- were there any issues or concerns with carrying out ERP tasks during the pandemic?

Participant Involvement

6) How did you find the participant discussions in the group?

Prompt- did you perceive any differences compared to your experiences of delivering groups face to face?

Attendance

7) Did you notice anything about the attendance to the online group?

Prompt- was this different to when the groups were delivered face to face?

Debrief

Check in with how they are feeling

Remind them who they can contact if needed

Check if they have any questions

## Appendix K- Interview transcript with notes

This has been removed from the electronic copy.

**Appendix L- memos and notes from interviews**

First interview (with a CBT therapist). Initial thoughts:

- Fairly relaxed with online work, discussed how the pandemic and previous therapy training online influenced this

- Different ways the therapist adapted their way of working to increase participation in the group

- Felt they had to be "confident" with online working and asking people for their opinions

- Used breakout rooms to try and help clients feel more comfortable

- Between session ERP felt the same with face-to-face between session ERP

- Discussions between clients was reduced

- Mute buttons create further action/effort to participate in the group

Second interview (CBT therapist). Initial thoughts:

- Had a real interest in OCD

- Liked how supportive the group was for clients

- Felt the clients being able to identify with one another was a powerful component of the therapy

- Difficulties with the group being online were more noticeable when clients did not get on with each other/someone was upset

- Turning off cameras felt awkward, worried how other clients perceived this

- Had facilitated online therapy before which made this work easier

- Lack of waiting room before session started meant clients did not have time for small talk

- Felt there was a disconnect with ERP tasks online as clients would go off camera to complete the task and the report back

Third interview (CBT therapist). Initial thoughts:

- Used the word "webinar" to describe the therapy sessions- thought this was an interesting way to describe therapy, made me think about how university lectures can feel different when its facilitated online compared to face to face

- Commented on face-to-face groups involving more peer support

- Spoke of client not having a camera on, felt on edge with this

- Felt the content of the therapy translated well online, but the relationships built between clients was not the same

- Clients being in their own homes could be comforting, felt they were more relaxed

- Felt the mute button created a barrier to talking in the group
- Thought clients were more likely to attend even if they were late- potentially feels less like they're interrupting the group if they're late to an online group? Did not think about this, will see if this comes up in other interviews

Fourth interview (CBT therapist). Initial thoughts:

- Discussed differences with running 1:1 therapy online compared to group therapy
- Online therapy much more accessible for clients, less travel
- Compared using break-out rooms to ice breaker activities
- Small talk usually happens before a face to face group, this doesn't happen with online therapy
- Could change who was in each break out room, meant everyone could chat with everyone
- Being at home meant being where safety behaviours for the OCD are more apparent

Fifth interview (client) initial thoughts:

- Found other group members very supportive
- Felt they could turn to the group for help with ERP tasks
- Noticed when other clients did NOT do their ERP tasks- felt more motivated to do their own- almost like good vs bad students
- Learnt a lot about ERP
- Put a lot of effort into ER tasks outside of session, found it helpful
- Wanted to show to other group members how helpful ERP can be
- Could contact the therapists if they could not attend a session
- Group being online meant it was easier to fit in with work

Sixth interview (client) initial thoughts:

- Easier to fit in therapy sessions with work
- Had some technical difficulties when attending therapy from car
- Worried about some of the ERP tasks, felt they were "too extreme"
- Hearing about other people's OCD= helpful, felt less alone
- Felt sad the group was over, seemed a good source of support
- Thought it was a shame when other clients did not complete the ERP tasks

Seventh interview (CBT therapist). Initial thoughts:

- Took a lot to learn about online therapy
- Thought writing things down (eg ERP tasks) was more likely to happen in face to face groups than online

- Hard to read clients when its online

- Clients might be distracted when they are home

- Less conversations between clients when it's online, such as no time to check in with one another before the therapy starts

- Break out rooms helped reduced anxiety

Eighth interview (CBT therapist) initial thoughts:

- Easier to avoid ERP tasks online

- Less interaction with clients when its online

- The break in therapy (having tea/coffee together) was an important aspect of the therapy, this is lost online

- Clients can take their laptops with them to complete an ERP task in another room

- Most clients had their cameras off during the group, felt difficult to manage

- Felt the energy was lacking with online therapy

- Easier to not do ERP tasks when it's online, clients can "hide". This makes sense- if you don't want to do something and there's an opportunity to not do it/you won't get caught, I think I would do that

Ninth interview (client) initial thoughts:

- Felt nervous about starting therapy

- Sometimes struggle to complete ERP tasks due to anxiety levels

- Contacted therapists when they could not attend therapy sessions

- Felt easier to work on contamination OCD online than harm prevention

- OCD really stopped them from living their lives fully, really wanted to start therapy even though they were nervous

- Wouldn't have attended if they would have to drive a long way

Tenth interview (CBT therapist) initial thoughts:

- Felt uncomfortable when clients did not have their cameras on, thought this might be because clients were feeling anxious

-  Break between doing ERP tasks and reporting back- felt like a gap

- Clients did not meet up with one another outside the group like they did with face-to-face sessions

- Hard to know if clients have done their ERP task or not- if they were face-to-face you can see them do it

- Put rules in place to try and reduce interruptions when clients spoke

Eleventh interview (CBT therapist) initial thoughts:

- Compared mute button to shushing someone

- Clients more likely to get in tough and say they're dropping out- easier to do via email

- Building the relationship between clients- did happen, but took longer

- Used to "pick" on people to encourage them to talk

- Tried to comment on if someone was nodding/looked like they were going to unmute

- Understanding ERP helped with completing the tasks

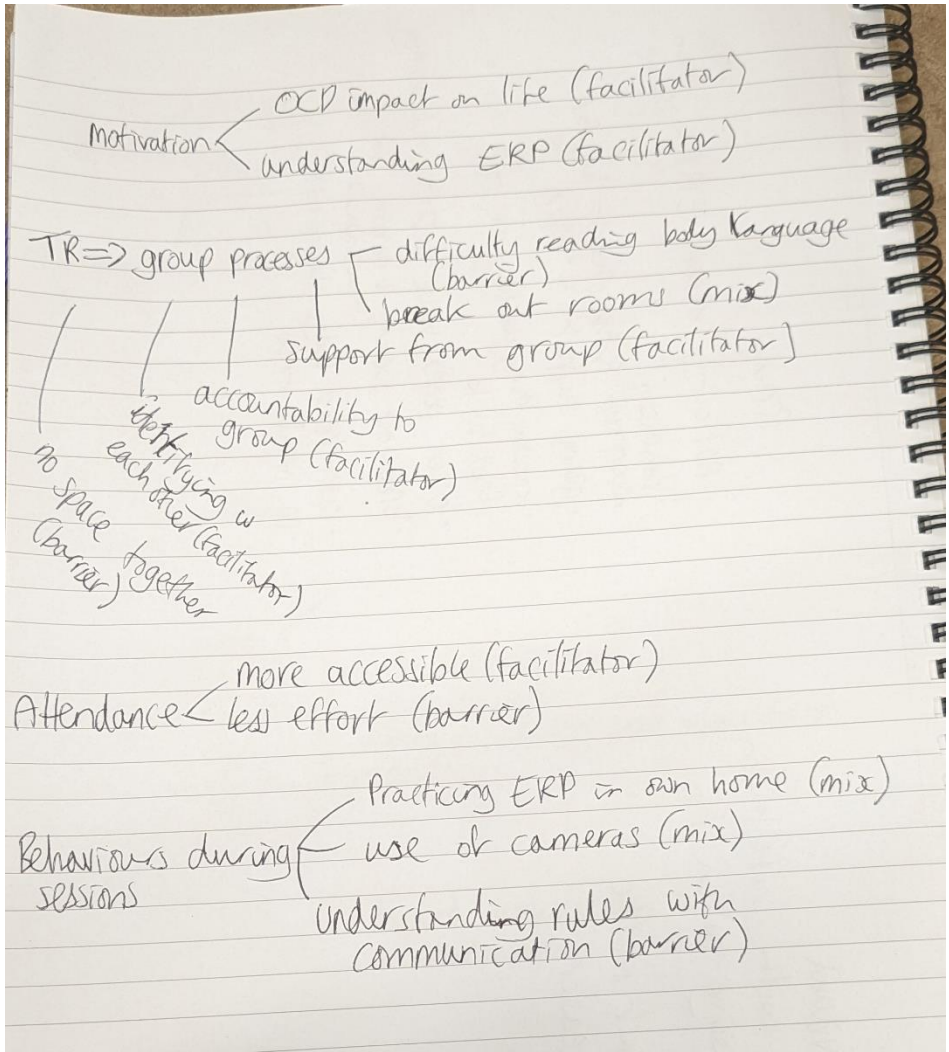Twelfth interview (client) initial thoughts:

- "pink room" for attending session- their safe space

- Support from the therapists was important- one sent a nice email

- Would offer support to other clients, noticed what everyone was saying to each other so they could apply it to themselves

- Found the break out rooms very awkward- put pressure on to talk, and then they're "clicked away" and brought back into the main room as soon as the conversation got going

- Learning about not having to be "perfect" with different aspects of their life

**Appendix M- Development of categories for framework analysis**

Initially, I noticed there was a lot of comments about the group processes so I started a list of them against a list of individual processes:
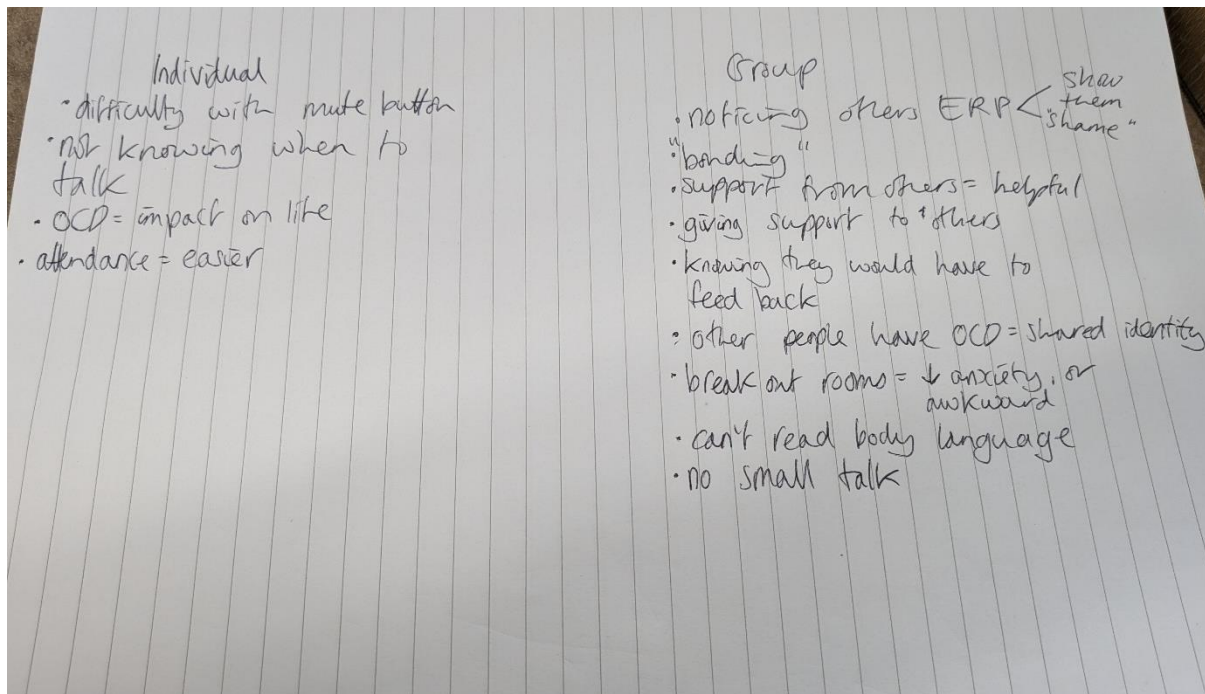


After reflections within supervision, it was observed that the ways the group members were bonding with each other is similar to what a client would do with a therapist in 1:1 therapy. Therefore, the original framework which includes "therapeutic relationship" was changed into "relationships within the group".

Motivation {
  OCD impact on life (facilitator)
  understanding ERP (facilitator)
}

TR => group processes {
  difficulty reading body language (barrier)
  break out rooms (mix)
  support from group (facilitator)
  accountability to group (facilitator)
  identifying w each other (facilitator)
  no space together (barrier)
}

Attendance {
  more accessible (facilitator)
  less effort (barrier)
}

Behaviours during sessions {
  Practicing ERP in own home (mix)
  use of cameras (mix)
  understanding rules with communication (barrier)
}

**Appendix N- Research diary extracts**

July 2022

Met with the ethics panel and had a few conditions to meet in order to obtain ethics approval. Despite these conditions, it still felt like quite a big milestone to have reached with the research. There were a few things raised that I needed to consider, it was interesting realising the differences in what I had covered in the ethics application and what the panel felt was important.

September 2022

Met with my supervisors to discuss further ideas for part A. I had been finding this really difficult to do, partly as there is a lot of research on OCD. I found I had written lots of notes on random bits of paper/word documents to try and keep track of all the previous research to try and find gaps within it, and I found this really overwhelming. It was helpful discussing things through with my supervisors, and they suggested a different way for exploring the therapeutic relationship that I had not considered.

November 2022

Introduced the study to the CBT therapists today- several of them seemed interested in the research and asked a few questions about it, which felt like a promising start. I know that organisation is something that I struggle with, so I built a traffic light list I learnt from a previous placement to remember which CBT therapist I had contacted, and who I was waiting to hear from.

November 2022

Carried out first interview with a CBT therapist- I felt anxious about forgetting something/the recording not working, but it all ran smoothly. The therapist gave lots of details, and there were times when I was not too sure whether to ask further follow up questions or to move on to the next part of the interview. I noticed afterwards when listening back to the interview that I tend to use lots of filler words, like "hmm" which I feel will be a nightmare with the transcribing.

December 2022

Carried out three more interviews with CBT therapists, and it felt great to be half way there with interviewing the therapists. I noticed several of them commented on how much more accessible the intervention was with it being facilitated online. I reflected on how the same was true for carrying out these interviews- we could change the time/date and it was easy for me to fit in, whereas I know other people in my cohort who had to travel for hours to meet

with participants. As I realised this, it also made me aware that some of the barriers with online work might also occur within these interviews, which I discussed within supervision. Agreed this was an important factor to raise in the discussion.

December 2022

I attended part of a remote CBT session to introduce the study to clients. Before this started, I felt a little nervous about doing this, I think this was partly because I felt like I still had a lot of work to do with regards to recruitment and Part A of the study. The clients were really receptive, and showed an interest in taking part in the research, and some of them commented on how important it is to share experiences of therapy. This felt really hopeful, and gave me a bit of a confidence boost about the research.

January 2023

After facing some recruitment difficulties, it was agreed in supervision to amend the ethics application so that I could contact clients who had taken part in previous groups. I felt stressed with making these amendments with the deadline for the research feeling so close. The ethics panel did agree with the amendments quickly which felt relieving.

January 2023

I carried out my first interview with a client. It seem to run smoothly, they gave lots of details of their experiences of therapy, and seemed really happy to take part in the research. I already felt there were some differences in the client's responses compared to the interviews I had done with the CBT therapists. I thought it was interesting how the client identified how much more helpful it was to do the therapy from home, whereas CBT therapists were more likely to be worried about this.

January 2023

I started transcribing the interviews. This felt time consuming, but also felt like it helped refresh my memory of some of the things said within the interviews. I noticed further details that I had overlooked in my notes straight after the interviews, such as what it was like for CBT therapists not being able to view clients carrying out the ERP tasks.

February 2023

I met with another online CBT group to introduce the study, once again clients showed an interest in taking part in the research. One client was worried about taking part as she "didn't want to take up space" in the research in case other people wanted to take part- I reassured her this was not the case. This made me think about how anxiety levels may increase for clients taking part in research, including different interpretations people make with taking part.

# Appendix O- IRAS Approval

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# Appendix P- Ethics approval from local NHS Trust

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## Appendix Q- Full matrix
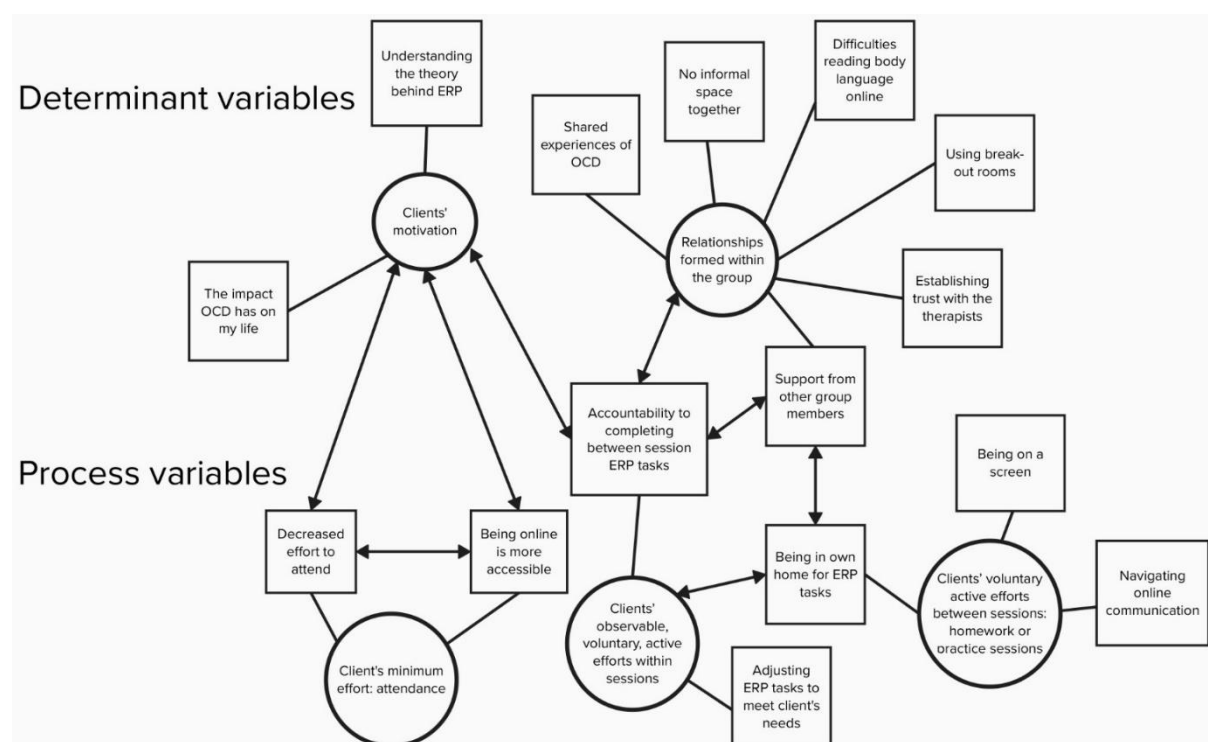
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**Appendix R- Email to participants with research summary**

Dear [Participant's name],

In [month, year] you kindly took part in my research exploring experiences of online group CBT for OCD.

A total of 12 people took part in the research in the end,  8 CBT therapists and 4 clients. I analysed the interviews, and looked for common themes within them, specifically anything to do with engagement with the therapy, such as actions within and outside of the sessions.

Here is a summary of the different themes I found within the interviews-



I am still working on it, so if you have any feedback, I would love to hear anything that particularly resonated with you, and anything that might feel less relevant to your experiences of the therapy. Alternatively, is there anything you feel is missing?

Also, I want to check that you are happy with how you've been quoted – I've replaced identifiable information with square brackets, but if you feel there's anything that could be identifiable as you, then you can let me know. If you feel misrepresented, or I've misunderstood anything that you said, you can let me know. Your pseudonym is [insert pseudonym].

If it's easier for you, I'd be happy to arrange a time to talk and we can go through it. We could speak again over Zoom on any day between 15th-28th February. Alternatively, you can send over any questions or comments by email.

Any further contributions are totally optional, and I would like to thank you again for taking part in this study.

Best wishes,

Frankie

If you no longer wish to receive updates about this research, you can let me know so I can remove your contact details from my records.

**Appendix S- Summary of results for research department and end of ethics report**

**Introduction:** Currently, exposure response prevention (ERP) with or without cognitive strategies is considered the gold standard therapy for obsessive compulsive disorder (OCD) and increasingly online CBT has been implemented. However, there remains considerable barriers to therapeutic recovery. It has been highlighted that there could be difficulties with engagement with the therapeutic process, partly due to how anxiety provoking ERP can be. What constitutes as "engagement" within therapy has debated widely, with some definitions including that engagement captures any behaviour towards the therapeutic goal.

**Method:** Eight cognitive behaviour therapists and four clients were interviewed on their experiences of remote group CBT for OCD. A framework analysis was used to analyse the interview data.

**Results:** A total of five groupings were found in the framework analysis; clients' motivation, relationships formed within the group, client's minimum effort: attendance, clients' observable, voluntary, active efforts within sessions and clients' voluntary active efforts between sessions. A comparison between the therapists and clients experiences were made.

**Discussion:** There were a mixture of ways that the CBT intervention being online enabled and disabled aspects of engagement. The intervention being online meant clients practiced ERP tasks within their own home, where their OCD was most prominent. It was challenging reading body language online, and the online technology meant it was difficult to speak up during the sessions.

Your Submission

### Name of Chief Investigator
Mrs Frances Apps

### Telephone Number of Chief Investigator
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### Email address of Chief Investigator
fa251@canterbury.ac.uk

### Chief Investigator ORCID ID
0000 0001 9526 7952

### Email address of person submitting the Final Report
fa251@canterbury.ac.uk

### Full Study Title
Internet-based group cognitive behavior therapy for individuals with obsessive compulsive disorder during the COVID- 19 pandemic: staff and service user's perspectives

### IRAS ID
319443

### Name of the Research Ethics Committee that issued a Favourable Opinion for the study
East of England - Cambridgeshire and Hertfordshire Research Ethics Committee

### Sponsor Organisation Name
Canterbury Christ Church University

### Study start date
2023-01-31

### Study end date
2024-03-30

### Funder's reference number
N/A

### Name of Registry
N/A

### Study Registration Number/Identifier
N/A

### Date of registration
N/A

## Is the study protocol publicly available?

No

## Lay summary of study results

Currently, exposure response prevention (ERP) with or without cognitive strategies is considered the gold standard therapy for obsessive compulsive disorder (OCD) and increasingly online CBT has been implemented. However, there remains considerable barriers to therapeutic recovery. It has been highlighted that there could be difficulties with engagement with the therapeutic process, partly due to how anxiety provoking ERP can be. What constitutes as "engagement" within therapy has debated widely, with some definitions including that engagement captures any behaviour towards the therapeutic goal. Eight cognitive behaviour therapists and four clients were interviewed on their experiences of remote group CBT for OCD. A framework analysis was used to analyse the interview data. A total of five groupings were found in the framework analysis; clients' motivation, relationships formed within the group, client's minimum effort: attendance, clients' observable, voluntary, active efforts within sessions and clients' voluntary active efforts between sessions. A comparison between the therapists and clients experiences were made. There were a mixture of ways that the CBT intervention being online enabled and disabled aspects of engagement. The intervention being online meant clients practiced ERP tasks within their own home, where their OCD was most prominent. It was challenging reading body language online, and the online technology meant it was difficult to speak up during the sessions.

## Has the registry been updated to include summary results?

No

## If no – why not?

This will be done once the viva is done.

## Did you follow your dissemination plan submitted in the IRAS application form (Q A51)?

Pending

## If pending, date when dissemination is expected

2024-06-07

## Have participants been informed of the results of the study?

Yes

## If yes, describe and/or provide URLs to materials shared and how they were shared

The following email was sent to participants- Dear [Participant's name], In [month, year] you kindly took part in my research exploring experiences of online group CBT for OCD. A total of 12 people took part in the research in the end, 8 CBT therapists and 4 clients. I analysed the interviews, and looked for common themes within them, specifically anything to do with engagement with the therapy, such as actions within and outside of the sessions. Here is a summary of the different themes I found within the interviews- [image of thematic map] I am still working on it, so if you have any feedback, I would love to hear anything that particularly resonated with you, and anything that might feel less relevant to your experiences of the therapy. Alternatively, is there anything you feel is missing? Also, I want to check that you are happy with how you've been quoted – I've replaced identifiable information with square brackets, but if you feel there's anything that could be identifiable as you, then you can let me know. If you feel misrepresented, or I've misunderstood anything that you said, you can let me know. Your pseudonym is [insert pseudonym]. If it's easier for you, I'd be happy to arrange a time to talk and we can go through it. We could speak again over Zoom on any day between 15th-28th February. Alternatively, you can send over any questions or comments by email. Any further contributions are totally optional, and I would like to thank you again for taking part in this study. Best wishes, Frankie If you no longer wish to receive updates about this research, you can let me know so I can remove your contact details from my records.

Have you enabled sharing of study data with others?

Yes

If yes, describe or provide URLs to how it has been shared

It will go on the university repository- https://repository.canterbury.ac.uk/

Have you enabled sharing of tissue samples and associated data with others?

No

If no, explain why

N/A