# Barriers and facilitators to engagement in psychological therapy in first episode psychosis: a meta-ethnography and qualitative comparative analysis (QCA)

Leanne Fahy

DClinPsy thesis (Volume 1), 2022

University College London

## UCL Doctorate in Clinical Psychology

## Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Leanne Fahy

Date: 16th June 2022

# Overview

This thesis explores the barriers and facilitators to engagement in psychological therapy for people experiencing a first episode of psychosis. It is divided into three parts, a meta-ethnography (part 1), a qualitative comparative analysis (QCA; part 2) and the critical appraisal (part 3). Existing research exploring service users own perspectives on this topic was used as the data for both the meta ethnography and the QCA.

In the meta-ethnography, the results of 22 papers on this topic were synthesised to create themes. Seven themes were identified as barriers to engagement in psychological therapy (Ambivalence to therapy, Emotional distress, Fluctuating symptoms, Negative expectations, Physical capacity, Service limitations and Therapy preference unmet), and six themes were identified as facilitators (Destigmatizing, Accessibility of digital therapy, Positive expectations of therapy are met, Service factors, Therapists interpersonal approach and skills, and Therapy preferences met).

These themes were used in the QCA empirical project. The aim of the QCA is to find the shortest possible expression of potential combinations of conditions (barriers and facilitators) that are sufficient for the outcome (engagement). The QCA found that ‘Emotional distress’ was most relevant to service users as a barrier to engagement and that ‘Destigmatizing’ and ‘Therapist interpersonal approach and skills’ were most relevant to service users as facilitators to engagement.

The critical appraisal reflects on the experience of writing the thesis as well as the experience of learning about QCA a relatively new methodology in the field of psychological research, and the challenges of exploring a multi-faceted complex phenomenon such as engagement.

## Impact Statement

This thesis contributes towards the field of clinical psychology in clinical practice, with implications for service provisions and delivery. It adds to the wider body of academic research on this topic by using a methodology (QCA) rarely used in the field of clinical psychology.

There are clinical implications for the findings which highlight key barriers and facilitators to engagement. Clinicians can use this information to prioritise alleviating emotional distress in early sessions and building the therapeutic relationship using their interpersonal skills in a normalizing and destigmatizing way. This has potential benefits for service users who are at risk of worsening symptoms and poorer prognosis over time through non-engaging with mental health services offering them support. These findings also have implications for service delivery as avoiding emotionally distressing assessments early in therapy is suggested to be important for maximizing engagement.

Academically, these findings continue towards a large body of research on engagement in psychological therapy for people experiencing psychosis. This research highlights how a meta-ethnography can condense a vast amount of qualitative data and how this can be used in a QCA analysis, employing elements of quantitative analysis with qualitative data. Crucially, QCA makes it possible to analyse multiple diverse studies to identify the causal contributions of different conditions to result in the outcome, which in this instance is engagement. This can be used as a template for future researchers to employ this methodology as a bridge between qualitative and quantitative methodology, increasing the use of QCA in academia.

This thesis will be reformatted and submitted for publication with the aim of disseminating these findings in the field of clinical psychology and academia.

## Table of Contents

## List of Tables and Figures

### List of Tables

Literature review

Empirical paper

### List of Figures

Literature review

# Acknowledgments

With many thanks to:

Dr Ciaran O'Driscoll, who has been consistently supportive and available throughout this project. Not only did he provide expert knowledge on the use of R, but offered patience with my many QCA questions, and had a tolerance for my inability to stick to a Gantt chart. Thank you for your calm response in my moments of doubt and confusion, I wouldn't have got to this point without it.

Dr Lisa Wood, who generously shared her extensive knowledge on qualitative synthesis research throughout this thesis. Alongside your research and clinical knowledge, your reassurances that I would get through this thesis were invaluable.

Dr Anna Batho, for making the time to lend me her words of wisdom when I was getting started with QCA.

To my friends, family, and partner, who have weathered the highs and the lows of the last two years working on this thesis with limitless patience and support.

Finally, to the service users who shared their experiences in the original research projects used in this thesis. Learning about the good, the bad and everything in between has been a privilege.

# Part 1: Literature Review

## Barriers and facilitators to engagement in psychological therapy in first episode psychosis: a meta-ethnography

# Abstract

**Aims:** Disengagement from psychological therapies in first episode psychosis is a common occurrence, with personal costs associated to untreated problems. Qualitative research on this topic often involves very few service users, limiting the generalisability of the results. This meta-ethnography of existing research aims to establish the barriers and facilitators of people experiencing First Episode Psychosis (FEP) to engagement in psychological therapies.

**Method:** A systematic search was conducted in multiple databases including Psychinfo, Ovid Medline, Web of Science, EthOs, OPENgrey and Procrest in July 2021. After the initial screening, 4,290 titles and 54 full texts were reviewed for eligibility. Twenty-two studies were found to meet eligibility and were critically appraised. Data was systematically extracted and synthesised in a meta-ethnography.

**Results:** Seven themes were identified as barriers to engagement in psychological therapy (Ambivalence to therapy, Emotional distress, Fluctuating symptoms, Negative expectations, Physical capacity, Service limitations and Therapy preference unmet), and six themes were identified as facilitators (Destigmatizing, Accessibility of digital therapy, Positive expectations of therapy are met, Service factors, Therapists interpersonal approach and skills, and Therapy preferences met).

**Conclusions:** Engagement is a multifaceted construct with many factors unique to an individual’s experience, impacted by emotional, social, practical, and service level factors. Strengths, limitations, and recommendations of the findings are discussed.

## 1. Introduction

Early engagement in treatment for first episode psychosis (FEP) has been found to be important for longer term outcomes, with longer durations of untreated psychosis (DUP) leading to a poorer prognosis (Birchwood, et al., 1998; Marshall et al., 2005). Early intervention in psychosis (EIS) services were set up with the aim of improving earlier access to treatment, with teams offering clients support with education, employment and housing alongside specific medical and psychological interventions (Barr et al., 2015; Cheng et al., 2011; Radhakrishnan et al., 2018).

National Institute of Clinical Excellence (NICE) guidelines stipulate that people experiencing first episode psychosis (FEP) should be offered evidence based psychological therapy, including cognitive behavioural therapy (CBT) and family interventions (NICE, 2014). Third wave CBT, including Person-Based Cognitive Therapy (PBCT), Metacognitive Therapy (MCT), Acceptance and Commitment Therapy (ACT), and Compassion-Focused Therapy (CFT) has also been found to be beneficial for people experiencing FEP, expanding the psychological treatments available (Ellett & Kingston, 2020; Wood et al., 2015). Alongside individual and group therapy, digital therapy interventions have been developed and found to be effective interventions for people experiencing FEP (Alvarez-Jimenez 2021; Valentine et al., 2021).

Despite NICE recommendations and an expanding evidence base for psychological therapies, rates of implementation for psychological interventions for people experiencing FEP are below recommended levels, with substantial inequalities in provisions dependant on location (Ince, et al., 2016). Alongside a sparsity of provision in some areas, people experiencing FEP have been highlighted as a group at risk of non-engagement (Dixon, Holoshitz & Nossel, 2016). Although there is considerable variation across studies, some research has found that 50% of young people with FEP disengaged from mental health teams at least once during their treatment (Brown et al., 2019) and one-third of individuals experiencing serious mental health problems including psychosis disengaged from care overall (Kreyenbuhl, Nossel & Dixon, 2009). Disengagement from treatment has been found to disrupt recovery (Kreyenbuhl et al., 2009), and as proposed by Birchwood, et al. (1998) in the critical period hypothesis, early engagement is crucial for positive long-term outcomes. Given the limited provisions for psychological therapy (Ince, et al., 2016), and substantive evidence that delays in accessing treatment impacts negatively on individuals (Birchwood, et al., 1998; Marshall et al., 2005), it is important to understand the factors which influence engagement in therapy.

Engagement in psychological therapy can be understood as a complex, multifaceted phenomenon, involving availability and acceptance of treatment, development of a therapeutic rapport and collaboration in working towards shared goals (MacBeth, et al., 2013). It has been associated to sociodemographic, clinical, and service level variables which are often poorly conceptualised in the literature (O'Brien, Fahmy & Singh, 2009). Using a binary classification tree, and comparing those with early and late FEP onset, O'Driscoll, Free, Attard, et al. (2021) identified a 50% probability that service users would engage in psychological therapy, regardless of their age group. By employing statistical modelling to identify group characteristics, O'Driscoll, Free, Attard, et al. (2021) also identified those who were least likely to engage with psychological therapy. This group consisted of women under 30, who did not have English as a first language, were not in education or volunteering and were ethnically white or Asian.

The duration of untreated psychosis, severity of negative symptoms, so called 'insight', forensic history, substance misuse, presence of family support, and impairment of functioning have been found to influence disengagement (Conus et al., 2010; MacBeth et al., 2013; Turner, Smith-Hamel & Mulder, 2007). Service users' feelings of disempowerment, blame and stigma have also been found to act as barriers to engagement (Berry & Haddock, 2008). When analysing service use during the 3 years following a referral to an early intervention in psychosis (EIP) team, O'Driscoll, Shaikh, Finamore, et al. (2021) found that those belonging to different clinical and sociodemographic groups (including age, gender, onward care and ethnicity) had different engagement patterns with mental health services over this period of time.

Service levels factors associated with engagement include the appropriateness of the services offered and availability of therapy (Bucci et al., 2016; Islam et al., 2015). Bucci et al (2016) found that implementation rates of NICE recommendation for psychological interventions were between 0%-53%, indicating that psychological support was not available or not offered in a timely manner in a substantive proportion of EIP services. When researching the cultural appropriateness of EIP services, Islam et al., (2015) found that black and minority ethnic service users frequently sought help from faith/spiritual healers before seeking medical intervention and held multiple contrasting model of understanding their experiences. Islam et al. (2015) acknowledged that it would be of benefit for EIP clinicians to actively include religious and spiritual perspectives in therapy, but clinicians described having limited spiritual or cultural awareness training. Although progress has been made in upskilling clinicians' abilities to adapt psychological interventions cross-culturally since then (Arundell et al., 2021), this is still an area for development, and a historical mismatch between the needs of service users and the therapy being offered are likely to impact on engagement in the present.

Facilitators of engagement have been described as the development of a collaborate therapeutic relationship, as well as perceived therapist genuineness (Jung et al., 2015; Wood et al., 2015). To develop a positive therapeutic relationship, basic principles of CBTp such as empathy and collaborative goals have been found to be important (Evans-Jones et al., 2009). Furthermore, a shorter DUP had been associated with frequent GP attendance and having a less avoidant coping style (Skeate et al., 2002).

One method of understanding the complexities of engagement from the perspective of the service user, is through qualitative methodologies which provide rich, detailed, first-person account (Bucci et al., 2018; Bradshaw et al., 2019). The aim of this type of data collection is to gather in-depth understanding of a phenomenon. However, this limits the ability to reach broader conclusions about the topic and restricts its generalisability (Noble & Smith, 2015). Alongside this, small scale research projects conducted on this topic (such as for a university thesis or service-related projects), are likely to remain unpublished, resulting in valuable service user perspective never being disseminated. Given this, there is a need to synthesise the existing literature to reach more robust conclusions.

Existing meta-synthesis' on engagement with mental health services in FEP have identified factors which influence engagement, such as the experience of finding help, the therapeutic relationship, and the role of caregiver's support, as well as substance misuse and family support and organisational factors (Doyle et al., 2014; Ince et al., 2016; Tindall et al., 2018). Although these syntheses provide important contributions to understanding engagement with mental health services in FEP, they are based on engagement with the whole mental healthcare team. This involves interactions with a team of multidisciplinary staff offering pharmacological, social, occupational, and educational support (Landi et al., 2021).

This meta-ethnography contributes to this field of research by exploring engagement specifically with psychological therapy as an independent phenomenon. To conduct this research, a meta-ethnographic approach will be adopted to synthesis data from multiple studies with the aim of creating new insights into service users' experiences (Sattar, Lawton, Panagioti & Johnson, 2021). Conducting a meta-ethnography differs from typical synthesis approaches, as it involves an analytic rather than descriptive approach (Daker-White et al., 2015). This means that conceptual data (such as themes created by the researchers) as well as primary data (such as service user quotes) are synthesised, enabling novel conceptual theories to be developed (Noblit & Hare, 1988). This approach takes the epistemological stance of phenomenology, understanding engagement as it is experienced by the people affected by psychosis, with no one singular 'truth' but multiple valid perspectives (Moustakas, 1994).

Through this process, the aim of this meta-ethnography is to collect, interpret and synthesize qualitative research to identify what acts as a barrier and facilitator to engagement with psychological therapy in FEP.

## 2. Methods

### *2.1 Design*

Qualitative meta-ethnography involves summarizing and reinterpreting the themes and concepts created by the primary authors in empirical research (Noblit & Hare, 1988). Using the Noblit and Hare (1988) approach, studies were read to gather the concepts and themes, before it was determined how they are related by comparing these themes systematically (translating concepts), identifying common translations (synthesising translation), and creating concepts for these new interpretations (expressing the synthesis). The meta-ethnography was registered on Prospero (ID: CRD42021228573) and followed PRIMSA guidance (France et al., 2019; Moher et al., 2010).

### *2.2 Literature search*

A comprehensive systematic literature search was conducted in July 2021 with the aim of gathering all available studies on the research topic. This search was performed in PsychINFO, Ovid MEDLINE and Ovid Emcare and Ovid Embase to gather published studies. EThOS, OATD, OpenDOAR OPENGrey, BASE, Library Hub Discover, and WorldCat were searched primarily for university theses, although other unpublished literature was also included. This selection of databases aimed to capture as many studies on the topic of interest as possible by conducting a wide search across both medical and psychological published literature, as well as unpublished grey literature in smaller repositories, so that as many individual service users' perspectives as possible were included.

As the literature search aimed for breath, no stipulations were set on language (although all search terms were in English), publication year or geography and unpublished literature was included. Search terms related to engagement, FEP, qualitative research and psychological therapy and were adapted dependant on the database's search functions, outlined in Appendix A.

### *2.3 Inclusion and exclusion criteria*

The inclusion criteria were empirical qualitative research involving individual interviews, focus groups or surveys with qualitative components about engagement (as either a specific aim or resultant theme) in psychological therapies for FEP. Engagement was defined as the acceptance of treatment, development of a therapeutic rapport and collaboration in working towards shared goals during the early stages of the psychological therapy including the assessment (MacBeth et al., 2013). Psychological therapy was defined as individual, digital and group psychological therapy involving components of formulation, psychoeducation, and strategies to reduce distress (Morrison & Barratt, 2010), delivered (or created in the instance of digital therapy) by trained and accredited practitioners (NHS talking therapies, 2020). FEP was defined as having had a first episode of psychosis within the last 3 years.

The exclusion criteria were service users with severe and enduring serious mental health problems such as long-standing schizophrenia, and studies where the research participants were mental health professionals or family members, with no service user involvement.

### *2.4 Screening*

Using Rayyan Software programme (Ouzzani et al., 2016), researcher LF independently conduced an initial screening of the studies titles and abstracts to identify studies which met the inclusion criteria for a full-text review. A secondary researcher (CO) reviewed 30% of the full-text studies against the inclusion criteria, and any discrepancies were resolved through discussion.

### **2***.4 Data extraction and synthesis*

The included studies were initially read to establish how the studies contributed to the wider literature. Additional in-depth readings focused on patterns that occurred across and between the studies. Following this, study characteristics and relevant data from the results sections were extracted from each study. The study characteristics were extracted based on the JBI Qualitative Data Extraction Tool (Aromataris & Munn, 2020). Relevant data from the results section was defined as service user descriptions of their experience of engagement in psychological therapy. Both service user quotes (first order data) and concepts generated by the primary authors (second order data) were extracted (See Appendix B and C). Data was coded into concepts using the software programme NVivo (QSR International Pty Ltd., 2020).

Translation of the studies data involved grouping the codes by engagement (barrier or facilitator) and then intervention type (individual, group or digital). Third-order themes were generated to give meaning to each code units (third-order subthemes). Commonalities were noted across all three intervention types and so these groups were collapsed to reduce repetition and enable comparisons to be drawn across all three intervention types.

The development of the themes occurred in collaboration with two researchers (CO and LW). Throughout the analysis process, themes were shared, discussed, and re-structured through reciprocal analysis. Difference in theme groupings were resolved through discussion, adding reflexivity to the final theme development.

### *2.5 Study quality and methodological rigour*

To assess the quality of the studies, the CASP Qualitative Research Checklist (Critical Appraisal Skills Programme, 2014) was performed. This is an appraisal tool consisting of a 10-item checklist to consider if the methodology is appropriate, the results are valid, if ethical considerations have been made and if the research will help locally. This was completed predominantly by researcher LF, using CASP guidance which included prompts to assist with making an appraisal of each study. Dilemmas were shared with researchers (CO, LW) to assist with the appraisal and resolved through discussion.

Researcher LF is a female of white ethnicity who has experience of working in an EIP team, attempting to engage individuals experiencing FEP in psychological therapy whilst working as a trainee clinical psychologist in the NHS. A reflective log was used to consider potential sources of bias. Themes structures and examples of coded first-order data were shared and discussed with secondary researchers (LW, CO) to reach a shared agreement.

## 3. Results

### *3.1 Search results*

By running the search strategy through the specified databases, 6,303 studies were identified. Once duplicates were removed, the remaining 4,290 studies were screened by tittle and abstract. Google translate was employed to translate titles and abstracts in languages other than English. After initial screening, 54 papers were sought for retrieval, and 48 studies were retrieved, and full text screened. All studies were written in English. By reviewing these studies against the inclusion criteria, 22 studies were included. The number of studies assessed for eligibility and exclusion reasons are outlined in Figure 1.

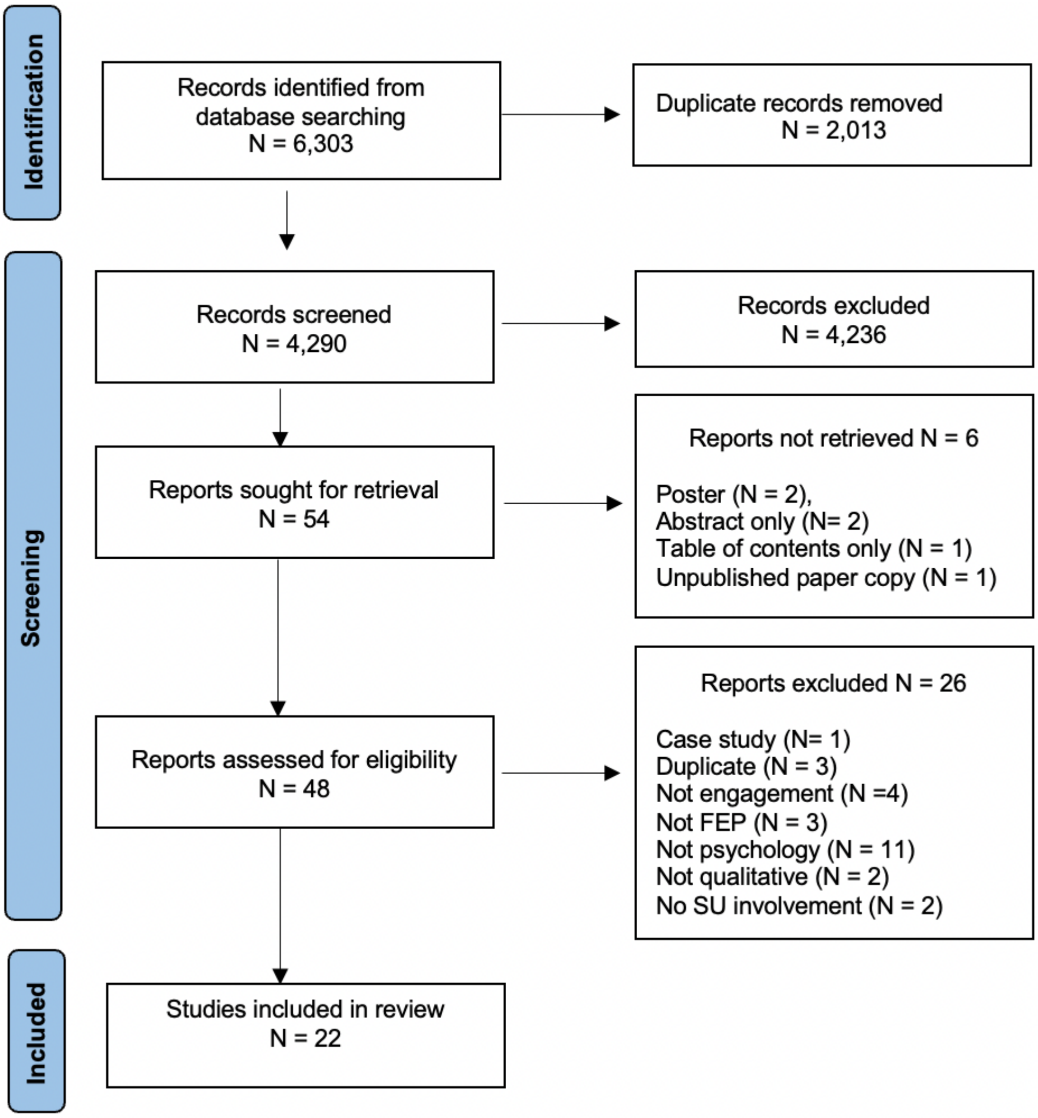


**Figure 1** Study selection. Key: FEP = first episode psychosis; SU = service user

### *3.2 Critical appraisal of studies*

The CASP tool (Critical Appraisal Skills Programme, 2014) was employed to assess the quality of the studies. As typical in qualitative reviews, no studies were excluded based on their quality, but the CASP tool was used to provide an overall sense of the quality of the studies included. The results of the CASP tool indicated that all studies stated clear research aims, used appropriate qualitative methodology, sufficiently analysed the data, and contributed valuable research.

In some of the studies, details such as the research design rationale were not justified in detail, and therefore it was unclear if the design was appropriate, for example in Cadario et al. (2012), Cowdrey et al. (2018), Nilsen et al. (2014) and Valentine et al. (2020). The full findings of the CASP tool are outlined below (table 1).

| | Clear research aims? | Qualitative methodology appropriate? | Research design appropriate? | Recruitment strategy appropriate? | Data collection appropriate? | Service user-researcher relationship considered? | Ethical issues considered? | Data analysis sufficient? | Clear statement of findings? | How valuable is the research? |
|---|---|---|---|---|---|---|---|---|---|---|
| Arnold et al. (2020) | Yes | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Very |
| Artaud et al. (2020) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |
| Bjornestad et al.(2018) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |
| Bradshaw et al. (2019) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Bucci et al. (2018) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Byrne et al. (2014) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |
| Cadario et al. (2012) | Yes | Yes | Unclear | Unclear | Yes | Yes | Yes | Yes | Yes | Very |
| Cowan et al. (2020) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Cowdrey et al. (2018) | Yes | Yes | Unclear | Unclear | Yes | Unclear | Yes | Yes | Unclear | Very |
| Harris et al. (2012) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Islam et al. (2015) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |
| Jansen et al. (2015) | Yes | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Yes | Very |
| Kilbride et al. (2013) | Yes | Yes | Yes | Yes | Unclear | Yes | Unclear | Yes | Yes | Very |
| Lucksted et al. (2015) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Mankiewicz et al. (2018) | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Yes | Yes | Very |
| Newton et al. (2007) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Nilsen et al. (2014) | Yes | Yes | Unclear | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Sidis et al. (2020) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |
| Stewart (2013) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Tindall et al. (2020) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Very |
| Valentine et al. (2020) | Yes | Yes | Unclear | Yes | Yes | Yes | Unclear | Yes | Yes | Very |
| Van schalkwyk et al. (2015) | Yes | Yes | Yes | Yes | Yes | Unclear | Yes | Yes | Yes | Very |

**Table 1** Critical Appraisal of Studies

### *3.3. Description of included studies*

Study characteristics are outlined in Table 2. The studies were published between 2007 and 2020, although most have been published since 2018 (n= 11). Of the studies included, 3 were on group therapy (including peer group therapy and family therapy), 3 on digital therapy and 16 on individual therapy, or individual therapy alongside another intervention such a family therapy, as is common in many EIP services in the UK. This intervention type has been displayed in table 1 as 'individual' or 'individual + group' where appropriate, but where the focus of the study is predominantly individual therapy, they are labelled as 'individual therapy' in further analysis.

All the studies were set in specialist services offering interventions for people experiencing early or first episode psychosis or children's mental health services. Geographically, most of the studies were based in the UK (n= 9) and Australia (n= 5), with other locations including Canada (n= 2), Norway (n= 2), USA (n= 2), New Zealand (n= 1), and Denmark (n= 1). The total sample consisted of 318 service users, 136 male,179 female and 3 transgender with ages ranging from 14-65 years old.

Data was collected through semi-structured interviews in all studies, aside from Cowdrey et al. (2018) who administered surveys and Islam et al (2015) who held focus groups. Most studies employed thematic analysis (n = 8), although several used interpretive phenomenological analyses (IPA; n = 5). Other analysis types included grounded theory (n= 2), IPA with thematic analysis (n = 2), framework analysis (n = 2), general inductive approach (n = 1), systematic text condensation (n = 1) and trajectory analysis (n = 1).

Most of the studies (n = 18) explored engagement more broadly with EIP teams (including medication adherence and contact with care co-ordinators) and included content on service users' engagement with psychological therapy.

Demographic information regarding employment, housing, and education level were included in less than half of the studies (n = 10). Details of service user ethnicity and race were included in just over half of the studies (n = 14) but described differently dependant on the study. In one study, ethnicity was described as the service users parents country of origin: First-born Australians whose parents migrated to Australia from Italy, Turkey, Scotland, The Philippines, Serbia, Germany, Malta, and India (n = 21), Norwegian (n = 20), Danish (n = 11), English (n = 5), Australian (n = 4), Hong Kong (n = 1), Greece (n = 1), Spain (n = 1), Fiji (n = 1). Several studies described service users ethnicity in broader categories: White / White British (n = 60), Asian/Asian British Pakistan/Bengali (n = 25), African American (n = 16), Black/ Black British /Caribbean /African (n = 14), other / unknown (n = 8), New Zealand European (n = 7), New Zealand Maori (n = 4), White and Asian (n = 2), New Zealand Maori/Cook Island Maori (n = 1), White and Caribbean (n = 1), Asian/Pacific Islander (n = 1) , North American (n = 1). One paper simplified participant ethnicity further by categorizing service users as either white (listed above) or a person of colour (n= 13).

**Table 2** Summary of studies

| Author (Year) | Aims | EIT aim | Intervention modality (type) | Setting | Location (city/ locality) | SU number and (F/M/T) | Age (mean) | Ethnicity (number n =_) | Data collection method | Data analysis method |
|---|---|---|---|---|---|---|---|---|---|---|
| **Arnold et al. (2020)** | To explore what influenced SUs engagement with a web-based intervention for psychosis. | Yes | Digital (self-help) | SMART | Australia | 17<br>(F=11 , M=6) | 18-65 | Not reported | Semi-structured interviews | Thematic analysis |
| **Artaud et al. (2020)** | To explore why individuals with early psychosis accept or refuse treatment | No | Individual/ Individual + group (psychotherapy) | Specialized clinic | Canada (Montreal) | 18<br>(F=5, M=13) | 21-37<br>(26.8) | Not reported | Semi-structured interviews | Grounded theory |
| **Bjornestad et al. (2018)** | To explore SUs perceptions of the working ingredients of psychotherapy after psychosis. | No | Individual (psychotherapy) | FEP program | Norway (Rogaland) | 20<br>(F=10, M=10) | 17-58<br>(25.8) | Norwegian (n= 20) | Semi-structured interviews | IPA with thematic analysis |
| **Bradshaw et al. (2019)** | To investigate disengagement within an EIP service from the perspective of SUs and staff. | Yes | Individual/ Individual + group (CBTp / FI) | EIP | UK (north-west) | 12<br>(F=3, M=9) | 19-38 | White British (n = 7),<br>British Asian (n = 1),<br>Black African (n = 1) | Semi-structured interviews | Framework analysis approach |
| **Bucci et al. (2018)** | To explore early psychosis service users' subjective views on DHI | No | Digital (self-help) | EIP | UK (north-west) | 21<br>(F=11, M=10) | 16-34<br>(26) | Not reported | Semi-structured interviews | Framework analysis approach |
| **Byrne et al. (2014)** | To explore service users' experiences of 'enhanced monitoring' and CBT | No | Individual (CBTp) | EDIE | UK (Manchester) | 10<br>(F=4, M=6) | 14-35<br>(27.5) | White British (n=9),<br>Black British (n=1) | Semi-structured interviews | Thematic analysis |
| **Cadario et al. (2012)** | To examine the experience of adolescences and their caregivers in FEP and accessing effective treatment | No | Individual/ Individual + group (unclear: ''therapy') | CAMHS | New Zealand (Auckland) | 12<br>(F=5, M=7) | 15-18<br>(24.9) | NZ European (n= 7),<br>NZ Maori (n = 4),<br>NZ Maori/Cook Island Maori (n=1) | Semi-structured interviews | General inductive approach |
| **Cowan et al. (2020)** | To explore how SUs define their engagement with a specialized early intervention program. | No | Individual/ Individual + group<br>(unclear: ''therapy') | EIP | Montreal, Canada | 24 (F=6, M=16, T=2) | 17-34<br>(22.67) | Person of colour (n= 13),<br>White (n= 9), unknown (n=2) | Semi-structured interviews | Thematic analysis |
| **Cowdrey et al. (2018)** | To investigate health care professionals' and SUs attitudes towards treatment options | No | Individual/ Individual + group (CBT) | EIP | UK (inner city) | 7<br>(F=2, M=5) | 22-39<br>(26.1) | Not reported | Survey | Thematic analysis |
| **Harris et al. (2012)** | To explore SUs experiences of EIP, its impact of their psychosis and current life situation | No | Individual/ Individual + group (peer group, unclear) | EIP | UK | 8<br>(F=3, M=5) | 21-37 | White British (n= 5),<br>White and Asian (n=2), White and Caribbean (n= 1) | Semi-structured interviews | IPA |
| **Islam et al. (2015)** | To examines the cultural appropriateness, accessibility, and acceptability of the EIP | No | Individual/ Individual + group (counselling / psychotherapy) | EIP | UK (Birmingham) | 21<br>(F=11, M=11) | 18-35<br>(22) | Asian/Asian British Pakistan (n = 9), Asian/Asian British Bengal (n = 1), Black/Black British African (n = | Focus groups | Thematic approach and |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 3),Black/ Black British Caribbean (n= 8), other (n= 1) | | framework analysis |
| **Jansen et al. (2015)** | To describe SUs perspectives on helpful aspects in their pathway to care | No | Individual/ Individual + group (unclear) | Specialized clinic | Denmark (Zealand) | 11 (F=5, M=6) | 15-24 (20) | Danish (n = 11) | Semi-structured interviews | Thematic analysis |
| **Kilbride et al.(2013)** | To explore SUs experiences of Cognitive Behavioural Therapy for psychosis | No | Individual (CBTp) | EIP / CMHT | UK (Greater Manchester) | 9 (F=5, M=4) | 21-65 (26) | White British (n=8)<br>Black British (n=1) | Semi-structured interview. | IPA |
| **Lucksted et al. (2015)** | To assess factors that facilitated or impeded clients' engagement in RAISE services. | No | Individual/ Individual + group (counselling) | RAISE | USA (Baltimore, New York) | 32 (F=11, M=21) | 15-35 | African American (n = 16)<br>Asian/Pacific Islander (n= 1)<br>White, Caucasian (n = 10),<br>Other (n = 5) | Semi-structured interviews | Thematic analysis |
| **Mankiewicz et al. (2018)** | To explore expectations and experiences of receiving CBTp among EIP clients with FEP. | Yes | Individual (CBTp) | EIP | UK (London) | 9 (F=4, M=5) | 17-33 (24.9) | Not reported | Semi-structured interviews | Thematic analysis |
| **Newton et al. (2007)** | To explore the experience of group-CBT for young people experiencing distressing auditory hallucinations. | No | Group (CBT group) | Voice hearing group, | UK (London) | 8 (F=5, M=3) | 17-18 | Not reported | Semi-structured interviews | IPA |
| **Nilsen et al. (2014)** | SUs and family members' experiences of psychoeducational family intervention. | No | Group (FI) | 3x Hospitals | Norway (South-East) | 12 (F=7, M=5) | 19-38 (26.8) | White/Caucasian (n=9),<br>Asian (n= 3) | Semi-structured interviews | Systematic text condensation |
| **Sidis et al. (2020)** | The experiences and perspectives of clinicians, SUs and families, following training in Open Dialogue | No | Group (open dialogue – network-based therapy) | CAMHS, inpatient | Australia (New South Wales) | 2 (F=1, M=1) | 19-21 (20) | Not reported | Semi-structured interviews | IPA |
| **Stewart (2013)** | To describe SUs experience of successful engagement in the initial stages of treatment. | No | Individual/ Individual + group (peer group, unclear) | EPP | Australia (Eastern City) | 30 (F=15, M=15) | 18-20 | Born in Hong Kong, Greece, Spain, Fij (n=4). First-born Australians from Italy, Turkey, Scotland, Philippines, Serbia, Germany, Malta, India (n =21), English (n= 5) | Semi-structured interviews | Grounded theory |
| **Tindall et al.(2020)** | To understand what causes and maintains periods of disengagement from EIP | No | Individual/ Individual + group (unclear 'therapy' and 'group') | EIP | Australia (Melbourne) | 9 (F=3, M=6) | 15-24 (18.4) | Australian (n =4) ,<br>Australian/British (n=3), Asian (n=1) , North American (n= 1) | Semi-structured interviews | Trajectory analysis |
| **Valentine et al. (2020)** | To explore how young people experience, a social media–based mental health intervention for social functioning | Yes | Digital (social media-based intervention) | Early Psychosis Centre | Australia (Melbourne) | 12 (F=7, M=4, T=1) | 19-28 (23) | Not reported | Semi-structured interviews | IPA |
| **van Schalkwyk et al. (2015)** | To collect service users' narratives of their early treatment experience. | No | Individual/ Individual + group (unclear 'talking therapy' and peer group) | STEP | USA, Connecticut | 11 (F=1, M=10) | 20-35 | Not reported | Semi-structured interviews | Thematic analysis |

F = female, M = mate, T = transgender, EIT = Engagement in psychological therapy, SU = Service users, CBTp = Cognitive behavioural therapy for psychosis, FI = family interventions, DHI = digital health intervention, SMART = Self-Management and Recovery Technology, EDIE = early detection and intervention evaluation, RAISE = Recovery After an Initial Schizophrenia Episode, CAMHS = Children and adolescent mental health service, CMHT = Community mental health team, EPP = Early psychosis program, STEP = Specialized Treatment Early in Psychosis, NZ = New Zealand, IPA = Interpretive Phenomenological Analysis

### *3.4 Theme summary*

Seven themes were identified as barriers to engagement in psychological therapy: (1) Ambivalence to therapy, (2) Emotional distress, (3) Fluctuating symptoms, (4) Negative expectations, (5) Physical capacity, (6) Service limitations and (7) Therapy preference unmet.

Six main themes were identified as facilitators to engagement, and they were: (1) Destigmatizing and connecting with peers, (2) Accessibility of digital therapy, (3) Positive expectations of therapy are met, (4) Service factors, (5) Therapists interpersonal approach and skills, and (6) Therapy preferences met (see figure 2).

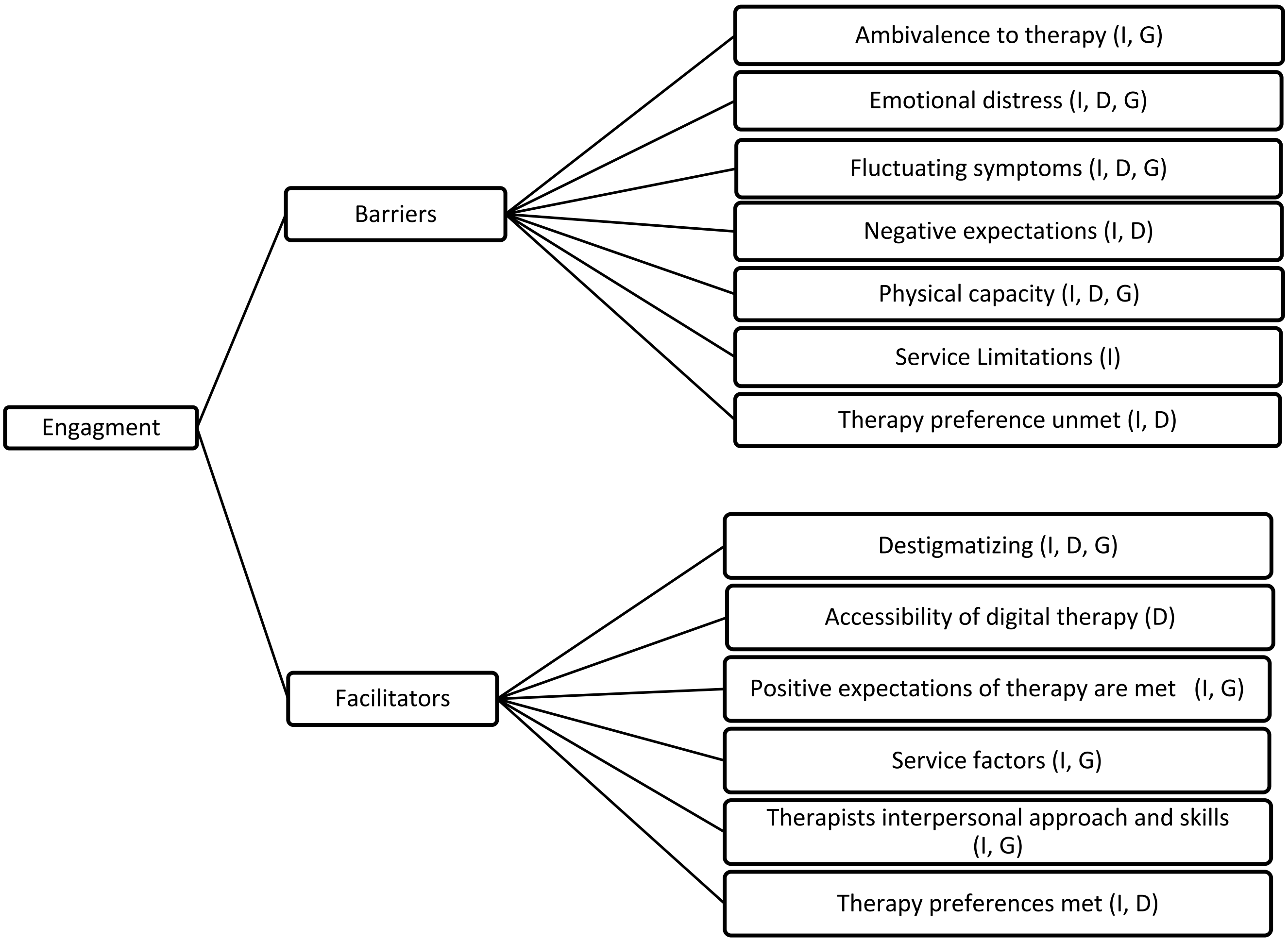


**Figure 2.** Summary of themes

Key: I = individual therapy, D = digital therapy, G = group therapy

### *3.5 Barriers*

Seven themes were identified as barriers to engagement in psychological therapy: (1) Ambivalence to therapy, (2) Emotional distress, (3) Fluctuating symptoms, (4) Negative expectations, (5) Physical capacity, (6) Service limitations and (7) Therapy preference unmet. Each theme has been derived by the synthesis of multiple studies, shown in table 3.

| | **Arnold et al. (2020)** | **Artaud et al. (2020)** | **Bjornestad et al. (2018)** | **Bradshaw et al. (2019)** | **Bucci et al. (2018)** | **Byrne et al. (2014)** | **Cadario et al. (2012)** | **Cowan et al. (2020)** | **Cowdrey et al. (2018)** | **Harris et al. (2012)** | **Islam et al. (2015)** | **Jansen et al. (2015)** | **Kilbride et al. (2013)** | **Lucksted et al. (2015)** | **Mankiewicz et al. (2018)** | **Newton et al. (2007)** | **Nilsen et al. (2014)** | **Sidis et al. (2020)** | **Stewart (2013)** | **Tindall et al. (2020)** | **Valentine et al. (2020)** | **van Schalkwyk et al. (2015)** | **Total** (N =) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Barriers** | | | | | | | | | | | | | | | | | | | | | | | |
| Ambivalence to therapy | | ○ | | | | | | ○ | | | | | ○ | ○ | | | ○ | | | | | | 5 |
| Emotional Distress | ○ | | | ○ | ○ | ○ | | ○ | | ○ | | | ○ | | ○ | | ○ | ○ | | | ○ | | 11 |
| Fluctuating symptoms | ○ | | | | | | | ○ | | | ○ | | ○ | ○ | ○ | | ○ | | | | ○ | | 8 |
| Negative expectations | | | | | ○ | | | ○ | | | ○ | | ○ | ○ | ○ | | ○ | | | ○ | | | 8 |
| Physical capacity | ○ | | | ○ | ○ | | | | | | | | | | | | ○ | | | ○ | | | 5 |
| Service Limitations | | | | | | | | | | | | ○ | | | | | | | | ○ | | | 2 |
| Therapy preference Unmet | ○ | | | | ○ | | | | ○ | ○ | | | | ○ | ○ | | | | | | ○ | | 7 |

**Table 3** Summary of the studies that barrier themes were derived from

### 3.5.1 Ambivalence to therapy

Five studies identified that service users were ambivalent towards engagement, due to multiple factors including giving up personal time, not feeling ready to talk about their experiences and attending for their family’s reassurance rather than their own benefit. This was derived from four studies on individual therapy (Artaud et al., 2020, Cowan et al. 2020, Kilbride et al., 2013, Lucksted et al., 2015) and on one group therapy (Nilsen et al., 2014), and divided into three subthemes: (1) Competing demands, (2) Not being ready for therapy and (3) Only there for their family’s sake.

*(1) Competing demands.* Having competing demands on time was found to contribute towards ambivalence towards individual psychological therapy, as engaging in therapy requires service users to utilise them that would otherwise be free for personal activities 'I'm very busy, so it's hard'. (Cowan et al.,2020).

(2) *Not ready for therapy.* Not feeling ready to engage in individual therapy was attributed to feeling that there would not have been a benefit of engaging in therapy at an earlier point in time, 'I don't know if I had cognitive therapy many years ago if it would have helped, as I don't know if I'd be ready' (Kilbride et al., 2013). Some service users described alternative explanations for their experiences and reported being 'in denial' of their difficulties (Cowan et al., 2020). When given information about psychosis and matched against their experience, they concluded that they were 'not in the psychosis state they [the clinicians] were talking about' (Artaud et al., 2020). Lucksted et al. (2015) identified that participants expressed ambivalence towards therapy due to multiple factors including unfamiliar concepts, stigma and uncertainty of therapy. For group therapy, Nilsen et al. (2014) found that although some service users explained they wanted to return to a 'normal life' rather than attend therapy, this changed after they experienced a second episode which resulted in them accessing support 'I think you have to understand you have an illness'.

*(3) Only there for their family's sake.* Nilsen et al. (2014)'s study on group intervention identified that service users reported only having joined the intervention for the sake of their families, rather than for their own benefit.

### ***3.5.2. Emotional distress***

Eleven studies were found to include service users' descriptions of emotional distress in therapy. Emotional distress was related to several factors including finding the digital therapy platform overwhelming, facing their experiences in individual therapy, fear of judgment and concerns that therapy will result in them feeling worse. These findings were derived from two studies on digital therapy (Arnold et al., 2020; Valentine et al., 2020), five on individual therapy (Bradshaw et al., 2019; Byrne et al., 2014; Cowan et al., 2020; Kilbride et al., 2018;

Mankiewicz et al., 2014) and two on group therapy (Nilsen et al. 2014 and Sidis et al. 2020). It was divided into five subthemes (1) Digital therapy navigation is overwhelming, (2) Emotionally triggering to face and share experiences, (3) Interpersonal challenges and obligation to help, (4) Stigma and fear of judgment and (5) Worries about feeling worse.

(1) *Digital therapy navigation is overwhelming*. Navigating the digital platform and absorbing the information provided online on a digital therapy platform was described as emotionally overwhelming, requiring a lot of effort and for some service users, 'I couldn't navigate it and I was just like 'oh I can't be bothered'' (Arnold et al., 2020).

*(2) Emotionally triggering to face and share experiences*. Both individual, group and digital therapy were described as emotionally distressing as they required individuals to confront their difficulties. Arnold et al. (2020) identified that service users felt fear once they were faced with the 'reality of this is how you're feeling', describing the online platform as 'quite triggering'. Similarly, in individual therapy service users described speaking about their mental health difficulties as emotionally hard, bringing up anxiety, suspiciousness, fear, frustration, and anger (Bradshaw et al., 2019). Therapy was described as bringing things 'from the past back' that they would rather 'forget about' and that talking about this left them feeling low in mood (Bryne et al.,2014; Mankiewicz et al., 2018; Kilbride et al., 2013). Cowan et al. (2020) identified that due to the emotional labour involved in therapy, service users became 'tired of being a patient'. In group therapy, anxiety and tension about meetings were described as present in the beginning but decreasing over them (Nilsen et al., 2014). The experience of starting therapy was reported to be one of anxiety and hesitation 'I was just really nervous and yeah, sussing it out' (Sidis et al., 2020).

*(3) Interpersonal challenges and obligation to help.* In group therapy, anxiety was reported because of conflict within the family group, as it was reported that discussions could get 'very nasty between us' (Sidis et al., 2020). Alongside this, in peer group therapy, listening to the experience of others was described as emotionally difficult, triggering feelings such as sadness (Nilsen et al., 2014). For digital therapy, a similar experience was reported, but due to the use of digital forums and messaging platforms, some service users felt

obligated to respond, describing a ‘responsibility to talk to them, to support them, to basically just be their secondary psychologist’ (Valentine et al., 2020).

*(4) Stigma and fear of judgment.* For individual therapy, service users explained that other people’s judgments about their diagnosis had triggered shame and impacted on their willingness to talk about their experiences (Harris et al., 2012). Service users were also found to hold stigmatized views about therapy, with one service user describing therapy as ‘a weakness’ (Mankiewicz et al., 2018). For digital therapy, the fear of others judgement in responses to messaging forums created a barrier to engaging with the website, as one service user described finding it ‘so embarrassing’ if their post or comment was not responded to (Valentine et al., 2020). Using the app itself in a social situation, was also found to cause embarrassment and add to the anxiety (Bucci et al., 2018).

*(5) Worries about feeling worse*. Bradshaw et al. (2019) identified that service users had worries about their symptoms and fear that therapy would make them ‘feel worse’. Others explained that they believed talking about their experiences of psychosis made it more likely that it could ‘happen again’ (Mankiewicz et al., 2014).

### *3.5.3. Fluctuating symptoms*

Eight studies described how fluctuating symptoms and the changeable nature of symptoms of psychosis impacted on service users’ engagement: five on individual therapy (Cowan et al., 2020; Islam et al., 2015; Kilbride et al., 2013; Lucksted et al., 2015; Mankiewicz et al., 2018) two on digital (Arnold et al., 2020; Valentine et al., 2020) and one on group therapy (Nilsen et al., 2014). This was divided into three subthemes (1) Feeling better so not engaging, (2) Psychosis symptoms interfering and (3) Too cognitively demanding.

*(1) Feeling better so not engaging*. Self-improvement and feeling ‘a lot better’ were described as factors in disengagement from individual therapy, alongside feeling they were helping themselves (Cowan et al., 2020). Others felt that there ‘wasn’t enough to say’ to warrant their attendance in individual therapy (Cowan et al., 2020). For group therapy, some

found it was initially beneficial, but this changed over time ‘at the beginning it was to help me socialize better, but afterwards I didn’t find I liked it’ (Cowan et al., 2020).

*(2) Psychosis symptoms interfering*. Arnold et al. (2020) identified that negative symptoms of psychosis such as low mood and motivation were found to impact on engagement with digital therapy, as for some it was ‘hard enough’ to get out of bed, ‘let alone trying to use this [website]’. ‘Paranoid thoughts’ about privacy and technology were also described as triggering anxiety, impacting on service users’ willingness to engage with the website (Arnold et al., 2020; Valentine et al., 2020). For individual therapy, some service users struggled to speak on the telephone due to concerns that the conversation was being listened to (Islam et al., 2015). The experience of hearing voices was also described as an additional challenge in individual therapy, both in the moment and later after therapy had finished, which for some was made worse by talking about their voices during the session (Mankiewicz et al., 2018).

*(3) Too cognitively demanding*. In Kilbride et al. (2013), individual therapy was described as cognitively effortful, as some service users struggled to identify thoughts due to experiencing ‘loads running through my head’. Nilson et al. (2014) found that group therapy was also described as ‘exhausting’ by service users, especially after an episode of psychosis, and difficulties with concentration were reported to prevent service users from benefiting from the sessions.

### ***3.5.4. Negative expectations***

Eight studies described service users’ negative expectations of therapy, including assumptions about the passivity of receiving therapy, that they would be sanctioned for disclosing their experiences, or their beliefs would not be understood. They also described feeling hopelessness about improvement, and concerns about the privacy of their information. This was derived from five studies on individual therapy (Cowan et al., 2020; Islam et a., 2015; Kilbride et al., 2018; Lucksted et al., 2015; Mankiewicz et al., 2014), two on digital therapy (Bucci et al., 2018; Valentine et al., 2020) and one on group therapy

(Nilsen et al., 2014). It was divided into 5 subthemes: (1) Expectations of being a passive recipient, (2) Consequences for disclosing experiences, (3) Limited cultural and spiritual understanding, (4) No immediate benefits, and (5) Privacy concerns.

*(1) Expectations of being a passive recipient*. Expectation of therapy were found to impact on engagement. In Kilbride et al.'s (2013) study on individual therapy, some service users described CBT as more demanding than they had expected. They described the expectation that they would be 'given' CBT to help them 'get better'. However, they discovered that therapy required a substantial effort, involving them putting a 'lot in yourself'.

*(2) Consequences for disclosing experiences*. In Mankiewicz et al.'s (2018) study on individual therapy, engagement was found to be impacted by service users fear that discussing their experiences would result in them being detained and 'locked up'.  Family tension could also deter engagement, whereby family were not supportive of their relatives accessing mental health support. For group therapy, one young person described their mother as 'embarrassingly argumentative with staff' resulting in them explaining that they 'almost gave up'.

*(3) Limited cultural and spiritual understanding*. In Islam et al.'s (2015) study on individual psychological therapy, some service users described believing that mental health professionals wouldn't understand their perspective on health, illness, or traditional remedies very well, and provided examples of this occurring in the past. Clinicians were not viewed as capable of meeting their cultural and spiritual needs due to viewing psychosis through a westernized model (Islam et al., 2015).

*(4) No immediate benefits*. Some service users reported no improvement in their difficulties after starting individual therapy, impacting on their engagement (Lucksted et al., 2015; Islam et al., 2015). Another described a small amount of progress but 'not much', leading them to feel 'stuck' (Tindall et al., 2020) whereas other service users perceived individual therapy to be less impactful than other interventions, such as medication (Mankiewicz et al., 2018). For some service users, the chronicity of their experiences meant that they felt they had a lower chance of recovery, describing that they felt they were 'too far

gone' for therapy (Mankiewicz et al., 2018). In group therapy, Nilsen et al. (2014) found that service users described needing to engage in the whole intervention to see progress and Cowan et al. (2020) found that some service users disengaged after feeling group therapy was no longer necessary for them.

*(5) Privacy concerns.* Bucci et al. (2018) identified that several service users described privacy concerns about data from digital therapy being linked outside agencies and not being protected. As they were uncomfortable about entries on the digital therapy platform being shared with their team, they filtered the information they provided (Bucci et al., 2018). This was due to not feeling ready to share personal information and wanting to protect the feelings of the therapist who they didn't want to 'worry' or 'think that the treatment wasn't working' resulting in symptom minimisation.

### ***3.4.5. Physical capacity***

Five studies were found to describe physical capacity as a challenge for service users, including in problems with their environment, access to resource and seeking financial security instead of therapy. This was derived from two on individual therapy (Bradshaw et al., 2019; Tindall et al. (2020) two on digital therapy (Arnold et al., 2020; Bucci et al., 2018; Valentine et al., 2020) and one on group therapy (Newton et al., 2007).  This was divided into three subthemes (1) Homeless, no space or time, (2) No internet, phone, or data, and (3) Seeking practical help with benefits, housing, and applications.

*(1) Homelessness, no space, or time.* Arnold et al. (2020) identified that service users found it challenging to spend time on the digital therapy website, due to an absence of time, physical space, or capacity. Similarly, group therapy was noted to be time demanding (Nilsen et al., 2014).

*(2) No internet, phone, or data.* Practical issues such as having limited phone data, an un-charged phone battery, lost or broken phones and not having access to the internet were found to be barriers to engaging in digital therapy (Arnold et al., 2020; Bucci et al., 2018).

*(3) Seeking practical help with benefits, housing, and applications.* The pressing need for support with practical support with areas such as accommodation, finances and employment were described as impeding on engagement as service users prioritised this above 'talking about their feelings' (Bradshaw et al., 2019). Tindall et al. (2020) identified that the expectation of receiving practical support with their housing had resulted in a rupture in the therapeutic relationship and disengagement (Tindall et al., 2020).

### *3.5.6. Service Limitations*

Two studies described service limitations, including the consistency and availability of therapy as a barrier to engagement in individual therapy (Jansen et al., 2015; Tindall et al., 2020). This theme comprises of two subthemes (1) Change in clinician and (2) Appointments not available and costly.

*(1) Change in clinician.* A change in clinician was described as having a marked negative impact on engagement and was associated with a sense of loss of trust (Tindall et al., 2020).

*(2) Appointments not available and costly.* Tindall et al. (2020) identified that when service users returned to work or school, engagement in therapy became a secondary priority for some, which due to the service opening hour constraints, resulted in disengagement. Other service users did not have the financial availability for therapy their parents declined to pay for this (Jansen et al., 2015).

### *3.5.7. Therapy preference unmet*

Seven studies described service users having an unmet preference for the way in which they receive therapy: five on individual therapy (Cowdrey et al., 2018; Harris et al., 2012; Lucksted et al., 2015; Mankiewicz et al., 2018) and three on digital therapy (Arnold et al., 2020; Bucci et al., 2018; Valentine et al., 2020). This theme consisted of four subthemes: (1) Digital content not relevant or unhelpful, (2) Medication favoured above therapy, (3) Self-reliance and family instead of treatment, (4) Wanting more human connection.

*(1) Digital content not relevant or unhelpful.* Having previously encountered similar information found on the digital therapy website or finding the information 'wasn't relevant' for their needs' was found to impact on engagement (Arnold et al., 2020). Valentine et al. (2020) identified that some service users viewed themselves as older and more independent than others using the digital platform, concluding they 'shouldn't need this'. Others did not feel the digital content matched with their experiences, describing it as 'mind-numbingly positive' (Valentine et al., 2020).

*(2) Medication favoured above therapy*. Some service users strongly believed that medication was beneficial above over treatment methods, describing themselves as ''biased in favour of medication' (Cowdrey et al., 2018).

*(3) Self-reliance and family instead of treatment*. Agency and self-reliance were described by some service users as helpful for their recovery (Cowdrey et al., 2018). For one service user, being offered psychological therapy was viewed as unhelpful as they couldn't 'provide a solution' (Harris et al., 2012), viewing themselves as the only ones who had the resolution to their difficulties and that they could 'do it myself' regarding their recovery (Lucksted et al., 2015). As an alternative to seeking professional help, some preferred to talking with their family about their experiences (Mankiewicz et al., 2018).

*(4) Wanting more human connection*. Service users described seeking connections with others (Arnold et al., 2020), an experience which some felt was absent during digital therapy, describing therapy as a very 'personal' experience, and reassurance being 'crucial' to this process (Bucci et al., 2019). Bucci et al.'s (2018) study on digital therapy identified that some service users felt technology should be an aid, rather than a replacement, for individual therapy.

### *3.6. Facilitators*

Six themes were identified as facilitators of engagement in psychological therapy (1) Destigmatizing and connecting with peers, (2) Accessibility of digital therapy, (3) Belief that therapy will help, and early benefits, (4) Service factors, (5) Therapists interpersonal approach and skills, and (6) Therapy preferences met. Each theme has been derived from synthesis of multiple studies, see table 4.

| | Arnold et al. (2020) | Artaud et al. (2020) | Bjornestad et al. (2018) | Bradshaw et al. (2019) | Bucci et al. (2018) | Byrne et al. (2014) | Cadario et al. (2012) | Cowan et al. (2020) | Cowdrey et al. (2018) | Harris et al. (2012) | Islam et al. (2015) | Jansen et al. (2015) | Kilbride et al. (2013) | Lucksted et al. (2015) | Mankiewicz et al. (2018) | Newton et al. (2007) | Nilsen et al. (2014) | Sidis et al. (2020) | Stewart (2013) | Tindall et al. (2020) | Valentine et al. (2020) | van Schalkwyk et al. (2015) | Total (N =) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Facilitators** | | | | | | | | | | | | | | | | | | | | | | | |
| Destigmatizing | ○ | | | | ○ | ○ | | | | | | | | ○ | ○ | ○ | ○ | ○ | ○ | | ○ | | 10 |
| Accessibility of digital therapy | ○ | | | | ○ | | | | | | | | | | | | | | | | ○ | | 3 |
| Positive expectations of therapy are met | | | ○ | | | | | ○ | | ○ | ○ | | | ○ | ○ | | | ○ | | | | | 7 |
| Service factors | | | | | | ○ | | | | | | | | ○ | ○ | | ○ | | | ○ | | ○ | 6 |
| Therapists interpersonal approach and skills | | | ○ | | | ○ | | | | | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | ○ | 10 |
| Therapy preferences met | ○ | | | | | ○ | ○ | ○ | ○ | | | | | | | | | | | | | | 5 |

**Table 4** Summary of the studies that facilitator's themes are derived from

### 3.*6.1. Destigmatizing*

Ten studies were found to describe a connection with peers and a destigmatizing and normalizing element which emerged from interacting with other people who understand about psychosis, or who have had similar difficulties. This was derived from four studies on individual therapy (Byrne et al., 2014; Lucksted et al., 2015; Mankiewicz et al., 2018; Stewart, 2013) three on group therapy (Newton et al., 2007; Nilsen et al., 2014; Sidis et al., 2020;) and three on digital therapy (Arnold et al. 2020; Bucci et al. 2018; Valentine et al., 2020). This theme was separated into 2 subthemes: (1) New perspectives and helping others, (2) Normalizing, peer support and reduced isolation.

*(1) New perspectives and helping others*. A sense of 'helping each other' through learning and sharing of coping strategies was described as beneficial in group therapy (Newton et al., 2007). As well as this, service users were found to develop new

perspectives on their situation, to ‘think in a different way’ by listening to each other and the therapist, facilitating engagement (Nilsen et al., 2014; Sidis et al., 2020). Similarly in digital therapy, service users described feeling ‘over the moon’ at being able to help others and hearing how others ‘dealt with the problem’ (Valentine et al., 2020).

*(2) Normalizing, peer support and reduced isolation*. Individual, group, and digital therapy were all found to be normalizing and facilitated connection with their peers. Individual therapy was described as helping to reduce isolation though gaining ‘understanding and knowledge of it [psychosis]’ (Mankiewicz et al., 2018) and reducing fears that they were ‘going mad’ (Bryne et al., 2014). Lucksted et al. (2015) identified that participants felt they were ‘taken seriously’ by staff who gave ‘no judgment at all’, and this was strongly engaging. Service users described meeting ‘people like me’ who were ‘open, non-judgmental, and shared their goals in group therapy (Newton et al., 2007; Steward, 2013). This experience reduced isolation and was reported to be like ‘war veterans’ who had a shared experiences (Newton et al., 2007; Nilsen et al., 2014), and more impactful than if delivered by professionals who hadn’t experienced psychosis (Valentine et al., 2020). Having therapy delivered digitally was described as a modern way of getting information, de-stigmatising and ‘normal’ (Bucci et al., 2018), whilst talking to peers online led some to believe that their ‘feelings are normal… I’m not a weirdo’ (Valentine et al., 2020).

### *3.6.2. Accessibility of digital therapy*

Three studies on digital therapy were found to describe benefits of digital therapy above other modalities of delivery (Arnold et al. 2020; Bucci et al. 2018; Valentine et al., 2020). This theme describes the benefits that service users reported from digital therapy, including aiding information sharing with their team, memory prompts and enhancing feelings of control. It consists of three subthemes (1) Digital therapy helps share information with clinicians, (2) Flexibility and control, (3) Technology use is modern, progressive, and upbeat

*(1) Digital therapy helps share information with clinicians.* Some service users described feeling more comfortable using digital therapy as opposed to attending face to face therapy (Bucci et al., 2018). This modality was described by some service users as being advantageous in reporting risk information to their team, and for others increased their ability to be more honest and truthful (Bucci et al., 2018).

*(2) Flexibility, ownership, and control.* Digital therapy was described by some service users as advantageous in its accessibility, flexibility and control compared to other modalities of therapy (Bucci et al., 2018). It was found to overcome challenges to engagement in conventional therapy such as social anxiety and sleep disturbance, due to accessibility ‘in your own home’ and finding it was easier to ‘open up’ online (Bucci et al., 2018). Automatic prompts were described as helpful for engagement in digital therapy, reminding service users to ‘keep my mental health going’, acting as a ‘hook’ to sign in (Arnold et al., 2020). Digital therapy was described as providing enhanced flexibility due to the material being ‘readily available’ to engage with (Arnold et al., 2020). Bucci et al. (2018) also found that engagement was aided by service users having the opportunity to track their own symptoms and experiences, providing motivation in an ‘empowering’ format, allowing service users to take their care into their own hands. Service users also described feeling more central to in the development of the digital therapy programme, as new users were encouraged to provide feedback (Valentine et al., 2020).

*(3) Technology use is modern, progressive, and upbeat.* Bucci et al. (2018) found that digital therapy was viewed as modern, progressive, and relevant which can aid engagement. This modality of receiving therapy was described as ‘moving with the times’ and in keeping with how young people communicate as it was reported to be easier for them to ‘type rather than speak’ due to being ‘brought up with computers’ (Bucci et al., 2018). The ‘positive’ environment fostered in a digital platform was also found to be a draw for some service user’s engagement as unlike other social media platforms, it was a ‘place for improvement’ (Valentine et al., 2020).

### *3.6.3. Positive expectations of therapy are met*

Seven studies were found to describe service user expectations that therapy would be helpful for them. For some, their symptom severity motivated them to seek help, whereas others had previous positive experiences of therapy. Alongside this, experiencing early gains in therapy was found to facilitate engagement. This theme was derived from six on individual therapy (Bjornestad et al., 2018; Cowan et al., 2020; Harris et al., 2012; Islam et al., 2015; Lucksted et al., 2015; Mankiewicz et al. (2018) and one on group therapy (Sidis et al., 2020). It was divided into four subthemes:

*(1) Feeling worse and thinking therapy will help.* Concern about symptoms and functioning was described as a facilitator of engagement. Cowan et al. (2020) identified that when some service users' symptoms worsened, they felt they 'couldn't ignore them anymore' and reported thinking that they 'need more help', and so engaged in therapy. Lucksted et al., (2015) noted how despite not actively wanting to get involved with therapy, believing they would not get better without it, they felt they had 'no choice but to go' (Lucksted et al., 2015). Mankiewicz et al.'s (2018) study on individual therapy identified that service users described how they hoped to develop coping strategies from therapy, to know 'if something's wrong and what to do', and 'ways that I can cope'.

*(2) Help with symptom reduction and daily routine*

Suggestions on how to manage daily structures, sleep habits and managing experiences such as voice hearing at night were often seen as useful and encouraged service users to engage in therapy (Bjornestad et al., 2018). Being encouraged to share experiences was also described as helpful in 'putting things into perspective' and some certainty was removed from strong beliefs as 'things may not be how you think they are' (Bjornestad et al., 2018). Harris et al. (2012) identified that some service users wanted to continue attending because they found therapy helpful, through having active control over their experiences, alongside feeling 'healthier' and 'not feeling constantly anxious' (Lucksted et al., 2015).

*(3) Awareness of support*

In Sidis et al.'s (2020) study on group therapy, service users described becoming more aware of their support network, realising that people close to them were trying to 'understand' and 'help' which they 'couldn't see before', motivating engagement in therapy. In Mankiewicz et al.'s (2018) study on individual therapy, service users reported experiencing a sense of a 'weight that had been lifted', as they were unburdened from their thoughts following their therapy session, resulting in them 'feeling a lot better afterwards'. Experiencing emotional support, specifically feelings of safety and experiencing hope in the early stages of therapy were seen as critical for engagement (Bjornestad et al., 2018; Islam et al., 2015).

*(4) Gaining independence*

Bjornestad et al. (2018) identified that engagement was aided by therapy being viewed as meaningful piece in the process of regaining independence and a place in society following an episode of psychosis. Service users described wanting to be 'functioning in society, not functioning well in a psychiatric ward'. Help with working towards personal life goals, alongside reassurance and patience, was seen by some as advantageous in overcoming ambivalence, aiding engagement (Lucksted et al., 2015).

*(5) To gain a new perspective.*

Expecting that individual therapy would allow service users to obtain an alternative perspective, was viewed as engaging. Mankiewicz et al. (2018) identified that service users described believing that a 'fresh pair of eyes' would help them to understanding more about their experiences and 'the way things were working'.

### *3.6.4. Service factors*

Six studies were found to describe service factors including to ease of access to appointments and staff consistency as facilitators of engagement, five on individual therapy (Byrne et al., 2014; Lucksted et al., 2015; Mankiewicz et al., 2018; Tindall et al.,2020; van Schalkwyk et al., 2015) and one on group therapy (Nilsen et al., 2014). This was divided into three subthemes: (1) Easy to access and arrange appointments, (2) Small group size and set number of sessions, (3) Staff continuity and impartiality.

*(1) Easy to access and arrange appointments.* Lucksted et al. (2015) identified practical factors which positively affected service users' engagement, including how nearby, easy to get to via public transport, affordable, stress-free, safe, and pleasant the location was. Byrne et al. (2014) identified that service users valued a flexible and collaborated approach to arranging meetings, and the therapist's flexibility in appointment time, location and response to a late arrival were described as facilitating rapport and trust (Lucksted et al., 2015). Lucksted et al. (2015) also identified that family attendance being allowed promoted engagement "My mom comes with me every time. ...I actually like her support. ...Having my mom come makes it feel less of a struggle."

*(2) Small group size and sessions predictability.* Having consistency in who attended the group sessions and how long they lasted was important for service users. In Nilsen et al.'s (2014) study on group therapy, having a smaller group was noted as less anxiety provoking, resulting in service users feeling 'more talkative'. The therapist following the pre-agreed time for the session promoted engagement and was highly valued, as overrunning sessions felt 'exhausting' and some service users 'felt responsible for taking up too much time'

*(3) Staff professionality and continuity.* Mankiewicz et al. (2018) identified that service users found the impartiality a professional 'refreshing' and aided engagement. van Schalkwyk et al. (2015) identified that talking to a trained professional also enabled some service users to share experiences they had not shared with others. Staff continuity was described as crucial in maintaining engagement (Byrne et al., 2014). Consistency was described as deepening the therapeutic relationship over time, and the main positive influencer of engagement, enabling service users to feel 'reassured' that they were understood (Tindall et al., 2020).

### *3.6.5. Therapists interpersonal approach and skills*

Ten studies describe how the approach of the therapist and skills they had facilitated engagement, including their warmth, ability to listen, work collaboratively and foster positive relationships. This was derived from several studies on individual therapy (Bjornestad et al., 2018; Byrne et al., 2014; Kilbride et al., 2013; Lucksted et al., 2015; Mankiewicz et al., 2018; Stewart, 2013; van Schalkwyk et al., 2015), three on group therapy (Newton et al., 2007; Nilsen et al., 2014; Sidis et al., 2020). This theme was comprised of five subthemes: (1) Warmth, trust, and support (2) A safe and empowering place to talk, (3) Flexibility and collaboration, (4) Help putting my story into words, (5) Normalizing, non-judgmental and informal.

*(1) Warmth, trust, and support.* Service users described it as crucial for engagement that their therapist had a warm, friendly, respectful style, and a ‘caring way’ about them, alongside an unconditional acceptance and genuine desire to help (Bjornestad et al., 2018; Lucksted et al., 2015). This enabled the therapist to be viewed as a companion to share traumatic or shameful information with (Bjornestad et al., 2018). The relationship to their therapist was noted as central to engagement in therapy when service users made personal disclosures about their experiences and created a sense of having ‘something to fight for’ (Byrne et al., 2014; Steward, 2013; van Schalkwyk et al., 2015). Having a trusting relationship was identified as key for facilitating open and honest conversation. Service explained that they wouldn’t ‘go into depth’ if they didn’t trust their therapist (Kilbride et al., 2013; Mankiewicz et al., 2018). In group therapy, engagement was facilitated by trust, openness and confidentiality which emerged throughout the process of service users sharing their experiences (Nilsen et al., 2014).

*(2) A safe and empowering place to talk.* Group therapy was described as a place where service users could speak about their experiences without fear of stigma (Newton et al., 2007). Despite initially finding group therapy ‘uncomfortable’, over time they felt able to disclose what they were ‘really feeling’ (Sidis et al., 2020). By positioning the service users

as experts in voice hearing, service users were them to help each other by sharing their own experiences (Newton et al., 2007). Steward (2013) identified that group leaders participation added a sense of ease in participants getting to know each other, and their guiding questions led to conversation ‘opening up’, whilst preventing some participants from dominating the sessions (Newton et al., 2007). These sessions were described as facilitating family communication in and outside of the sessions and helped identify useful coping strategies (Nilsen et al., 2014; Sidis et al, 2020). The group leader’s ability to be open-minded and honest was found to increase service users trust in them, and enabled service users to talk about their struggles in an open way (Nilsen et al., 2014). In individual therapy, engagement was facilitated by a humanistic, client-centred approach, where service users feeling heard, empowered, listened to and that their ‘opinions were taken seriously’ (Bjornestad et al., 2018; Lucksted et al., 2015; Mankiewicz et al., 2018; Stewart, 2013; van Schalkwyk et al., 2015).

*(3) Flexibility and collaboration in the work.* Derived from Kidbride et al.’s (2013) study on individual therapy, a collaborative partnership between the service user and the psychologist was described as a valued aspect of engagement. Having shared control was described as integral, especially in areas such as agenda setting. Adapting sessions by re-evaluating with service users their priorities for therapy and making appropriate adaptions were described as an important attribute of therapy, aiding engagement (Kilbride et al., 2013).

*(4) Help putting my story into words*. Bjornestad et al. (2018) identified that service users found it difficult to express frightening thoughts and emotions, and so therapy was described as a language-creating process to help ‘put things into words’. Disclosing experiences and ‘opening up’ was described a positive process, and something that for some service users had previously been neglected (Byrne et al., 2014). Derived from Bjornestad et al.’s (2018) study on individual therapy, service users highlighted the role of the therapist as someone who could make a meaningful tie between their life events, and ‘keep my story’. This was seen as advantageous during periods of psychosis, in response

to disorganised thinking and memory problems which could lead to disengagement (Bjornestad et al., 2018)

*(5) Normalizing, non-judgmental and informal.* Lucksted et al. (2015) noted that service users reported clinicians taking a stance of ‘no judgment’ and them having ‘no ties or loyalties’ was strongly engaging, enabling service users to feel that their clinician understood them, fostering a strong alliance (Mankiewicz et al., 2018). Being viewed and treated as an equal to their therapist was also important to engagement (Kilbridge et al., 2013). Bryne et al. (2014) identified that clinicians having a normalizing approach, delivering therapy in an informal way, was an important factor in service users’ willingness to maintain engagement. This involved the use of everyday language and having non-catastrophic reactions to disclosures of experiences (Bjornestad et al., 2018; Bryne et al., 2014). Stewart (2013) noted that service users felt the clinician’s approach enabled group members to feel ‘normal’, and that they were treated like ’normal people’ (Stewart, 2013).

#### ***3.6.6. Therapy preferences met***

Several studies described participates expressing a preference for the way in which they received therapy. When this was facilitated, it was described as aiding engagement and found in four on individual therapy (Byrne et al., 2014; Cadario et al., 2012; Cowan et al., 2020; Cowdrey et al., 2018) and two on digital therapy (Arnold et al., 2020; Bucci et al., 2018). This theme was comprised of two subthemes: (1) Medication alongside talking therapy, (2) Personal contact with web therapist valued.

*(1) Medication alongside talking therapy*. Cadario et al. (2012) identified that for some, medication was only viewed as beneficial alongside other supports, such as in conjunction with ‘psychological work’, (Cowan et al., 2020). Cowdrey et al.’s (2018) noted that some service users did not want to take medication, but instead wanted to engage in therapy due to knowing that others had managed their difficulties with CBT or ‘other means without drugs’ and so facilitating this preference aided their engagement in therapy (Cowdrey et al., 2018).

*(2) Personal contact with web therapist preferred.* Arnold et al. (2020) identified that having a connection with a web-based therapist facilitated engagement as it felt ‘a little more personalised’ if there was a ‘real person’ available for support, which for some digital platforms was not facilitated. Bucci et al. (2018) found that for several service users personal contact facilitated engagement as it enabled fears surrounding information safety to be allayed through reassurance, suggested that some service users may disengage due to a poor match between their preference for personal contact and the modality of therapy offered.

### 3.7. Discussion

This meta-ethnography aimed to synthesize qualitative research on the experience of people with FEP accessing psychological therapy to identify robust factors which act as barriers and facilitators to engagement. The findings confirms that engagement is a complex, muti-faceted phenomenon as previously found in the literature (MacBeth et al., 2013), which can be associated to sociodemographic, clinical, and service level variables (O’Brien et al., 2009). Despite this, data from these 22 studies could be distilled down to a relatively low number of themes and factors, some of which were cited far more frequently than others.

The barrier to engagement in psychological therapy in FEP which was identified in the greatest number of studies (N =11) was ‘emotional distress’. The facilitator which appeared in the greatest number of studies was ‘therapist interpersonal approach’ (N = 10) and ‘destigmatizing’ (N = 10). This is in line with existing meta-syntheses data on whole team engagement in FEP which identified that the therapeutic relationship, the role of caregiver/family support and organisational factors were important for engagement (Doyle et al., 2014; Ince et al., 2016; Tindall et al., 2018).

The current meta-ethnography suggests that emotional distress commonly occurs when service users attempt to engage in psychological therapy in FEP and that this can have a negative impact on service users continuing with therapy (Kilbride et al., 2013). However, the therapist's interpersonal approach, alongside feeling destigmatized and connected to others facilitates engagement (Bjornestad et al., 2018). Although the importance of a positive therapeutic relationship is not unique to psychological therapy for psychosis (Evans-Jones, Peters & Barker, 2009), individuals with FEP commonly describe feelings of disempowerment, blame and stigma (Berry & Haddock, 2008), highlighting the importance of this relationship in FEP populations. The approach of the therapist and relationship development was found to facilitate engagement, including therapist warmth, genuineness and listening abilities as well as the collaboratively nature of the sessions (Bjornestad et al., 2018; Lucksted et al., 2015). This was in line with existing findings which identified that a collaborate therapeutic relationship and perceived therapist genuineness facilitated engagement (Jung et al., 2015; Wood et al., 2015), alongside principles of CBTp including empathy and having a collaborative stance (Evans-Jones et al., 2009).

Some constructs can be seen as barriers or facilitators relative to the individual service users experience. In the theme 'therapy preference', service users described that having personal contact with a clinician alongside digital therapy as a facilitator to engagement, whereas others felt this was insufficient support, resulting in reduced engagement (Arnold et al., 2020). This indicates that more support may be required for some individuals but for others it is sufficient. Some service users noted that digital therapy provided opportunities for them to engage with psychological support despite having a disrupted sleep routine, increasing their accessibility to help (Bucci et al., 2018). However, for others having the physical capacity to participate impacted on their engagement, due to periods of homelessness, not having access to the internet, data, or a phone (Arnold et al., 2020). Service factors were also found to effect engagement differently dependant on the circumstance of the service. Some service users experienced staff consistency and an accessible service location, facilitating engagement (Lucksted et al., 2015) whereas for others, experiencing staffing changes and inconvenient appointment times were barriers to engagement (Tindall et al., 2020).

Aside from service location and accessibility, practical support with housing, benefits, and application forms were prioritized above individual psychological support by some (Bradshaw et al., 2019). Additional challenges to engagement were found when expectation in therapy were not met. Tindall et al. (2020) described how one service user expected to receive practical support from their therapist, and when this was not available, this resulted in a rupture in the therapeutic relationship, impacting on engagement. Holding the expectation that therapy was ‘done to’ you, rather than being an active participant in the change was also found to impact on engagement, resulting in disengagement once this expectation was not met (Kilbride et al., 2013).

Another barrier to engagement identified in the present synthesis was the fluctuating symptoms of psychosis, including low mood, ‘paranoid thoughts’ and voice hearing experiences (Arnold et al., 2020; Kilbride et al., 2013). The experience of voice hearing interfering with engagement in therapy has previously been identified in the literature (Turkington et al., 2006), but this study found that in addition, for some service users it was not symptoms that were viewed problematic to engagement, rather that they held an alternative understanding of their experiences to professionals (Cowan et al., 2020).

The theme ‘Ambivalence to therapy’ captures difficulties around motivation with therapy, which is for some was caused by not seeing themselves as having a difficulty or experiencing psychosis despite that being the opinion of others (Artaud et al., 2020; Cowan et al., 2020). Alongside this, service users described viewing their experiences as too embarrassing and degrading to share with family and friends (Schalkwyk et al., 2015). This is in accordance with literature which identified that disempowerment, blame and stigma can be barriers to engagement (Berry & Haddock, 2008). In the current study, the impartiality of talking to a professional who has heard similar experiences before acted as a facilitator to overcome this (Mankiewicz et al. 2018)

Engagement has been found to be a construct which can change over time (MacBeth et al., 2013). In Cowan et al. (2020), service users described finding socializing was challenging after an episode of psychosis, and therefore group therapy was initially helpful, but once they felt more able to socialise, they disengaged. This indicates how engagement can fluctuate, in some instances due to having differing needs at different times, and highlights that although one approach to psychological therapy may be initially beneficial, this is changeable over time.

The nuance in these findings highlight the individuality of experience, creating a unique set of circumstance which make psychological therapy easier or more challenging to engage in dependant on personal in relation to the service accessibility and availability, the resources they have available to them alongside the modality of therapy being offered and the specific experiences that person has at that time regarding their emotional distress or symptoms of psychosis. For some service users, psychological therapy was only part of what they needed support with and was therefore not viewed as a priority. When there was a match between these service users and the accessibility of the sessions, service users valued the relationship with the therapist, as trust, warmth and normalization were found to be highlight engaging.

### *Strengths, limitations, and reflexivity*

This meta-ethnography captures the unique and individual experience of people with FEPs' engagement in psychological therapy. To capture the greatest possible number of studies and service users, a very broad search was cast on the literature, maximizing the opportunity to capture data by including unpublished studies from across the world with no language limitations. Despite the substitutive time commitment require to do this, this yielded just one (Bradshaw et al., 2019) unpublished studies of relevance, and none which were not in English. This is possible due to several reasons, including the search terms being conducted in English, as well as unpublished studies for some institutes being not electronically available, and a lack of centralised online repositories for unpublished research to be uploaded onto.

Reflexivity refers to how a researcher self-reflects on their own social positions (for example, gender and race), personal experience, political and professional beliefs in relation to their research (Berger, 2015). Reflexivity was considered by researcher LF using a reflective journal and by consulting with another researchers (LW, CO) during theme development, resulting in an iterative process to the analysis. The CASP tool was used to assist with assessing the quality of the studies included in the synthesis. This was completed by researcher LF with the support of researchers (CO, LW) to resolve dilemmas. Under ideal conditions this appraisal tool could have been completed independently by an external researcher, to cross-check the appraisals with the aim of reaching conclusions with enhanced reliability.

To include as much relevant data as possible, studies were included in which psychological therapy was not necessarily the focus of the paper. Some studies such as Jansen et al. (2015) only contributed to one theme, whereas others, such as Bucci et al.'s (2018) contributed to 6. This inequality of contribution from each study is an unavoidable implication of using the broadest inclusion criteria. To find such minimal data from an entire paper was uncommon, and the majority of the 22 papers contributed to multiple themes. Despite this approach to include as many individual service users experiences as possible, the studies included are limited by those retrieved from the search terms. It is likely that service users have described their engagement in psychological therapy in FEP in other studies which were not the primary focus of the study, but in studies where the key search terms were not included in the studies tittle or abstract.

Considering the service users who were included and not included in this research is of importance. The challenge of speaking with service users about their engagement in therapy in FEP is somewhat of a paradox, as it leaves the voices of those who have not engaged at all with psychological therapies or mental health times absent.  In existing research 'insight' is used as a term to describe people's difficulty in recognizing their 'illness' and its consequences (Drake, 2008). Although some participants explained that they made sense of their experiences through a religious or spiritual framework (Islam et al., 2015) there was an absence of people describing having not recognized that they were struggling with some element of their experience as a barrier to engagement in therapy. Despite the absence of this, it does not mean that for some people this is not a factor, as there are many people who experience FEP but have decline to engage at all with mental health services, research studies, or professionals. Given this, their experiences remain absent from this research, and the existing literature will be swayed by those who are engaging in some form. Although a challenge of direct clinical research, discussions with community leaders, clinicians, and mental health teams about what they believed made it challenging for service users to engage in psychological therapy may capture a greater range of perspectives.

Another group of people who have been found to be at risk of not engaging in primary mental health services when experiencing FEP, but are overrepresented in secondary care, are service users of black ethnicity (Anderson et al., 2014). Given this, it would be important to know ethnicity of the service users involved, to identify if it was representative of people experiencing FEP. Unfortunately, ethnicity was only documented in 14 out of 22 studies and was described in a variety of ways providing unclear or missing information.

During the data extraction and analysis process, there were differences in the way I was coding first-hand data (service user quotes) compared to the original authors. In van Schalkwyk et al. (2015) the authors had created the theme ‘an important relationship with a professional’ and under this theme included a quote in which the service user talks about feeling listened to. During the analysis, I coded this as a subtheme of ‘feeling listened too’ under the main theme of ‘therapist interpersonal and skills’. This highlights how in this research, the data was deconstructed to its smallest parts and used to form new themes, rather than synthesising pre-existing secondary data based on the authors interpretation. This is a strength of the present study as it enables new theories and concepts to be generated. However, through this analysis process, I am dependant on the exemplar quotes and material provided in these studies. The quotes which are included are based on the subjective opinion of the researchers conducting that study, highlighting the subjective nature of the analysis process across multiple levels. Furthermore, I come from the view the world from the perspective of a white, middle-class female who has not experienced psychosis but has working with many people who have, bringing in my own inherit biases.

In attempt to manage this, throughout the research project I have considered reflexivity, with the aim of understanding the influence and impact my own thoughts and actions have on the research process (Doughlas, 2018).

Regarding the search strategy, a wide search of the literature was cast with the aim of capturing studies in different languages, and unpublished grey literature. Despite this, the final 22 studies are of limited in their diversity, as they are all published research articles, written in English from high-income countries. Although attempts were made to move away from a homogenised research sample in the planning of this research project, studies which matched the inclusion criteria which were unpublished or in a language other than English were not in existence or were not inaccessible through the search strategy employed.

### *Recommendations and conclusions*

This meta-ethnography has highlighted several barriers to engagement in psychological therapy in FEP, including emotional and person factors such as ambivalence towards engagement, the emotional distress triggered by starting therapy and holding negative expectations of therapy. Experiential factors such as psychosis symptom were also described as problematic for engagement, as well as practical factors such as not having the physical capacity to engage, service factors impacting engagement, or not having a preference for therapy which is unmet. Several facilitators were also highlighted, including emotional and social factors such as finding therapy destigmatising and enabling service users to connect with others, alongside holding positive expectations about therapy. Some service users also described how digital therapy provided them with greater flexibility and opportunities above conventional therapy. Practical factors such as a coinvent location and set up of a service, alongside having their therapy preference met was also described as facilitating engagement.

Although this meta-ethnography was unique in its focus on engagement with psychological therapy, other literature reviews researching service engagement in FEP found similar themes as in the present study, such as the importance of the therapeutic relationship (Tindall et al., 2017). This suggests that some factors may not be unique to engagement in psychological therapy but may be common across engagement with all mental health professionals. Furthermore, may of the service challenges of staff retention and appointment flexibility, alongside finding therapy emotionally challenging (Kilbride et al., 2013) are likely to be present across clinical groups other than FEP. In this study engagement was found to be for some service users a changeable construct over time (Cowan et al., 2020). Given this, further longitudinal research looking at the factors associated to engagement with psychological therapy across multiple time points would provide a valuable contribution to this topic.

Regarding the use of digital therapy, service users described benefits to this modality including accessibility and experiencing this as a modern and progressive way to access therapy (Bucci et al., 2018). This has the potential to overcome the lack of psychological provisions in some areas (Ince, et al., 2016), as well session locations being difficult to get to, or far away (Lucksted et al., 2015). However, being unable to afford mobile data, to repair a smart phone or to have a place at home do conduct therapy from were barrier to others engaging with digital therapy (Arnold et al., 2020). Since the COVID-19 pandemic, much more clinical work has been undertaken digitally (Torous, Myrick, Rauseo-Ricupero & Firth, 2020). Understanding more about the challenges and benefits of this digital work from the perspective of the service user is likely to help inform future practice.

This research has found that engagement is a multifaceted construct with many factors unique to an individual's experience, impacted by emotional, social, practical factors and service level factors. It highlights the importance of considering factors such as the level of emotional distress being experienced, the connections someone with FEP may have to others having a shared experience, and practical issues surrounding accessing appointments. Exploring an individual's situation, circumstance, or preference is likely to overall increase engagement, through identifying which constructs are likely to be barriers or facilitators for that individual person.

## Reference

Alvarez-Jimenez, M., Koval, P., Schmaal, L., Bendall, S., O'Sullivan, S., Cagliarini, D., ... & Gleeson, J. F. (2021). The Horyzons project: a randomized controlled trial of a novel online social therapy to maintain treatment effects from specialist first-episode psychosis services. *World Psychiatry*, *20*(2), 233-243.

Anderson, K. K., Flora, N., Archie, S., Morgan, C., & McKenzie, K. (2014). A meta-analysis of ethnic differences in pathways to care at the first episode of psychosis. *Acta psychiatrica scandinavica*, *130*(4), 257-268.

Anderson, K. K., Fuhrer, R. & Malla, A. K. (2013). “There are too many steps before you get to where you need to be”: Help-seeking by patients with first-episode psychosis. *Journal of Mental Health*, *22*(4), 384-395.

Arnold, C., Williams, A. & Thomas, N. (2020). Engaging With a Web-Based Psychosocial Intervention for Psychosis: Qualitative Study of User Experiences. *JMIR Ment Health, 7*(6), e16730. doi:10.2196/16730.

Aromataris, E., Munn, Z. (2020). JBI Manual for Evidence Synthesis. JBI, 2020. Available from: https://synthesismanual.jbi.global. https://doi.org/10.46658/JBIMES-20-01.

Artaud, L., Abdel-Baki, A., Nolin, M. & Rousseau, C. (2020). Adherence to Treatment in First Episode Psychosis: Acceptance, Refusal, or Ambivalent Process? *Canadian Journal of Community Mental Health, 39*(3), 17-31. doi:10.7870/cjcmh-2020-018.

Arundell, L. L., Barnett, P., Buckman, J. E., Saunders, R., & Pilling, S. (2021). The effectiveness of adapted psychological interventions for people from ethnic minority groups: A systematic review and conceptual typology. *Clinical psychology review*, *88*, 102063.

Barr, K., Ormrod, J., & Dudley, R. (2015). An exploration of what service users value about early intervention in psychosis services. *Psychology and Psychotherapy: Theory, Research and Practice*, *88*(4), 468-480.

Berger, R. (2015). Now I see it, now I don’t: Researcher’s position and reflexivity in qualitative research. *Qualitative research*, *15*(2), 219-234.

Berry, K. & Haddock, G. (2008). The implementation of the NICE guidelines for schizophrenia: barriers to the implementation of psychological interventions and recommendations for the future. *Psychology and Psychotherapy: Theory, Research and Practice*, *81*(4), 419-436.

Birchwood, M., Todd, P. & Jackson, C. (1998). Early intervention in psychosis: the critical-period hypothesis. *Psychiat*ry *172*(S33), 53–59.

Bjornestad, J., Veseth, M., Davidson, L., Joa, I., Johannessen, J. O., Larsen, T. K., . . . Hegelstad, W. T. V. (2018). Psychotherapy in Psychosis: Experiences of Fully Recovered Service Users. *Frontiers in Psychology, 9,* 1675. doi:10.3389/fpsyg.2018.01675.

Bradshaw, T., Lovell, K. & Fitzsimmons, M. (2019). Understanding disengagement from early intervention services for psychosis, Perspectives from ex-service users and mental health staff. *Early Intervention in Psychiatry, 6*(0).

Brown, E., Reynolds, S., Geros, H., Sizer, H., Tindall, R., McGorry, P. & O'Donoghue, B. (2019). The rates and determinants of disengagement and subsequent re-engagement in young people with first-episode psychosis. *Social psychiatry and psychiatric epidemiology*, *54*(8), 945-953.

Bucci, S., Berry, K., Barrowclough, C., & Haddock, G. (2016). Family interventions in psychosis: a review of the evidence and barriers to implementation. *Australian Psychologist*, *51*(1), 62-68.

Bucci, S., Morris, R., Berry, K., Berry, N., Haddock, G., Barrowclough, C., . . . Edge, D. (2018). Early Psychosis Service User Views on Digital Technology: Qualitative Analysis. *JMIR Ment Health, 5*(4), 10091. doi:10.2196/10091.

Byrne, R. E. & Morrison, A. P. (2014). Young people at risk of psychosis: their subjective experiences of monitoring and cognitive behaviour therapy in the early detection and intervention evaluation 2 trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *87*(3), 357-371.

Cadario, E., Stanton, J., Nicholls, P., Crengle, S., Wouldes, T., Gillard, M. & Merry, S. N. (2012). A qualitative investigation of first-episode psychosis in adolescents. *Clinical child psychology and psychiatry*, *17*(1), 81-102.

Cheng, F., Kirkbride, J. B., Lennox, B. R., Perez, J., Masson, K., Lawrence, K., ... & Jones, P. B. (2011). Administrative incidence of psychosis assessed in an early intervention service in England: first epidemiological evidence from a diverse, rural and urban setting. *Psychological Medicine*, *41*(5), 949-958.

Conus, P., Lambert, M., Cotton, S., Bonsack, C., McGorry, P. D. & Schimmelmann, B. G. (2010). Rate and predictors of service disengagement in an epidemiological first-episode psychosis cohort. *Schizophrenia research*, *118*(1-3), 256-263.

Cowan, T., Pope, M. A., MacDonald, K., Malla, A., Ferrari, M. & Iyer, S. N. (2020). Engagement in specialized early intervention services for psychosis as an interplay between personal agency and critical structures: A qualitative study. *International Journal of Nursing Studies*, *108*, 103583.

Cowdrey, F. A., Hogg, L. & Chapman, K. (2018). Is there a choice to make? A pilot study investigating attitudes towards treatment in an Early Intervention for Psychosis service. *Mental Health Review Journal*. doi:10.1108/mhrj-09-2017-0038.

Daker-White, G., Hays, R., McSharry, J., Giles, S., Cheraghi-Sohi, S., Rhodes, P., & Sanders, C. (2015). Blame the patient, blame the doctor or blame the system? A meta-synthesis of qualitative studies of patient safety in primary care. *PloS one*, *10*(8), e0128329.

Dixon, L. B., Holoshitz, Y. & Nossel, I. (2016). Treatment engagement of individuals experiencing mental illness: review and update. *World Psychiatry*, *15*(1), 13-20.

Douglas, C. (2018). *Factors that promote recovery: The views of service-users experiencing psychosis on an acute psychiatric ward* (Doctoral dissertation, University of Essex).

Doyle, R., Turner, N., Fanning, F., Brennan, D., Renwick, L., Lawlor, E. & Clarke, M. (2014). First-episode psychosis and disengagement from treatment: a systematic review. *Psychiatric Services*, *65*(5), 603-611.

Drake, R. J. (2008). Insight into illness: impact on diagnosis and outcome of nonaffective psychosis. *Current psychiatry reports*, *10*(3), 210-216.

Ellett, L. & Kingston, J. (2020). Third-Wave CBT Interventions for Psychosis. In *A Clinical Introduction to Psychosis* (pp. 379-393). Academic Press.

Evans-Jones, C., Peters, E. & Barker, C. (2009). The therapeutic relationship in CBT for psychosis: client, therapist and therapy factors. *Behavioural and cognitive psychotherapy*, *37*(5), 527.

France, E. F., Cunningham, M., Ring, N., Uny, I., Duncan, E. A., Jepson, R. G., ... & Britten, N. (2019). Improving reporting of meta-ethnography: the eMERGe reporting guidance. *BMC medical research methodology*, 19(1), 25.

Harris, K., Collinson, C. & das Nair, R. (2012). Service-users' experiences of an early intervention in psychosis service: An interpretative phenomenological analysis. *Psychology and Psychotherapy: Theory, Research and Practice*, *85*(4), 456-469. doi:10.1111/j.2044-8341.2011.02043.x.

Hastrup, L. H., Kronborg, C., Bertelsen, M., Jeppesen, P., Jorgensen, P., Petersen, L., ... & Nordentoft, M. (2013). Cost-effectiveness of early intervention in first-episode psychosis: economic evaluation of a randomised controlled trial (the OPUS study). *The British Journal of Psychiatry*, *202*(1), 35-41.

Ince, P., Haddock, G. & Tai, S. (2016). A systematic review of the implementation of recommended psychological interventions for schizophrenia: rates, barriers, and improvement strategies. *Psychology and Psychotherapy: Theory, Research and Practice*, *89*(3), 324-350.

Islam, Z., Rabiee, F. & Singh, S. P. (2015). Black and minority ethnic groups' perception and experience of early intervention in psychosis services in the United Kingdom. *Journal of Cross-Cultural Psychology*, *46*(5), 737-753. doi:10.1177/0022022115575737.

Jansen, J. E., Wøldike, P. M., Haahr, U. H. & Simonsen, E. (2015). Service user perspectives on the experience of illness and pathway to care in first-episode psychosis:

a qualitative study within the TOP project. *Psychiatric Quarterly*, *86*(1), 83-94. doi:10.1007/s11126-014-9332-4.

Jung, E., Wiesjahn, M., Rief, W. & Lincoln, T. M. (2015). Perceived therapist genuineness predicts therapeutic alliance in cognitive behavioural therapy for psychosis. *British Journal of Clinical Psychology*, *54*(1), 34-48.

Kilbride, M., Byrne, R., Price, J., Wood, L., Barratt, S., Welford, M. & Morrison, A. P. (2013). Exploring service users' perceptions of cognitive behavioural therapy for psychosis: a user led study. *Behavioural and Cognitive Psychotherapy*, *41*(1), 89. doi:10.1017/S1352465812000495.

Kreyenbuhl, J., Nossel, I. R. & Dixon, L. B. (2009). Disengagement from mental health treatment among individuals with schizophrenia and strategies for facilitating connections to care: a review of the literature. *Schizophrenia bulletin*, *35*(4), 696-703.

Lal, S., Nguyen, V., & Theriault, J. (2018). Seeking mental health information and support online: Experiences and perspectives of young people receiving treatment for first-episode psychosis. *Early intervention in psychiatry*, *12*(3), 324-330.

Landi, G., Leuci, E., Quattrone, E., Azzali, S., Pellegrini, C., Pellegrini, P., & Pelizza, L. (2021). The ‘Parma-Early Psychosis’ programme: Characterization of help-seekers with first episode psychosis. *Early Intervention in Psychiatry*, *15*(2), 380-390.

Lucksted, A., Essock, S. M., Stevenson, J., Mendon, S. J., Nossel, I. R., Goldman, H. H., ... & Dixon, L. B. (2015). Client views of engagement in the RAISE Connection Program for early psychosis recovery. *Psychiatric Services*, *66*(7), 699-704. doi:10.1176/appi.ps.201400475.

MacBeth, A., Gumley, A., Schwannauer, M. & Fisher, R. (2013). Service engagement in first episode psychosis: clinical and premorbid correlates. *The Journal of nervous and mental disease*, *201*(5), 359-364.

Mankiewicz, P. D., O’Leary, J. & Collier, O. (2018). That hour served me better than any hour I have ever had before”: Service users’ experiences of CBTp in first episode psychosis. *Counselling Psychology Review*, *33*(2), 5. doi:10.1348/147608306X110148.

Marshall, M., Lewis, S., Lockwood, A., Drake, R., Jones, P., & Croudace, T. (2005). Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. *Archives of general psychiatry*, *62*(9), 975-983.

McCrone, P., Craig, T. K., Power, P. & Garety, P. A. (2010). Cost-effectiveness of an early intervention service for people with psychosis. *The British journal of psychiatry*, *196*(5), 377-382.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS med*, *6*(7), e1000097.

Morrison, A. P., & Barratt, S. (2010). What are the components of CBT for psychosis? A Delphi study. *Schizophrenia Bulletin*, *36*(1), 136-142.

Moustakas, C. (1994). *Phenomenological research methods*. Sage publications.

National Institute for Health and Clinical Excellence (2014). Psychosis and schizophrenia in adults: prevention and management. *NICE clinical guideline* CG178. London: NICE.

Nilsen, L., Frich, J. C., Friis, S. & Røssberg, J. I. (2014). Patients' and family members' experiences of a psychoeducational family intervention after a first episode psychosis: a qualitative study. *Issues in Mental Health Nursing*, *35*(1), 58-68. doi:10.3109/01612840.2013.837992.

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-based nursing*, *18*(2), 34-35.

Noblit, G. W. & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies* (Vol. 11). Sage.

Nordentoft, M., Rasmussen, J. Ø., Melau, M., Hjorthøj, C. R. & Thorup, A. A. (2014). How successful are first episode programs? A review of the evidence for specialized assertive early intervention. *Current opinion in psychiatry*, *27*(3), 167-172.

O'Brien, A., Fahmy, R., & Singh, S. P. (2009). Disengagement from mental health services. *Social psychiatry and psychiatric epidemiology*, *44*(7), 558-568.

O'Driscoll, C., Free, K., Attard, A., Carter, P., Mason, J., & Shaikh, M. (2021). Transitioning to age inclusive early intervention for psychosis. *Early intervention in psychiatry*, *15*(1), 34-40.

O'Driscoll, C., Shaikh, M., Finamore, C., Platt, B., Pappa, S., & Saunders, R. (2021). Profiles and trajectories of mental health service utilisation during early intervention in psychosis. *Schizophrenia Research*, *237*, 47-53.

Ouzzani, M., Hammady, H., & Fedorowicz, Z. E. (2016). *A. Rayyan—A web and mobile app for systematic reviews. Systematic Reviews*, *5*.

Pattyn, V., Molenveld, A. & Befani, B. (2019). Qualitative comparative analysis as an evaluation tool: Lessons from an application in development cooperation. *American Journal of Evaluation*, *40*(1), 55-74.

QSR International Pty Ltd. (2020) NVivo (released in March2020), https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home.

Radhakrishnan, M., McCrone, P., Lafortune, L., Everard, L., Fowler, D., Amos, T., ... & Birchwood, M. (2018). Cost-effectiveness of early intervention services for psychosis and fidelity to national policy implementation guidance. *Early Intervention in Psychiatry*, *12*(4), 747-756. http://doi.wiley.com/10.1111/eip.12481.

Rihoux, B. & Lobe, B. (2009). The case for qualitative comparative analysis (QCA): Adding leverage for thick cross-case comparison. *The Sage handbook of case-based methods*, 222-242.

Sattar, R., Lawton, R., Panagioti, M., & Johnson, J. (2021). Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Services Research*, *21*(1), 1-13.

Scholz, V., Kirbyshire, A. & Simister, N. (2017). Applying Qualitative Comparative Analysis. Retrieved September 20, 2020, from https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Qualitative-comparative-analysis.pdf.

Sidis, A., Ramirez, J., Dawson, L., River, J., Buus, N., Singh, R., ... & Deane, F. (2020). Not ‘Just a Talking Head’: Experiences of Australian public mental health clinicians implementing a dialogical family therapy approach for young people with severe mental health concerns. *Australian and New Zealand Journal of Family Therapy*, *41*(1), 6-28. doi:10.1002/anzf.1407.

Skeate, A., Jackson, C., Wood, M. B., & Jones, C. (2002). Duration of untreated psychosis and pathways to care in first-episode psychosis: investigation of help-seeking behaviour in primary care. *The British Journal of Psychiatry*, *181*(S43), s73-s77.

Stewart, K. D. (2013). Factors contributing to engagement during the initial stages of treatment for psychosis. *Qualitative health research*, *23*(3), 336-347. doi:10.1177/1049732312468337.

Tindall, R., Simmons, M. B., Allott, K. & Hamilton, B. E. (2018). Essential ingredients of engagement when working alongside people after their first episode of psychosis: A qualitative meta-synthesis. *Early Intervention in Psychiatry*, *12*(5), 784-795.

Tindall, R., Simmons, M., Allott, K. & Hamilton, B. (2020). Disengagement processes within an early intervention service for first-episode psychosis: a longitudinal, qualitative, multi-perspective study. *Frontiers in Psychiatry*, *11*, 565. doi:10.3389/fpsyt.2020.00565.

Torous, J., Myrick, K. J., Rauseo-Ricupero, N., & Firth, J. (2020). Digital mental health and COVID-19: using technology today to accelerate the curve on access and quality tomorrow. *JMIR mental health*, *7*(3), e18848.

Turkington, D., Dudley, R., Warman, D. M., & Beck, A. T. (2006). Cognitive-behavioral therapy for schizophrenia: a review. *Focus*, *10*(2), 5-233.

Turner, M., Smith-Hamel, C. & Mulder, R. (2007). Prediction of twelve-month service disengagement from an early intervention in psychosis service. *Early Intervention in Psychiatry*, *1*(3), 276-281.

Valentine, L., McEnery, C., O’Sullivan, S., Gleeson, J., Bendall, S. & Alvarez-Jimenez, M. (2020). Young people’s experience of a long-term social media–based intervention for first-episode psychosis: Qualitative analysis. *Journal of medical Internet research*, *22*(6), e17570. doi:10.2196/17570.

van Schalkwyk, G. I., Davidson, L. & Srihari, V. (2015). Too late and too little: narratives of treatment disconnect in early psychosis. *Psychiatric Quarterly*, *86*(4), 521-532. doi:10.1007/s11126-015-9348-4.

Wood, L., Burke, E. & Morrison, A. (2015). Individual cognitive behavioural therapy for psychosis (CBTp): a systematic review of qualitative literature. *Behavioural and Cognitive psychotherapy*, *43*(3), 285-297.

# Part 2: Empirical paper

## Barriers and facilitators to engagement in psychological therapy in first episode psychosis (FEP): a qualitative comparative analysis (QCA)

## Abstract

**Aims:** Engagement in psychological therapy during a first episode of psychosis (FEP) has been found to involve emotional, social, practical, and service level factors. This qualitative comparative analysis (QCA) aims to identify which factors are most relevant to service users as barriers and facilitators to engagement in FEP.

**Method:** QCA combines qualitative and quantitively methodology by utilising set theory to understand configurations of factors which are necessary and sufficient for engagement in psychological therapy. This aims to find the shortest possible expression of potential combinations of conditions (barriers and facilitators) that are sufficient for the outcome of engagement. Themes from the concurrent meta-ethnography review of 22 studies were utilised in this QCA.

**Results:** The QCA found that ‘Emotional distress’ was most relevant to service users as a barrier to engagement and that ‘Destigmatizing’ and ‘Therapist interpersonal approach and skills’ were most relevant to service users as facilitators to engagement.

**Conclusions:** QCA builds upon qualitative methodology by identifying the themes which are most frequently referred to across multiple studies. Strengths, limitations, and further directions are discussed.

## 1. Introduction

*Psychosis and treatment recommendations*

First episode psychosis (FEP) commonly involves experiences such as seeing or hearing things that others do not and having strong beliefs which are not shared by others (National Health Service, 2019). The National Institute of Clinical Excellence guidelines (NICE, 2014) recommends that alongside medication, people experiencing FEP should be offered evidence based psychological interventions such as individual Cognitive Behavioural Therapy (CBT) and family therapy (FI). Third wave CBT, such Compassion-Focused Therapy (CFT) and digital interventions have also been found to be effective (Alvarez-Jimenez et al., 2021; Ellett & Kingston, 2020; Valentine et al., 2021; Wood et al., 2015).

Obtaining treatment in the early stages of FEP is of particular importance as longer durations of untreated psychosis (DUP) have been found to lead to poorer longer-term outcomes (Birchwood, et al., 1998). However, engagement with mental health services has been found to be impacted by a complex combination of individual, sociodemographic, clinical, and service level variables, often poorly conceptualised in the literature (O'Brien et al., 2009). Anderson et al. (2014) identified ethnic differences in pathways to accessing mental health care in a meta-analysis, as participants of black ethnicity had a decreased likelihood of GP involvement and increased likelihood of police involvement relative to participants of white ethnicity.

*Prior meta-ethnography summary*

By collecting, interpreting, and synthesizing the existing qualitative literature on this topic, the previous meta-ethnography (Part 1) identified multiple factors which service users referenced as barriers and facilitators to engagement. Seven themes were identified as barriers to engagement in psychological therapy in FEP: 'Ambivalence to therapy', 'Emotional distress', 'Fluctuating symptoms', 'Negative expectations', 'Physical capacity', 'Service limitations' and 'Therapy preference unmet'. Six themes were identified as facilitators: 'Destigmatizing', 'Accessibility of digital therapy', 'Positive expectations of therapy are met', 'Service factors', 'Therapists interpersonal approach and skills', and 'Therapy preferences met'.

The multifaceted nature of these findings indicate that what influences one individual's engagement in psychological therapy when experiencing FEP may be different from another's, and for each individual person there are likely to be multiple factors of relevance, exacerbated by service level factors and social circumstance. Specifically, what the individuals' difficulties are, the services offered, the skills of the clinician and the physical capacity the person with FEP has to engage in the type of therapy they are offered (digital, group or in person) were found to impact on engagement.

This meta-ethnography utilised an analytic approach involving synthesising the secondary data of researchers' interpretations of service user quotes (for example, themes), as well as primary data of service users quotes, with the aim developing novel theory (Daker-White et al., 2015; Noblit & Hare, 1988). This is a phenomenological stance whereby there is not one singular 'truth' but multiple valid perspectives (Moustakas, 1994). This makes sense of engagement as it is experienced by the people affected by FEP.

### *Models of understanding complex phenomenon*

Aside from a meta-ethnography, there are multiple models of understanding complex phenomenon such as engagement. Dismantling studies allows researchers to identify which components (when examined separately and in combination) lead to causative change (Wenzel, 2017). With engagement in therapy in FEP, this would involve comparing factors which have been found to impact on engagement and seeing the impact they had on service user engagement in isolation and combination. This approach minimises threats to internal validity (Wenzel, 2017) and is viable to research specific aspects of therapy, such as randomised control trails investigating which components of CBT for psychosis are most impactful (Gaudiano, 2005). One challenge with this approach is that it assumes an additive model which is often not supported in the literature, as specific components have been found to contribute only modestly to outcomes (Bell et al., 2013). Beyond the individual components of therapy, individual and systemic factors have been found to impact on engagement (MacBeth et al., 2013) which are not possible to be considered with this methodology.

Regression models aim to investigate the relationships between variables, with multiple regression analysis used to understand mediating conditions in relationships (Sykes, 1993). Although a meta-analysis on engagement with mental health services in FEP found that symptoms correlated with negative quality of life (Watson et al., 2018) this does not clarify the direction of this relationship or other contributary factors. Using correlational methodology, MacBeth et al. (2013) found that poorer clinician-rated engagement was associated with greater symptoms, psychopathology, and poorer pre-morbid social adjustment but that in a regression analysis, only severity of negative symptoms was found to predict engagement. Neither dismantling or regression methodological approaches attempt to identify the necessary or sufficiency of conditions (Kazdin, 2007).

Although providing valuable contributions to the literature on engagement in psychosis, these methodologies are limited in that broad homogenising assumptions are made, biased either by the small size of the sample or the variables included by the researchers. This results in an increased risk of missing variables and overfitting a specific model to a unique data set (Mahoney & Goertz, 2006).

Qualitative research counteracts this by offering sensitive, in-depth case study, using small or inhomogeneous data sets (Mahoney & Goertz, 2006). Delphi studies attempt to define necessary components of a research topic by seeking expert and first-hand opinions on real-world problems. Participants then reflect and reconsider their options based on the responses of others, with the aim of reaching a consensus (Mcpherson et al., 2018). In psychosis, Delphi studies have been used to reach consensus on service users' priorities and preferences for treatment (Byrne & Morrison, 2014b).

Although qualitative research contributes to this topic by bringing forth service users' perspectives as well as considering complexity in social phenomenon (Bucci et al., 2018;

Bradshaw et al., 2019), it is limited in the size of the sample, risking bias, and impacting on its generalisability (Noble & Smith, 2015).

### *Aims of QCA*

First introduced by Ragin (1897), QCA is an alternative to standard qualitative or quantitively methodology. It attempts to address the fundamental dilemma between breadth and depth in research (Mahoney & Goertz, 2006). To do this it moves away from the approach of creating a model of best fit and instead aims to establish what are the sufficient and necessary components to result the outcome (in this instance engagement), and in what combination (Ragin, 2000).

Since its development, QCA has been applied across several disciplines including political science, sociology, and management (Rihoux, et al., 2013). Although less commonly used in psychological research, it has been increasingly used to explore complex phenomenon, including the psychological treatment of chronic pain (Batho et al., 2021) and the perception of recovery from psychological distress (Jailobaeva et al., 2021).

QCA can be characterised by its ability to address 'causes-of effects' research questions, aiding understanding of why certain phenomenon, such as engagement in psychological therapy, occurs (Mahoney & Goertz, 2006). It is designed as a middle ground between variable-oriented and case-oriented traditions (Baumgartner, 2009; Ragin, 2000). This methodology means it is possible to make formal comparisons whilst maintaining the complexity and individuality of cases (Oana et al., 2021). It can be employed to identify the necessity and sufficiency of conditions to produce an outcome (Oana, et al., 2021) and so was selected to understand the complex multifaceted phenomenon of engagement in psychological therapy in FEP.

*Causal complexity*

The concept of causality suggests that the things that happen in the world have an impact on other things, and so through understanding causality we can understand the ‘cases of effects’ (Howitt & Cramer, 2007). Traditionally, causal relationships are explored though quantitative research methodologies (Jensen, 2021). However, we can rarely understand complex social phenomenon by focusing on a single factor in isolation. Instead, QCA accepts that a complex combination of factors brings about a specific outcome (Oana, et al., 2021). This incorporation of causal complexity distinguishes it from other methodological approaches meaning it is not a typical qualitative or qualitative research method.

To do this, it does not establish how much each individual factor in isolation contributes towards a phenomenon such as engagement, but uses Boolean logic AND, OR and NOT (Schneider and Wagemann, 2012). This aims to understand the complex interplay of different factors which bring about that phenomenon (Oana, et al., 2021). This is achieved by identifying patterns across sets, looking at both the within-case variation of a set and cross-case variation (Ragin, 2000). In the analysis, the researcher derives logical conclusions by looking at the relationships between the conditions and their outcomes. This makes it possible to analyse multiple diverse studies to identify the causal contributions of heterogeneous conditions, which is particularly beneficial in the present study looking at the multifaceted phenomenon of engagement.

*Aims of study*

QCA was selected as a methodology for this research as it combines qualitative and quantitively methodology by utilising set theory to understand configurations of factors which are necessary and sufficient for engagement in psychological therapy. This QCA aims to identify which factors are most referred to by service users as barriers and facilitators to engagement in FEP, using the themes from meta-ethnography review of 22 studies (part 1).

## 2. Methods

### *2.1 Design*

A meta-ethnography systematic review was performed in 2021 to synthesise qualitative research on the barriers and facilitators of engagement in psychological therapy in FEP. The meta-ethnography was pre-registered on Prospero (ID: CRD42021228573). It followed PRIMSA (France et al., 2019; Moher et al., 2010) and eMERGe guidance (France et al., 2019). Data collected from this meta-ethnography was used for the QCA. The data set was analysed using QCApro in R statistical software package (R Core Team, 2020).

### *2.2 Ethics*

As both the 2021 meta-ethnography and this study used secondary data, which was already published, ethical approval was not required for this project.

### *2.3 Meta-ethnography search method*

Studies included in this QCA were taken directly from the meta-ethnography review. The inclusion criteria were empirical qualitative research about engagement (as either a specific aim or resultant theme) in psychological therapies for FEP. FEP was defined as having had a first episode of psychosis (within the last 3 years) and psychological therapy was defined as treatments delivered by trained and accredited practitioners (NHS talking therapies, 2020), including individual, digital and group therapies. The exclusion criteria were participants with severe and enduring serious mental health problems such as long-standing schizophrenia, and studies which did not involve service user consultation.

A comprehensive systematic literature search was conducted in July 2021, performed in PsychINFO, Ovid MEDLINE and Ovid Emcare and Ovid Embase to gather published studies. EThOS, OATD, OpenDOAR OPENGrey, BASE, Library Hub Discover, and WorldCat were searched primarily for university theses, although other unpublished literature was also included.

The inclusion criteria included empirical qualitative research involving individual interviews, focus groups or surveys with qualitative components about engagement (as either a specific aim or resultant theme) in psychological therapies for FEP. The exclusion criteria were service users with severe and enduring serious mental health problems such as long-standing schizophrenia, and studies where the research participants were mental health professionals or family members, without service user involvement. A secondary researcher (CO) reviewed 30% of the full-text studies against the inclusion criteria, and any discrepancies resolved through discussion.

Study characteristics were extracted, based on the JBI Qualitative Data Extraction Tool (Aromataris & Munn, 2020), and the studies were assessed for methodological quality using the CASP Qualitative Research Checklist (Critical Appraisal Skills Programme, 2014). Both service user quotes (first order data) and concepts generated by the primary authors (second order data) were extracted from the results sections of the included studies and stored in NVivo (QSR International Pty Ltd., 2020).

### *2.4 Qualitative comparative analysis (QCA) summary*

QCA bridges the gap between standard qualitative and quantitively methodology. It makes formal comparisons whilst maintaining the complexity of cases by identifying the necessity and sufficiency of conditions to result in engagement (Mahoney & Goertz, 2006; Oana, et al., 2021). The process of the QCA follows guidance by Rihoux and Ragin (2008) and Oana, et al. (2021).

QCA first requires the researcher to collect a list of the conditions which impact on the phenomenon being investigated. From the meta-ethnography (Part 1), six barriers and sever barriers were generated, referred to in QCA terminology as conditions (see glossary in section 2.10 for a full list of QCA terminology). This QCA aims to identify the relationships between these conditions and engagement in psychological therapy. Transforming qualitative data to quantitative makes it possible to investigate the weighting of these different factors as either barriers or facilitators to engagement, despite variability in the number of participants in the studies and findings.

To do this, the data from the meta-ethnography is translated from qualitative data to quantitively data. This involved identifying the number of times each condition (in Part 1, a condition is referred to as a theme) was referenced in each individual study. This raw data is then calibrated for the next stage of the QCA. Each study (known as a case in QCA terminology) was given a score of ‘0’ if the condition was not present in the study and ‘1’ if it was. If the case (study) scored 1, this indicated that the condition (theme) was present in the paper, and it gained membership to that set. Binary coding of 1 or 0 in QCA is called crisp set calibration (Rihoux & Ragin, 2008). Although this shows whether the case (study) contains a particular condition (theme) or not, it does not say how much that condition (theme) is present in that paper. To provide more information on the degree of membership each case (study) has to a set, four data points were used (0, 0.33, 0.67, 1). In QCA this is called fuzzy set calibration (Oana et al., 2021).

The QCA was undertaken using QCApro in R statistical software package (R Core Team, 2020). The following 6 steps are a summary of the stages undertaken for the QCA (Rihoux & Ragin, 2008). Further details for each stage in the present QCA, as well as more information on crisp and fuzzy set calibration, are outlined in section 2.5.

(1) Completion of the data table

From each case (study) and condition (theme) a score is generated, represented by a number between 0 and 1. For this code, 0 represents the absence of the condition (theme) and 1 represents that it is present. These scores are either ‘crisp’ (0 or 1) or ‘fuzzy’ (0, 0.33, 0.67, 1), described below.

(2) Construct truth tables

The truth table uses software to bring together all the information from the data table by presenting all logically possible combinations of conditions (called configurations). Each row in a truth table is a statement of sufficiency, as it would score a ‘1’ if the row was sufficient for the outcome, and a 0 if the row was not sufficient for the outcome (Oana, et al., 2021). Each case (study) belongs best to just one truth table row, and each row represents a different configuration.

(3) Resolution of contradictory configuration

The dataset was assessed for any contradictory configurations where a case (study) with the same configuration of conditions (themes) yielded different outcomes (membership to a set), so that these discrepancies can be resolved.

(4) Boolean minimisation

Statistical software using Boolean logic is employed to identify the conditions (themes) which are necessary or sufficient to result in the outcome.

(5) Consideration of logical remainder cases

After minimization, in QCA it is possible that configurations occur for which no studies exist. In this instance it is required that the researcher uses logic or existing knowledge in the field to explain why this has occurred.

(6) Interpretation

The models created through Boolean minimization are considered against the initial research question and studies included in the QCA. The findings are a viewed as a hypothesis of understanding the construct in question, and considered alongside empirical findings, theory, and case knowledge to ensure that the outcomes make meaningful sense.

### *2.5 Qualitative comparative analysis (QCA) process*

#### *2.5.1 Completion of the data*

To generate the data for the QCA, qualitative conditions (themes) are transformed into quantitative data. Calibration is the process of transforming data, to state whether (and it does, to what extent) each cases (study) belong to a particular set or not (Oana, et al., 2021). The seven barriers and six facilitators which were identified in the meta-ethnography are used as conditions. Each case (study) is given a membership score for each condition (theme) associated to engagement. For example, Arnold et al. (2020) identified the condition of ‘emotional distress’ and so was given membership to the ‘emotional distress’ set.

### *2.5.2. Crisp set calibration*

To calibrate the data into a crisp set, each case (study) was given a score of ‘0’ if the condition was not present in the case (study), and a score of ‘1’ if it was (Rihoux & Ragin, 2008). For example, Arnold et al. (2020) found that ‘emotional distress’ was a barrier to engagement, so it would receive a score of 1 indicating that it has membership to the ‘emotional distress’ set. Alternatively, for example, if Arnold et al. (2020) did not mention this barrier, then it would not have membership to this ‘emotional distress’ set and would get a score of 0. An inclusive approach was adopted to this coding, as if there was one or more reference to a condition (theme) then a case (study) was given a score of 1, giving it membership to that set.

### *2.5.3. Fuzzy set calibration*

To provide more information, fuzzy set calibration enables a case (study) to belong to a set to various degrees (Oana, Schneider & Thomann, 2021). This allows a case (study) to be recognised as more or less of a member of a condition’s set (theme), unlike with binary crisps calibration. As recommended by Oana et al. (2021), four points were used as a continuum to establish the degree of membership to a condition’s set, as outlined in table 1.

Calibration involves setting the anchor points which indicate the degree to which each case (study) contributes to a condition’s set (theme). A direct calibration method was adopted to establish the anchor points for membership into a set. This involves defining quantitively the cut-offs for condition’s set membership. Typically, this is done by using existing research, knowledge and theory on the topic being researched. As this specific topic has not been researched using a QCA approach before, there are no pre-existing standardised methodology to measure the degree to which each case contributes to a condition’s set. Given this, it was decided that the number of times each case (study) referenced a particular condition (theme) would be used as the anchor for interpretation. This was selected after careful consideration, and as no alternatives were possible, generated from the data in Nvivo, the software used for the meta-synthesis.

As stated, the number of times each study referenced a condition (theme) was used to determine the range. For barriers to engagement in therapy, this number ranged from 0-7. This was used to calibrate each fuzzy set value, as shown in table 1. Scores between 0-7 were split across the 4 data points. As 0 was kept as a true 0, the other data points were spread across the 3 anchor points. From the scores 0-7, 3 points were given to the 0.67 fuzzy set value (middle) and 2 reference points given to both the 0.33 (lowest) and 1.00 (highest) fuzzy set value. For example, in Arnold et al. (2020), the study referenced ‘emotional distress’ 4 times. Using the coding system outlined above, this score of 4 was calibrated to generate a 1 in the crisp set (indicating it has membership to the set), and 0.67 in the fuzzy set (indicating its more in than out of the set).

**Table 1.** Barrier’s calibration to fuzzy and crisp data set

| Number of study references | Membership in set | Fuzzy set value | Crisp set |
|---|---|---|---|
| 6-7 | In (full) | 1.00 | 1.00 |
| 3-5 | More in than out | 0.67 | |
| 1-2 | More out than in | 0.33 | |
| 0 | Out (non) | 0 | 0 |

The number of times each study referenced a condition (theme) was used to determine the range. For facilitators, this number ranged from 0-18. As with barriers, this data was used to calibrate fuzzy and crisp sets, as shown in table 2. Scores between 0-18 were split across the 4 data points, keeping 0 as a true 0, each of the remaining 3 data points were allocated 6 reference points, split evenly across the anchor values. For example, in Nilsen et al. (2014), the study referenced therapist interpersonal approach and skills 6 times, and so was calibrated to a crisp score of 1 (indicating it has membership to the set), and a fuzzy score of 0.33 (indicating it was more out than in the set).

**Table 2.** Facilitators calibration to fuzzy and crisp data set

| **Number of study references** | **Membership in set** | **Fuzzy set value** | **Crisp set** |
|---|---|---|---|
| 13-18 | In (full) | 1.00 | 1.00 |
| 7-12 | More in than out | 0.67 | |
| 1-6 | More out than in | 0.33 | |
| 0 | Out (non) | 0 | 0 |

### *2.5.4 Necessity, sufficiency and set theory*

After the raw data had been calibrated into 'crisp' and 'fuzzy' set membership scores, the data could be analysed. This used set theory which models 'if… then' hypothesis, to identify the necessary or sufficient conditions (Wagemann, 2017). This aimed to understand the necessary and sufficient conditions required for engagement in therapy in FEP.

A 'necessary' condition refers to a condition that must be present for an event to occur, but it does not guarantee the occurrence of the event, where as a 'sufficient' condition refers to a condition which guarantees the occurrence of the event (Jeffreys et al., 1999). QCA aims to understand which conditions or specific combinations of conditions result in the outcome (Oana, et al., 2021). Given this, there should not be instances where service users engage in therapy without the present of a specific condition if it has been found that this condition is necessary for engagement, but the presence of it alone is not enough to guarantee engagement. Alternatively, the present of sufficient condition should always lead to the outcome of engagement.

### *2.6. Construct truth tables*

The aims of a truth table analysis are to find the shortest possible expression of potential combinations of conditions (barriers and facilitators) that are sufficient for the outcome (engagement). As described by (Oana, et al., 2021), this involves establishing all combinations, which means that each case (study) is attributed to a row and identifying which rows are sufficient as well as eliminating irrelevant or redundant conditions. It was stipulated that the analysis occur once for barriers and once for facilitators, to identify the impact on engagement separately (see Appendix D and E).

In QCA analysis, the software produces a raw consistency score. This represents the proportion of cases (studies) which reflect the conditions and the outcome. All the cases (studies) which contain a condition of interest (theme - such as 'emotional distress'), rarely result in the outcome of interest (for example, as a barrier to engagement). Given this, some inconsistency is acceptable and allowed within the analysis. However, researchers have stipulated that there needs to be a minimum consistency score (Oana, et al., 2021). In the current QCA, the raw consistency was set at 2 (n.cut = 2), meaning that 2 was the minimum number of times a condition (theme) could be mentioned in a case (study) to be considered as contributing to each set. This was selected as the aim of the QCA was to find consensus across studies and n=2 was the minimum number possible to achieve consensus.

### *2.7. Consideration of logical remainder cases*

In QCA truth tables, each row is a statement of sufficiency. If there is not enough empirical evidence to conclude if a case is sufficient for the outcome, then it is called a logical remainder (Oana, et al., 2021). In QCA it is possible that there can be configurations (rows) in the truth table where there are several cases (studies) with no configurations of conditions (themes) present. This can be resolving in several ways, as outlined below.

In QCA there are three potential solution types to address remainders: parsimonious, conservative, or intermediate (Thiem, 2017). A remainder is a combination of conditions where no outcome has been derived. Conservative uses a complex solution to remove logical remainders, whereas in intermediate solutions the researcher decides how remainders are included. Both approaches have been found to artificially inflate the data, resulting in models which claim relevancies without a supportive evidence base (Schneider, & Wagemann, 2012; Thiem, 2017). In the minimization process, parsimonious solutions utilise remainders by assuming that they agree with the solution. In line with recommendations by Theim (2017), the present QCA utilised parsimonious minimalization.

### *2.8 Resolution of contradictory configuration*

Contradictory configurations refer to when two configurations have the same combinations of conditions, but one configuration exhibits the outcome, and the other configuration exhibits the negation of the outcome (Oana, et al., 2021). Following Boolean minimization, contradictory configurations are considered. If there are occurrences where one configuration of conditions (themes) results in the outcome (set membership to a barrier/ facilitator), and the same configuration results in the negation of the outcome, but both have the same combination of conditions, then this is called a contradictory configuration. In the present QCA, there were no identical rows in the truth table which resulted in membership to a set, indicating that there were no contradictory configurations in the data set.

### *2.9. Boolean minimalization*

Boolean minimization is a central process of QCA involving configurations of conditions (or their absence) which result in the outcome (Duşa & Thiem, 2015). In Boolean expression, ~ denotes the negation of a condition, the multiplication sign * denotes ‘AND’, and the plus sign + reads as ‘OR’ (Oana, et al., 2021). Boolean minimization algorithms having been introduced to aid this process, with the most well-known being the Quine-McCluskey algorithm (QMC; Duşa & Thiem, 2015; McCluskey, 1956; Quine, 1952). The QCA software package for R environment included the enhanced QMC (eQMC) algorithm, enabling Boolean minimization to be performed through the programme’s algorithms (Duşa & Thiem, 2015). eQMC utilises the same functions as QMC but is enhanced by its capable of processing multivalent conditions and outcome factors, optimizing its functionality in the context where there is limited empirical diversity (Duşa & Thiem, 2015).

The primary measure used to analyse the minimisation is a measure of consistency. This represents the proportion of cases (studies) which has the conditions of interest (theme) and outcomes of interest (barrier or facilitator to engagement), with a higher value indicating that the pattern is consistent with the statement of sufficiency (Oana, et al., 2021). This has been set at >.75 by some methodologists (Ragin, 2006), and so in the present QCA, studies with a consistency value of > 0.75 are to be consistent valid. Alongside this, coverage is examined as a metric to indicate the proportion of cases in the analysis which are covered by a configuration (condition of interest and outcome of interest).

### *2.10 Glossary of QCA Terminology*

| | |
|---|---|
| **Calibration** | The process of turning raw data into membership scores to determine the extent to which each case belongs to each set. |
| **Case** | A unit of analysis. In this QCA, a case refers to a research study, for example 'Bjornestad et al. (2018)'. |
| **Condition** | An aspect of a case which can explain the outcome. In this QCA, these are the themes from the meta-ethnography, for example 'Emotional Distress'. |
| **Consistency** | The proportion of cases which has the conditions of interest and outcomes of interest (barrier or facilitator to engagement). A higher value indicates that the pattern is consistent with the statement of sufficiency. |
| **Coverage** | The proportion of cases in the analysis which reflect the solution (condition of interest and outcome of interest). |
| **Crisp Set** | A binary classification set, which allows a case to have either full set membership or not. In the present QCA, each case was given a '0' if the condition was not present in the study, and a score of '1' if it was. |
| **Fuzzy Set** | A non-binary classification set, which indicates whether the case has membership into a set or not, and the extent to which it has |

| | |
|---|---|
| | membership. In the present QCA, four points were used to establish the degree of membership that a case has to a set. |
| **Minimisation** | The data set after the application of Boolean logic to the truth table. |
| **Model Ambiguity** | Where there are more than one solution (formula) resulting in the outcome. |
| **Necessary** | A condition that must be present for an outcome to occur, but it does not guarantee the occurrence of the outcome. |
| **Parsimonious** | A solution for remainders, to incorporate them into the analysis. In the software analysis, a parsimonious solution includes all remainder rows which contribute to obtaining the most parsimonious solution. |
| **Remainders** | A truth table row without enough information empirical evidence to state if it is sufficient for the outcome or not. This is a combination of conditions for which no case (research studies) exists, deriving no outcome. |
| **Solution** | The outcome of minimization, a combination of conditions which results in the outcome. |
| **Sufficient** | A condition which guarantees the occurrence of an outcome. |
| **Truth Table** | The logically possible combination of different conditions. In this QCA this is the potential combinations of the barriers and facilitators themes that are sufficient for engagement in therapy. |

## 3. Results

The 22 studies which met the inclusion criteria were undertaken in the UK (n=9), Australia (n=5), Canada (n=2), Norway (n=2), USA (n=2), New Zealand (n=1), and Denmark (n=1). Of these studies, 3 were on group therapy (peer groups and family therapy), 3 on digital therapy and 16 on individual therapy, or individual therapy alongside another intervention such a family therapy.

Most conducted semi-structured interviews (n = 20), aside from Cowdrey et al. (2018) who administered surveys and Islam et al. (2015) who held focus groups. Studies employed a range of methodology including thematic analysis (n = 8), Interpretive Phenomenological Analysis (IPA; n = 5), grounded theory (n = 2), IPA with thematic analysis (n = 2), framework analysis (n = 2), general inductive approach (n = 1), systematic text condensation (n = 1) and trajectory analysis (n = 1).

### *3.2 QCA results summary*

The complete data set showing the 22 papers set membership to each condition for barriers can be seen in table 3 and for facilitators in table 4. Both crisp and fuzzy scores are included in this table to indicate whether a particular paper had met the inclusion to that set (crisp) and to the extent to which it had met that inclusion (fuzzy).

**Table 3.** Barriers to engagement set membership. Key: C = crisp, F = fuzzy

| | **Ambivalence to therapy** | | **Emotional distress** | | **Fluctuating symptoms** | | **Negative expectations** | | **Physical capacity** | | **Service limitations** | | **Therapy preference** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** |
| Arnold et al. (2020) | 0 | 0 | 1 | 0.67 | 1 | 0.67 | 0 | 0 | 1 | 0.67 | 0 | 0 | 1 | 0.67 |
| Artaud et al. (2020) | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bjornestad et al.(2018) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bradshaw et al. (2019) | 0 | 0 | 1 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 |
| Bucci et al. (2018) | 0 | 0 | 1 | 0.33 | 0 | 0 | 1 | 0.67 | 1 | 0.33 | 0 | 0 | 1 | 0.67 |
| Byrne et al. (2014a) | 0 | 0 | 1 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cadario et al. (2012) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cowan et al. (2020) | 1 | 0.67 | 1 | 0.33 | 1 | 0.33 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cowdrey et al. (2018) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.67 |
| Harris et al. (2012) | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 |
| Islam et al. (2015) | 0 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jansen et al. (2015) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 |
| Kilbride et al. (2013) | 1 | 0.67 | 1 | 1.00 | 1 | 0.33 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lucksted et al. (2015) | 1 | 0.67 | 0 | 0 | 1 | 0.33 | 1 | 0.33 | 0 | 0 | 0 | 0 | 1 | 0.67 |
| Mankiewicz et al. (2018) | 0 | 0 | 1 | 1.00 | 1 | 0.33 | 1 | 0.67 | 0 | 0 | 0 | 0 | 1 | 0.33 |
| Newton et al. (2007) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nilsen et al. (2014) | 1 | 0.67 | 1 | 1.00 | 1 | 0.33 | 1 | 0.33 | 1 | 0.33 | 0 | 0 | 0 | 0 |
| Sidis et al. (2020) | 0 | 0 | 1 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stewart (2013) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tindall et al. (2020) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.33 | 1 | 1.00 | 0 | 0 |
| Valentine et al. (2020) | 0 | 0 | 1 | 0.67 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.67 |
| Van schalkwyk et al. (2015) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 4.** Facilitators to engagement set membership. Key: C = crisp, F = fuzzy

| | **Destigmatizing** | | **Accessibility of digital therapy** | | **Positive expectations of therapy are met** | | **Service factors** | | **Therapists interpersonal approach and skills** | | **Therapy preferences met** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** | **C** | **F** |
| Arnold et al. (2020) | 1 | 0.33 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 |
| Artaud et al. (2020) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bjornestad et al.(2018) | 0 | 0 | 0 | 0 | 1 | 0.67 | 0 | 0 | 1 | 1.00 | 0 | 0 |
| Bradshaw et al. (2019) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bucci et al. (2018) | 1 | 0.33 | 1 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.33 |
| Byrne et al. (2014a) | 1 | 0.33 | 0 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.67 | 1 | 0 |
| Cadario et al. (2012) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 |
| Cowan et al. (2020) | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 | 1 | 0 |
| Cowdrey et al. (2018) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 |
| Harris et al. (2012) | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| Islam et al. (2015) | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jansen et al. (2015) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kilbride et al. (2013) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.67 | 0 | 0 |
| Lucksted et al. (2015) | 1 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.33 | 1 | 0.33 | 0 | 0 |
| Mankiewicz et al. (2018) | 1 | 0.33 | 0 | 0 | 1 | 0.67 | 1 | 0.33 | 1 | 0.67 | 0 | 0 |
| Newton et al. (2007) | 1 | 0.67 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 |
| Nilsen et al. (2014) | 1 | 1.00 | 0 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.33 | 0 | 0 |
| Sidis et al. (2020) | 1 | 0.33 | 0 | 0 | 1 | 0.33 | 0 | 0 | 1 | 0.67 | 0 | 0 |
| Stewart (2013) | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.67 | 0 | 0 |
| Tindall et al. (2020) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 | 0 | 0 | 0 | 0 |
| Valentine et al. (2020) | 1 | 1.00 | 1 | 0.33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Van schalkwyk et al. (2015) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.33 | 1 | 0.33 | 0 | 0 |

### *3.2 Barriers to engagement QCA results*

The truth table for the barriers to engagement can be found in table 5. As there are no combinations of conditions which result in a different outcome regarding set membership, this indicates that there are no contradictions. Given this, there is no need for resolution.

For the barriers to engagement set, two combinations of conditions ('Emotional distress' and 'Ambivalence to therapy') had a consistency value of 1, meeting the threshold of above 0.75.

In QCA it is common that multiple cases display the same configuration of conditions (Duşa, 2018). This is present in table 5, as are multiple rows whereby there no conditions (themes) exist, indicating that there are a high number of cases (studies) whereby not all conditions (themes) are present. These configurations are allocated to the same truth table combination at the point of minimization. In the present QCA, a 'parsimonious solution' has been selected to utilise these remainders in the minimization process (Oana et al., 2021).

**Table 5.** Truth table for barriers to engagement

| Conditions | | | | | | | Membership in 'barrier' set | Number of cases | Consistency |
|---|---|---|---|---|---|---|---|---|---|
| **Ambivalence to therapy** | **Emotional distress** | **Fluctuating symptoms** | **Negative expectations** | **Physical capacity** | **Service limitations** | **Therapy preference** | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0.475 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |

The parsimonious minimisation of the fuzzy dataset can be seen in table 6, and the crisp dataset in table 7. For the fuzzy minimisation (table 6), only one condition, 'Emotional distress', was a solution to a barrier to engagement. This met the consistency cut off value of above 0.75, with a value of 1, and had a coverage value of 0.35. This was derived from five papers: Bradshaw et al. (2019), Byrne et al. (2014a), Sidis et al. (2020), Kilbride et al. (2013) and Nilsen et al. (2014).

**Table 6.** Minimization table for barriers to engagement (Fuzzy)

| | Consistency | Raw Coverage | Unique Coverage | Cases |
|---|---|---|---|---|
| **Emotional Distress** | 1 | 0.35 | - | Bradshaw et al. (2019),<br>Byrne et al. (2014a),<br>Sidis et al. (2020),<br>Kilbride et al. (2013),<br>Nilsen et al. (2014) |

The crisp minimization output for barriers to engagement, are shown in table 7. As with the fuzzy data set, only one condition, ‘emotional distressing’, was a solution to barriers to engagement, with a consistency value of 1 (above the 0.75 cut off). The coverage value for the crisp dataset analysis was 0.50.

**Table 7.** Minimization table for barriers to engagement (Crisp)

| | Consistency | Raw Coverage | Unique Coverage | Cases |
|---|---|---|---|---|
| **Emotional Distress** | 1 | 0.50 | - | Byrne et al. (2014a)<br>Sidis et al. (2020)<br>Cowan et al. (2020)<br>Kilbride et al. (2013) |

*3.2 Facilitators to engagement QCA results*

The truth table for the facilitators to engagement can be found in table 8. As with barriers to engagement, the truth table demonstrates that there no combinations of conditions which result in a different outcome regarding set membership, indicating that there are no contradictions which need a resolution.

For the facilitators to engagement, three combinations of conditions (‘therapists’ interpersonal approach and skills’ ‘Belief that therapy will help, and expectation met’ ‘destigmatizing’ had a consistency value of 1 (above the 0.75 cut-off).

As was found in the barriers to engagement truth table, in table 8 there are multiple cases display the same configuration of conditions, as is common in QCA (Duşa, 2018). These configurations are allocated to the same truth table combination at the point of minimization, using a ‘parsimonious solution’ to utilise these remainders (Oana et al., 2021).

**Table 8.** Truth table for facilitators to engagement

| Conditions | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Destigmatizing** | **Accessibility of digital therapy** | **Positive expectations of therapy are met** | **Service factors** | **Therapists interpersonal approach and skills** | **Therapy preference met** | **Membership in ‘facilitator’ set** | **Number of cases** | **Consistency** |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0.525 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 1 |
| 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 1 |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 |

The parsimonious minimisation of the fuzzy dataset can be seen in table 9, and the crisp dataset in table 10. For the fuzzy minimisation (table 9), only two conditions, ‘destigmatizing’ and ‘therapist interpersonal approach and skills’ were solutions to a facilitator to engagement. As they both had a consistency score of 1, they met the consistency cut off value of above 0.75.  with a value of 1. ‘Destigmatizing’ had a coverage score of 0.21, and ‘therapist interpersonal approach and skills’ had a raw coverage score of 0.26.

The condition ‘Destigmatizing’ was present in three studies: Newton et al. (2007), Nilsen et al. (2014) and Valentine et al. (2020). ‘Therapist interpersonal approach and skill’ was present in six studies: Byrne et al. (2014a), Kilbride et al. (2013), Sidis et al. (2020), Stewart (2013) Bjornestad et al. (2018) and Bucci et al. (2018).

**Table 9.** Minimization table for facilitators to engagement (fuzzy)

| | Consistency | Raw Coverage | Unique Coverage | Cases |
|---|---|---|---|---|
| Destigmatizing | 1.00 | 0.21 | 0.12 | Newton et al. (2007)<br>Nilsen et al. (2014)<br>Valentine et al. (2020) |
| Therapist interpersonal approach and skills | 1.00 | 0.26 | 0.17 | Byrne et al. (2014a)<br>Kilbride et al. (2013)<br>Sidis et al. (2020)<br>Stewart (2013)<br>Bjornestad et al.(2018)<br>Bucci et al. (2018) |
| Minimisation (M1) | 1.00 | 0.38 | - | - |

The crisp minimization output for barriers to engagement, are shown in table 10. This provided two models as solutions to facilitators to engagement. Model 1 included the conditions of ‘Belief that therapy will help, and expectation met’ and ‘therapy preferences met’. This had a consistency value of 1 (above the 0.75 cut off) and coverage of 0.77. Model 2 includes the conditions of ‘Destigmatizing’ and ‘Therapist interpersonal approach and skills. Model 2 also had a consistency value of 1 (above the 0.75 cut off) and coverage of 0.77. The studies from which these conditions were derived are indicated within the table.

**Table 10.** Minimization table for facilitators to engagement (crisp)

| | Consistency | Raw Coverage | Unique Coverage | (M1) | (M2) | Cases |
|---|---|---|---|---|---|---|
| Positive expectations of therapy are met | 1.00 | 0.32 | 0.14 | 0.14 | 0.23 | Cowan et al. (2020)<br>Harris et al. (2012)<br>Islam et al. (2015) |
| Therapy preferences met | 1.00 | 0.18 | 0.09 | 0.18 | 0.09 | Cadario et al. (2012)<br>Cowdrey et al. (2018)<br>Arnold et al. (2020)<br>Bucci et al. (2018) |
| Destigmatizing | 1.00 | 0.41 | 0.05 | - | 0.23 | Newton et al. (2007)<br>Stewart (2013)<br>Byrne et al. (2014a)<br>Nilsen et al. (2014)<br>Arnold et al. (2020)<br>Bucci et al. (2018) |
| Therapist interpersonal approach and skills | 1.00 | 0.46 | 0.09 | 0.27 | - | Newton et al. (2007)<br>Stewart (2013)<br>Byrne et al. (2014a)<br>Nilsen et al. (2014) |
| Minimisation (M1) | 1.00 | 0.77 | - | - | - | - |
| Minimisation (M2) | 1.00 | 0.73 | - | - | - | - |

This can be understood as model ambiguity, where there is more than one solution to a formula to succinctly summarize the information in the truth table (Oana, et al., 2021). In response to this, researchers must rely on additional material outside of this truth table. This can include additional data on within-case mechanisms supporting one of the models, or theoretical arguments making one model more interesting than another (Oana, et al., 2021).

In the present study there are minimal differences between the two models. However, when the fuzzy minimalization was performed, the only combination of conditions which provided a solution was 'destigmatizing' and 'therapist interpersonal approach and skills.'. As fuzzy data is more specific than the binary crisp data, is it likely that this is a more accurate picture of the best minimization model to understand facilitators to engagement.

## Discussion

This QCA has built upon the prior meta-ethnography (part 1) to identifying the themes which are the shortest possible expression of potential combinations of conditions (barriers and facilitators) which are sufficient for the outcome of engagement in psychological therapy from 22 studies on the experience of FEP. It was found that 'Emotional distress' was most relevant as a barrier to engagement and that 'Destigmatizing' and 'Therapist interpersonal approach and skills' were most relevant as facilitators to engagement. This builds upon traditional quantitative research which identifies factors which impact on engagement, by providing more information on which factors are most prevalent across a wider sample by including multiple studies, combining elements of quantitative analysis with qualitative data.

### *Barriers to engagement*

Although there is an absence of QCA in the literature on FEP and engagement in therapy, the finding that 'Emotional distress' is a barrier to engagement in FEP is in line with existing research in the field on this topic.

Research by Wood et al. (2017) found that stigma (experienced and perceived) was significantly associated with internalised shame, low self-esteem, depression, hopelessness, and recovery. These components can also be understood as the experience of emotional distress, as in the present findings. Wood et al. (2017) conclude that stigma can have a significant negative impact on the recovery of people with psychosis and impact on internalised shame and low self-esteem. Although not directly researched in relation to engagement, mental health stigma has been found to act as a barrier to seeking mental health treatment (Valentine et al., 2016). In the current meta-ethnography, emotional distress was found to contain self-reported subthemes indicating that service users found it emotionally triggering to face and share their experiences, as well as stigma and fear of judgment, suggesting this finding is in line with existing research on this topic.

Although MacBeth et al.  (2013) did not directly measure emotional distress associated with starting therapy, they found that poorer engagement was associated with greater symptoms, psychopathology, and poorer pre-morbid social adjustment. This finding indicates that a wider range of factors influence engagement, although it is not clear the direction or role of emotional distress in these factors. In MacBeth et al.'s (2013) study, engagement was rated by clinicians and service user via questionnaires with Likert scale ratings. This limits the complexity of the information that service users can feedback and minimizes nuances. These are factors which the current research project has attempted to overcome, through the methodological approach selected. In the meta-ethnography (Part 1), fluctuating symptoms were reported by service user as a barrier to engagement, but social adjustment was not something service users themselves described as impacting on their engagement. In the QCA, these factors were not noted as the most prevalent factors to act as barriers to engagement across the range of studies, despite being present in several studies.

### *Facilitators to engagement*

This QCA identified that the conditions of most relevance as facilitators to engagement in therapy in FEP were 'Destigmatizing' and 'Therapist interpersonal approach and skills'. The theme ‘Destigmatizing’ captured the normalizing effect of interacting with other people who understand about psychosis, or who have had similar difficulties. It included gaining new perspectives from others and helping others, as well as the normalizing impact of peer support. The theme ‘Therapist interpersonal approach and skills’ focuses on what the therapist brings to the alliance, including therapist warmth, trust, support, feeling safe to talk, help putting their experience into words, and normalizing their experiences through a non-judgmental and informal approach.

This finding is consistent with existing research which has identified the quality of the therapeutic alliance as a key predictor for treatment outcomes. Jung et al. (2015) found that perceived therapist genuineness was the most important predictor of an alliance in CBT for psychosis (CBTp). Several therapist factors have also been found to impact on the therapeutic alliance, including therapist empathy and trustworthiness (Evans-Jones et al., 2009). In a systematic review of qualitative literature on service users’ experiences and perceptions of CBTp, Wood et al., (2015) identified that developing a collaborative therapeutic relationship is essential for people experiencing psychosis attempting to engage in therapy. This was especially important as engaging in CBTp was found to be challenging for service users, and the service user and the therapist needed to work together to overcome these challenges. This relates to the current QCA finding that emotional distress was a prevalent challenge for service users during therapy, with the implication being that it impacts on their engagement. This also highlights the importance of the relationship with the therapist as a buffer against this, which could be developed through the therapist warm, skilled, empathetic, and normalizing approach, factors which were found in the current QCA to facilitate engagement.

### *Strengths and limitations of QCA*

QCA has been noted as a methodology which bridges the gap between qualitative and quantitative analysis, addressing the tension between depth and breadth of data coverage. Unlike dismantling studies, it addresses this challenge without viewing factors as individual components, as within additive model which can utilise flawed assumptions (Bell et al 2013). It captures the complexity and individuality of experience through using qualitative data but can be applied to a larger number of cases than typical qualitative analysis, increasing generalizability (Ragin, 2008). Looking at the interactions of conditions results in a more holistic perspective on the situation, as it considers all aspects, including conflicting findings (Ragin, 2008).

Some of the limitations of QCA are shared with other methodologies. QCA has been criticised for the arbitrary nature of the researcher determining the parameter for set inclusion in crisp set as the author decides the criteria which determines if a case gains membership to a set or not. Fuzzy sets attempt to overcome this through a non-dichotomous categorisation, but still require the researcher to make arbitrary cut offs (Vink & Van Vliet, 2009). QCA has also been noted as being only suitable when the goal is to test deterministic hypothesis and that it assumes error-free measures of the variables being studies (Hug, 2013). As with traditional cross-sectional research, QCA has been criticised for the conditions of interest being measured in a snapshot ‘one moment in time’, rather than longitudinally to capture different elements of the social phenomenon under investigation over time. QCA has also been challenged for its assumption that all cases are independent, suggesting that they do not influence one another, but the relevance of this depends entirely on the research question under investigation (Marx et al., 2014). In the present study, this would refer to if each case (research study) was influence by other research in the field, a commonality in the field of academia.

A beneficial feature of QCA is that it enables the researcher to explore a greater number of conditions in combination. The core methodology of QCA involves Boolean Minimization, involving using algebra formular to consider all potential combinations of conditions, which if applied to simplistic problems with only a few conditions (2-4) is possible to do with high accuracy and without QCA-specific software (Duşa & Thiem, 2015).  However, with problems involving a medium-high number of combinations of conditions (10-15) this can become an impractical task due memory limitation and so QCA software is a solution to this

(Brayton, Hachtel, McMullen & Sangiovanni-Vincentelli, 1984). The unwanted consequence of this, however, is a reduction in the accuracy of the analysis, as this software cannot guarantee exact solutions (Duşa & Thiem, 2015). This trade-off between feasibility and exactitude is a challenge within the QCA analysis process and results in a small reduction of exactitude.

*Future direction and clinical implications*

Although the current QCA did not look at the interactions between barriers and facilitators to engagement, research suggests they are linked (Wood et al., 2015). Specifically, it could be predicted that the impact of emotional distress on engagement may be reduced by having a destigmatising and the therapists' interpersonal skills, although further research would be required to ascertain this. Further research exploring if the facilitators to engagement of feeling destigmatized and the therapist's interpersonal skills are sufficient to minimize the barrier of finding therapy emotionally distressing would establish the interactions between these variables.

Clinically, the findings of this research can be used to inform initial assessments with people experiencing a first episode of psychosis to aid and support their engagement. The factors identified as barriers and facilitators suggest what is needed within early sessions of seeking support. The findings indicate that someone experiencing psychosis is often in emotional distress, and this makes it hard to engage, whereas engagement is facilitating when the therapist is interpersonally skilled and helps the person feel less destigmatized.

A person-centred therapy, whereby the therapeutic alliance, therapist genuineness and use of empathy are paramount has been prevalent in psychology for many decades (Rogers, 1957). This research highlights the need to preserve these core principles, even in the challenging context of increasing waiting lists for psychological therapy within the NHS (Reichert & Jacobs, 2018). Specifically, these findings suggests that in early sessions it would be beneficial to spend a smaller proportion of the time asking 'problem focused' questions to inform a formulation if the person appears to be in emotional distress. Instead, the findings indicate that it is important to service users to not feel too emotionally distressed, to receive destigmatizing information and reassurances and to build a therapeutic alliance. This is something which could be achieved through a spending a greater proportion of the time engaging in ‘problem free’ talk early in clinical sessions and explicitly offering destigmatizing reassurance.

### *Conclusions*

Using the data collected in the meta-ethnography (Part 1), this study has found that the necessary components which act as a barrier to engagement in psychological therapy in FEP are emotional distress, and the components which facilitate engagement therapy being perceived as destigmatizing and the interpersonal approach and skills of the therapist.

This has highlighted the use of QCA as an approach to enhance traditional methodology for synthesising quantitative data. There is a need for further research to understand the interactions between these factors.

## Reference

Alvarez-Jimenez, M., Koval, P., Schmaal, L., Bendall, S., O'Sullivan, S., Cagliarini, D., ... & Gleeson, J. F. (2021). The Horyzons project: a randomized controlled trial of a novel online social therapy to maintain treatment effects from specialist first-episode psychosis services. *World Psychiatry*, *20*(2), 233-243.

Anderson, K. K., Flora, N., Archie, S., Morgan, C., & McKenzie, K. (2014). A meta-analysis of ethnic differences in pathways to care at the first episode of psychosis. *Acta psychiatrica scandinavica*, *130*(4), 257-268.

Arnold, C., Williams, A. & Thomas, N. (2020). Engaging With a Web-Based Psychosocial Intervention for Psychosis: Qualitative Study of User Experiences. *JMIR Ment Health, 7*(6), e16730. doi:10.2196/16730.

Artaud, L., Abdel-Baki, A., Nolin, M. & Rousseau, C. (2020). Adherence to Treatment in First Episode Psychosis: Acceptance, Refusal, or Ambivalent Process? *Canadian Journal of Community Mental Health, 39*(3), 17-31. doi:10.7870/cjcmh-2020-018.

Batho, A., Kneale, D., Sutcliffe, K., & Williams, A. C. D. C. (2021). Sufficient conditions for effective psychological treatment of chronic pain: a qualitative comparative analysis. *Pain*, *162*(10), 2472-2485.

Baumgartner, M. (2009). Inferring causal complexity. *Sociological methods & research*, *38*(1), 71-101.

Bell, E. C., Marcus, D. K., & Goodlad, J. K. (2013). Are the parts as good as the whole? A meta-analysis of component treatment studies. *Journal of Consulting and Clinical Psychology*, *81*(4), 722.

Birchwood, M., Todd, P. & Jackson, C. (1998). Early intervention in psychosis: the critical-period hypothesis. *Psychiat*ry *172*(S33), 53–59.

Bjornestad, J., Veseth, M., Davidson, L., Joa, I., Johannessen, J. O., Larsen, T. K., . . . Hegelstad, W. T. V. (2018). Psychotherapy in Psychosis: Experiences of Fully Recovered Service Users. *Frontiers in Psychology, 9,* 1675. doi:10.3389/fpsyg.2018.01675.

Bozarth, J. D. (1997). Empathy from the framework of client-centred theory and the Rogerian hypothesis.

Bradshaw, T., Lovell, K. & Fitzsimmons, M. (2019). Understanding disengagement from early intervention services for psychosis, Perspectives from ex-service users and mental health staff. *Early Intervention in Psychiatry, 6*(0).

Brayton, R. K., Hachtel, G. D., McMullen, C., & Sangiovanni-Vincentelli, A. (1984). *Logic minimization algorithms for VLSI synthesis* (Vol. 2). Springer Science & Business Media.

Bucci, S., Morris, R., Berry, K., Berry, N., Haddock, G., Barrowclough, C., . . . Edge, D. (2018). Early Psychosis Service User Views on Digital Technology: Qualitative Analysis. *JMIR Ment Health, 5*(4), 10091. doi:10.2196/10091.

Byrne, R. E. & Morrison, A. P. (2014a). Young people at risk of psychosis: their subjective experiences of monitoring and cognitive behaviour therapy in the early detection and intervention evaluation 2 trial. *Psychology and Psychotherapy: Theory, Research and Practice*, *87*(3), 357-371.

Byrne, R. E. & Morrison, A. P. (2014b). Service users' priorities and preferences for treatment of psychosis: a user-led Delphi study. *Psychiatric Services*, *65*(9), 1167-1169.

Cadario, E., Stanton, J., Nicholls, P., Crengle, S., Wouldes, T., Gillard, M. & Merry, S. N. (2012). A qualitative investigation of first-episode psychosis in adolescents. *Clinical child psychology and psychiatry*, *17*(1), 81-102.

Cowan, T., Pope, M. A., MacDonald, K., Malla, A., Ferrari, M. & Iyer, S. N. (2020). Engagement in specialized early intervention services for psychosis as an interplay between personal agency and critical structures: A qualitative study. *International Journal of Nursing Studies*, *108*, 103583.

Cowdrey, F. A., Hogg, L. & Chapman, K. (2018). Is there a choice to make? A pilot study investigating attitudes towards treatment in an Early Intervention for Psychosis service. *Mental Health Review Journal*. doi:10.1108/mhrj-09-2017-0038.

Daker-White, G., Hays, R., McSharry, J., Giles, S., Cheraghi-Sohi, S., Rhodes, P., & Sanders, C. (2015). Blame the patient, blame the doctor or blame the system? A meta-synthesis of qualitative studies of patient safety in primary care. *PloS one*, *10*(8), e0128329.

Duşa, A. (2018). *QCA with R: A comprehensive resource*. Springer.

Duşa, A., & Thiem, A. (2015). Enhancing the Minimization of Boolean and Multivalue Output Functions with e QMC. *The Journal of Mathematical Sociology*, *39*(2), 92-108.

Ellett, L. & Kingston, J. (2020). Third-Wave CBT Interventions for Psychosis. In *A Clinical Introduction to Psychosis* (pp. 379-393). Academic Press.

Gaudiano, B. A. (2005). Cognitive behavior therapies for psychotic disorders: Current empirical status and future directions. *Clinical Psychology: Science and Practice*, *12*(1), 33.

Harris, K., Collinson, C. & das Nair, R. (2012). Service-users' experiences of an early intervention in psychosis service: An interpretative phenomenological analysis. *Psychology and Psychotherapy: Theory, Research and Practice*, *85*(4), 456-469. doi:10.1111/j.2044-8341.2011.02043.x.

Howitt, D., & Cramer, D. (2007). *Introduction to research methods in psychology*. Pearson Education.

Hug, S. (2013). Qualitative comparative analysis: How inductive use and measurement error lead to problematic inference. *Political analysis*, *21*(2), 252-265.

Islam, Z., Rabiee, F. & Singh, S. P. (2015). Black and minority ethnic groups' perception and experience of early intervention in psychosis services in the United Kingdom. *Journal of Cross-Cultural Psychology*, *46*(5), 737-753. doi:10.1177/0022022115575737.

Jansen, J. E., Wøldike, P. M., Haahr, U. H. & Simonsen, E. (2015). Service user perspectives on the experience of illness and pathway to care in first-episode psychosis: a qualitative study within the TOP project. *Psychiatric Quarterly*, *86*(1), 83-94. doi:10.1007/s11126-014-9332-4.

Jailobaeva, K., Horn, R., Bah, A. J., Loffreda, G., & Ager, A. (2021). Understanding perceptions of recovery from psychological distress in Sierra Leone through qualitative comparative analysis. *Humanities and Social Sciences Communications*, *8*(1), 1-9.

Jeffreys, H., Jeffreys, B., & Swirles, B. (1999). *Methods of mathematical physics*. Cambridge university press.

Jensen, R. (2021). Exploring causal relationships qualitatively: An empirical illustration of how causal relationships become visible across episodes and contexts. *Journal of Educational Change*, 1-18.

Kazdin, A. E. (2007). Mediators and mechanisms of change in psychotherapy research. *Annu. Rev. Clin. Psychol.*, *3*, 1-27.

Kilbride, M., Byrne, R., Price, J., Wood, L., Barratt, S., Welford, M. & Morrison, A. P. (2013). Exploring service users' perceptions of cognitive behavioural therapy for psychosis: a user led study. *Behavioural and Cognitive Psychotherapy*, *41*(1), 89. doi:10.1017/S1352465812000495.

Lucksted, A., Essock, S. M., Stevenson, J., Mendon, S. J., Nossel, I. R., Goldman, H. H., ... & Dixon, L. B. (2015). Client views of engagement in the RAISE Connection Program for early psychosis recovery. *Psychiatric Services*, *66*(7), 699-704. doi:10.1176/appi.ps.201400475.

MacBeth, A., Gumley, A., Schwannauer, M., & Fisher, R. (2013). Service engagement in first episode psychosis: clinical and premorbid correlates. *The Journal of nervous and mental disease*, *201*(5), 359-364.

Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political analysis*, *14*(3), 227-249.

Mankiewicz, P. D., O’Leary, J. & Collier, O. (2018). That hour served me better than any hour I have ever had before”: Service users’ experiences of CBTp in first episode psychosis. *Counselling Psychology Review*, *33*(2), 5. doi:10.1348/147608306X110148.

Marx, A., Rihoux, B., & Ragin, C. (2014). The origins, development, and application of Qualitative Comparative Analysis: the first 25 years AXELMARX 1 * , BENOIˆTR IHO UX 2 ANDCHARLESRAGIN. European Political Science Review, 6(1), 115–142. https://doi.org/10.1017/S1755773912000318.

McCluskey, E. J. (1956). Minimization of Boolean functions. *The Bell System Technical Journal*, *35*(6), 1417-1444.

McPherson, S., Reese, C., & Wendler, M. C. (2018). Methodology update: Delphi studies. *Nursing research*, *67*(5), 404-410.

Moustakas, C. (1994). *Phenomenological research methods*. Sage publications.

National Health Service. (2019). *Overview: Psychosis.* Available from: https://www.nhs.uk/conditions/psychosis/ [Accessed May 2022].

National Institute of Clinical Excellence. (2014). *Psychosis and schizophrenia in adults: prevention and management* [CG178]. https://www.nice.org.uk/guidance/cg178/chapter/1-Recommendations#first-episode-psychosis-2.

Newton, E., Larkin, M., Melhuish, R., & Wykes, T. (2007). More than just a place to talk: Young people's experiences of group psychological therapy as an early intervention for auditory hallucinations. *Psychology and psychotherapy: Theory, research and practice*, *80*(1), 127-149.

Nilsen, L., Frich, J. C., Friis, S. & Røssberg, J. I. (2014). Patients' and family members' experiences of a psychoeducational family intervention after a first episode psychosis: a qualitative study. *Issues in Mental Health Nursing*, *35*(1), 58-68. doi:10.3109/01612840.2013.837992.

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-based nursing*, *18*(2), 34-35.

Noblit, G. W. & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies* (Vol. 11). Sage.

Oana, I. E., Schneider, C. Q., & Thomann, E. (2021). *Qualitative comparative analysis using R: a beginner's guide*. Cambridge University Press.

O'Brien, A., Fahmy, R., & Singh, S. P. (2009). Disengagement from mental health services. *Social psychiatry and psychiatric epidemiology*, *44*(7), 558-568.

Ragin, C. C. (2000). *Fuzzy-set social science*. University of Chicago Press.

Ragin, C. C. (2006). Set relations in social research: Evaluating their consistency and coverage. *Political analysis*, *14*(3), 291-310.

Ragin, C. C. (2008). Redesigning social inquiry: Fuzzy sets and beyond. Chicago, IL: University of Chicago Press.

R Core Team (2020). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org//.

Reichert, A., & Jacobs, R. (2018). The impact of waiting time on patient outcomes: Evidence from early intervention in psychosis services in England. *Health economics*, *27*(11), 1772-1787.

Rihoux, B., Álamos-Concha, P., Bol, D., Marx, A., & Rezsöhazy, I. (2013). From niche to mainstream method? A comprehensive mapping of QCA applications in journal articles from 1984 to 2011. *Political research quarterly*, 175-184.

Rihoux, B., & Ragin, C. C. (2008). *Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques*. Sage Publications.

Rogers, C. (1957). The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 21(2), 95-103.

Sidis, A., Ramirez, J., Dawson, L., River, J., Buus, N., Singh, R., ... & Deane, F. (2020). Not 'Just a Talking Head': Experiences of Australian public mental health clinicians implementing a dialogical family therapy approach for young people with severe mental health concerns. *Australian and New Zealand Journal of Family Therapy*, *41*(1), 6-28. doi:10.1002/anzf.1407.

QSR International Pty Ltd. (2020) NVivo (released in March2020), https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home.

Quine, W. V. (1952). The problem of simplifying truth functions. *The American mathematical monthly*, *59*(8), 521-531.

Schneider, C. Q., & Wagemann, C. (2012). Set-theoretic methods for the social sciences: A guide to Qualitative Comparative Analysis (QCA). Cambridge:Cambridge University Press.

Sidis, A., Ramirez, J., Dawson, L., River, J., Buus, N., Singh, R., ... & Deane, F. (2020). Not 'Just a Talking Head': Experiences of Australian public mental health clinicians implementing a dialogical family therapy approach for young people with severe mental health concerns. *Australian and New Zealand Journal of Family Therapy*, *41*(1), 6-28. doi:10.1002/anzf.1407.

Stewart, K. D. (2013). Factors contributing to engagement during the initial stages of treatment for psychosis. *Qualitative health research*, *23*(3), 336-347. doi:10.1177/1049732312468337.

Sykes, A. O. (1993). An introduction to regression analysis.

Thiem, A. (2017). Conducting configurational comparative research with qualitative comparative analysis: a hands-on tutorial for applied evaluation scholars and practitioners. *American Journal of Evaluation*, *38*(3), 420-433.

Tindall, R., Simmons, M., Allott, K. & Hamilton, B. (2020). Disengagement processes within an early intervention service for first-episode psychosis: a longitudinal, qualitative, multi-perspective study. *Frontiers in Psychiatry*, *11*, 565. doi:10.3389/fpsyt.2020.00565.

Valentine, S. E., Dixon, L., Borba, C. P., Shtasel, D. L., & Marques, L. (2016). Mental illness stigma and engagement in an implementation trial for cognitive processing therapy at a diverse community health center: a qualitative investigation. *International journal of culture and mental health*, *9*(2), 139-150.

Valentine, L., McEnery, C., O'Sullivan, S., Gleeson, J., Bendall, S. & Alvarez-Jimenez, M. (2020). Young people's experience of a long-term social media–based intervention for first-episode psychosis: Qualitative analysis. *Journal of medical Internet research*, *22*(6), e17570. doi:10.2196/17570.

van Schalkwyk, G. I., Davidson, L. & Srihari, V. (2015). Too late and too little: narratives of treatment disconnect in early psychosis. *Psychiatric Quarterly*, *86*(4), 521-532. doi:10.1007/s11126-015-9348-4.

Vink, M. P., & Van Vliet, O. (2009). Not quite crisp, not yet fuzzy? Assessing the potentials and pitfalls of multi-value QCA. *Field Methods*, *21*(3), 265-289.

Wagemann, C. (2017). Qualitative comparative analysis (QCA) and set theory. In *Oxford Research Encyclopedia of Politics*.

Watson, P., Zhang, J. P., Rizvi, A., Tamaiev, J., Birnbaum, M. L., & Kane, J. (2018). A meta-analysis of factors associated with quality of life in first episode psychosis. *Schizophrenia Research*, *202*, 26-36.

Wenzel, A. (Ed.). (2017). *The sage encyclopedia of abnormal and clinical psychology* (Vol. 1). SAGE Publications.

Wood, L., Burke, E. & Morrison, A. (2015). Individual cognitive behavioural therapy for psychosis (CBTp): a systematic review of qualitative literature. *Behavioural and Cognitive psychotherapy*, *43*(3), 285-297.

Wood, L., Byrne, R., Burke, E., Enache, G., & Morrison, A. P. (2017). The impact of stigma on emotional distress and recovery from psychosis: The mediatory role of internalised shame and self-esteem. *Psychiatry Research*, *255*, 94-100.

# Part 3: Critical Appraisal

The process of writing this substantive piece of work as part of a doctoral level qualification involved many steps, and along the way, several challenges. This critical appraisal explores a number of these elements, including the practical, theoretical, and emotional challenges of completing this research. This includes learning QCA as a methodology for analysing engagement in therapy in first episode psychosis (FEP) and the challenges which arose with conducting a large-scale literature search, learning the unfamiliar methods of QCA as well as how to use the associated software programmes, alongside the emotional challenges of sitting with the uncertainty of being a novice researcher carrying out this research project.

It is hoped that through reflecting on these experience's and sharing the process of this research, this could be of use to future researchers embarking on a similar project.

### *Learning about QCA*

Having previously learnt that research methodologies are either numerical and quantitative or descriptive and qualitive, I was interested to learn about QCA as an approach which bridges the gap between these two approaches (Mahoney & Goertz, 2006). Specifically, it has greater flexible in the way it could be used, to bring together elements of both approaches, rather than having to make a dichotomous choice in the mythology. This facilitates the researcher's ability to make formal comparisons between data with greater power, as in quantitively research, whilst holding onto the complexity and individuality of cases, as in qualitative research (Oana et al., 2021). It struck me as something that would appeal to psychologists interested in studying complex social phenomenon. I was therefore surprised to discover how rarely it has been used in psychological research and felt excited to contribute towards this growing field.

Alongside this excitement, I also experienced some trepidation as I was aware that I was taking on a challenge to learn a methodology which I had never received any formal teaching on. Given the numbers of years of education undertaken to train to become a clinical psychologist, it is interesting that this area of research methods is not included or taught in the curriculum. Through seeking some early support from my supervisor and making contact a psychologist who had used this approach in their doctoral thesis before, I was able to receive early guidance on what to expect with a QCA analysis.

### *Large scale literature searching*

Before being able to start the QCA, I needed to collect the data which would be used in the analysis. This was done through the completion of the meta-synthesis (part 1). For this synthesis to be rigorous, the aim was to capture as many studies and individual experiences of the topic of engagement in psychological therapy in FEP as possible. To do this required a large-scale data search to take place.

Alongside the aim of conducting a rigorous data search, ethical research principles were taken into consideration (Artal & Rubenfeld, 2017).  Over several years, the term 'file drawer' was established to describe how many research studies remain unpublished, especially if they the results were non-significant (Dalton et al., 2012). This resulted in a publication bias, where the literature available publicly is not an accurate representation of the findings of studies conducted on the topic of interest (Banks et al., 2014). To conduct research which took this into consideration and to captured as many individual service user voices as possible, it was decided that grey literature would also be included in the search strategy. Grey literature refers to literature which is not controlled by commercial publishing (Cirkovic, 2018). It has been argued to be an essential resource in scholarly communication, research, policy making and key evidence across multiple disciplines (Cirkovic, 2018).

Once all relevant repositories were considered, it was identified that the search strategy would involve the collection of data from 11 different databases. This transpired to be a time-consuming task, as each database had a different capacity to search for specific terms (for example, some using Boolean operators and some not), as well as a different function for saving search results. For the unpublished 'grey literature' repositories, they often had simplistic search functions, returning a vast number of studies for screening. This resulted in the identification of 4,290 studies for a tittle and abstract screening. Although a necessary and crucial step in the process of the thesis, screening this amount of data was tedious, requiring a high level of concentration to ensure that no studies which matched the inclusion criteria were disregarded by accident. Despite the aim of the strategy being to cast a wide net for data searching, 21/22 of the studies included in the final synthesis were published research studies, with just one unpublished doctoral dissertation. This was something I had not predicted, as I had anticipated there being a greater number of unpublished research on this topic. I had expected there to be unpublished research on this topic conducted through projects such as service-related research projects and doctorate level thesis.

On consideration, there are multiple plausible explanations for why this may be the case. It is possible that much of the unpublished research on this topic is not accessible online and is instead saved on private computers or in libraries in printed copies. Alternately, it is possible that the search terms did not allow me access the studies, or that some educational institutes or places of work do not have online storage for research to be uploaded onto that is accessible through the repositories searched. Although the inclusion of grey literature insured rigour and resulted in the return of one unpublished paper, future researchers would be well advised to consider if they have the time available for this level of data searching, as in the present thesis this process took a substantial proportion of time and yielded a minimal number of studies included in the final synthesis.

### *Unanswered questions*

Once I had screened the data to the final 22 studies for the synthesis, I began to immerse myself in the literature by reading these studies. Only four of the 22 studies were dedicated to the experience of engagement in therapy, whereas 18 studies focused on engagement with mental health services more broadly. This was an interesting discovery, as researchers had more frequently asked a broader question for their researchers than in my project. Although there is inevitable overlap between the reasons why an individual person may not engage with a mental health team compared to psychology specifically, there also differences. In conjunction with the limited number of papers on this topic returned by the grey literature searched, this highlighted the need for further research on this topic.

Having spent many hours reading the studies and immersing myself in the service users' multiple perspectives, I became aware that for some people, the psychological therapy being offered was not in line with their needs. The question being asked about the barriers and facilitators to engagement in psychological therapy in FEP is challenging as it assumes that psychological therapy is the 'answer' to the 'problem' of psychosis.  Although there is undoubtedly a need for therapeutic support for some people experiencing psychosis, for others, the therapy offered was not what they wanted or found helpful. Artaud et al. (2020) identified that some participants 'didn't recognise themselves' in a diagnosis of psychosis and held alternative explanations for their experience's (for example, spirituality). This resulted in some people declining the recommended treatments and seeking support from members of the community who could provide spiritual support.

Alongside this, I was aware that although I was reading about one group of people's experiences of FEP and engaging with mental health services, there was another group of service users who had actively chosen not to participate, who remained absent from this conversation. This left me feeling uncertain about if the question I was asking. I considered the alternatives, that it could be asked what are the needs that service users with FEP have, that are not being met by the current provisions offered. However, for feasibility reasons, this is a hard research questions to answer, beyond asking the question I had previously posed about engagement. I reconciled that although there are elements of the current research question which are not capturing the full cultural, systematic, and individual context, the question being asked was the best that could be done to address this topic with the studies that were available.

This is one area which could be developed in future research, to consider the question of engagement from the perspective of the services being offered and if they match to the needs of service users.

*Creating themes and subthemes*

In the process of synthesising this data, I reanalysed the existing researchers' thematic groupings as well as the individual service users quotes. As I began to analyse the data, it became clear that there was a large quantity of data with many individual components and themes.

When analysing and coding researchers' perspectives on service users quote (second order data) there were instances where I did not interpret the data in the same way as the original author. For example, an original author may have interpreted a service user quote as being about the therapist listening, and I interpreted it as being about them stating that therapy was de-stigmatising. One reason for this difference is that we bring our own perspective to the process of data analysis. Noblet and Hare (1988) stated that a meta-ethnographic synthesis reveals as much about the perspective of the synthesiser as it does the substance of the synthesis. Although I have worked in FEP services, I have no first-hand experience of what it is like to experience psychosis and engage with metal health services for this reason. I am a middle-class white female and will have had experience's which are different to other researchers interpreting the same data. Despite efforts being made to minimize potential bias though secondary authors reviews, the process of a synthesis will always contain elements of bias, due to viewing the world through our own lens of experience. To reduce the potential for bias in this process, I sought support from my supervisors who provided their feedback on these thematic groupings.

Initially I grouped this data by intervention (digital, individual or group), which resulted in substantial overlap as many themes were present across several or all intervention types (for example, emotional distress as a barrier was present in all three intervention types). Given this, it was agreed that the data would be collapsed across all intervention types. An observation of the impact of the large amount of data collected was that the themes ended up as more categorical than descriptive in the meta-ethnography.

### *Unfamiliar QCA concepts and software*

After the data had been synthesised and collected into themes, the QCA journey could begin. This was a challenging aspect of the process, which required familiarity not only with new concepts, theory, and terminology but the software packages required to implement them. As I had not previously used Raayan, Nvivo or the statistical software R before, this was a substantial learning curve. Selecting which software to use involved considering the various advantages and disadvantages of each. Although I have had previous statistical training on the use of SPSS, I had never received any formal teaching on how to use the statistical software program R. Therefore, alongside the research I was having to navigate new interfaces. To do this I used internet resources to facilitate my learning, but at times this was a slow process creating frustration with not having the skills I needed. Although it is beneficial to learnt to use SPSS during psychology training, it would also be helpful for clinical training to offer a broader range of teaching on how to use software beyond SPSS. To use R without any formal training required much persistence and patience. This was something I developed throughout my thesis with the support of my supervisor, resulting in an increase in competent using R.

### *QCA decision making and uncertainty*

A vital decision in QCA was deciding on how the data would be calibrated. In QCA this is something that always requires the researcher to make a choice about, but usually this is grounded in theory already developed within the field (Oana et al., 2021). For the current thesis this was particularly challenging due the limited amount of QCA research conducted in the field of psychology, and none having been previously conducted on this research topic. Given this, I felt a greater sense of responsibility for selecting this process as without a template to work from.

I experienced a range of emotional challenges whilst developing my skills in conducting a QCA. This was in part due to the nature of it being a methodology I was unfamiliar with. Although I felt enthusiastic about the use QCA, this came with a great deal of uncertainty and a feeling of imposter syndrome whilst I attempted to teach myself QCA.  I noticed that with QCA, the more I learnt, the more there was to learn and this went way beyond the scope of my current research project. This required me to have a tolerance for the uncertainty of what I did not know about QCA, to work within the scope of that I needed for this project.

Alongside this, I found the use of language in QCA quite unique, something that made the concepts feel inaccessible initially. Through conducting this thesis and developing my QCA knowledge, I have now become more familiar with the QCA terminology. However, this can be problematic as when writing up this research, QCA terminology can becomes a blind spot, making it inaccessible for readers who have not already working in QCA before.

### *Summary*

Through taking a leap of faith in opting for a QCA as the methodology for this thesis, I hope to have contributed towards this methodology being used in the field of clinical psychology in future research. I feel proud to have brought together the voices and experiences of many service users in the hope that this can be used as a springboard to consider the needs to people experiencing a FEP and prompt further research.

The process of creating this thesis has required perseverance, a tolerance for uncertainty and a lot of energy, but has resulted in a significant personal grown and learning.

# Reference

Artal, R., & Rubenfeld, S. (2017). Ethical issues in research. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *43*, 107-114.

Banks, G. C., Kepes, S., & McDaniel, M. A. (2014). Publication bias: Understanding the myths concerning threats to the advancement of science. *More statistical and methodological myths and urban legends*, 36-64.

Cirkovic, S. (2018). Grey literature–the chameleon of information resources. *Infotheca-Journal For Digital Humanities*, *18*(1), 75-83.

Dalton, D. R., Aguinis, H., Dalton, C. M., Bosco, F. A., & Pierce, C. A. (2012). Revisiting the file drawer problem in meta-analysis: An assessment of published and nonpublished correlation matrices. *Personnel Psychology*, *65*(2), 221-249.

Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political analysis*, *14*(3), 227-249.

Noblit, G. W. & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies* (Vol. 11). Sage.

Oana, I. E., Schneider, C. Q., & Thomann, E. (2021). *Qualitative comparative analysis using R: a beginner's guide*. Cambridge University Press.

**Appendix A** Search terms

**PsychINFO / OvidMEDLINE / OvidEMCARE / OvideEMBASE <July 2021**

((psycho* or cognitive or behavio* or early) adj3 (therap* or treatment* or interven*)) or CBT or psychotherap*or counsel*
AND
((first or recent* or early) adj3 (diagnos* or onset or episode or psychosis* or schizophrenia))
AND
(psychos* or psychotic or schizophreni* or delusion* or hallucination* or voice*)
AND
(((("semi-structured" or semistructured or unstructured or informal or "in-depth" or indepth or "face-to-face" or structured or guide or guides) adj3 (interview* or discussion* or questionnaire*)) or (focus group* or qualitative or ethnograph* or fieldwork or "field work" or "key informant")).ti,ab,id. or exp qualitative research/ or exp interviews/ or exp group discussion/ or qualitative study.md.)
not
"Literature Review".md.

**Web of Science / ProCrest <July 2021**

((psycho* or cognitive or behavio* or early) NEAR/3 (therap* or treatment* or interven*)) or CBT or psychotherap*or counsel*
AND
((first or recent* or early) NEAR/3 (diagnos* or onset or episode or psychosis* or schizophrenia))
AND
(psychos* or psychotic or schizophreni* or delusion* or hallucination* or voice*)
AND
("semi-structured" or "case control" or "case report" or focus group* or qualitative or ethnograph* or fieldwork or "field work" or "key informant" or interview* or questionnaire*)

**WorldCat <July 2021**

psychology or cognitive behavioural therapy AND psychosis
AND
semi-structured or qualitative or interview

**OATD<July 2021**

First episode psychosis
AND
cognitive behavioural therapy OR CBT OR psychology OR therapy
AND
qualitative interviews OR case report

**Google Scholar <July 2021**

First episode psychosis, cognitive behavioural therapy, psychology, qualitative interviews, case report

**EThOS <July 2021**

First episode psychosis, psychology, qualitative

**OPENGrey <July 2021**

Psychosis qualitative

**Base/ Library Hub Discover <July 2021**

psychosis, therapy, qualitative

**OpenDOAR <July 2021**

psychosis, psychology, qualitative OR just schizophrenia

## **Appendix B** first and second order data for barriers

| | Third order subthemes | First order data (service user quotes from primary studies) | Second order quote and themes (developed by primary authors) |
|---|---|---|---|
| **Ambivalence to therapy** | Competing demands (I) | "I'm very busy, so it's hard… to just have a one-hour appointment and go back, it's like two and a half hours of my day that I could have done a lot of stuff [with], and often, Tuesdays after school are really the only time I'm a little bit free, but now I always have an appointment." (Cowan et al. 2020) | Theme: Coming to the service and staying (Cowan et al. 2020) |
| | Not being ready for therapy (I) | 'I don't know if I had cognitive therapy many years ago if it would have helped, as I don't know if I'd be ready you know, but since having CBT I've never looked back.' (Kilbride et al., 2013)<br>They explained what psychosis was… I analysed what they said and compared it with my problem… I told myself that I was not in the psychosis state they were talking about… so… I could stop the medications to see what effect it would have on me.' (Artaud et al., 2020)<br>"There were definitely some cons… even if I wasn't on anything, talking to somebody always makes you feel better….like I said, it was just stupid of me, like I just went back in denial and I started drinking again…. there were no pros and definitely a few cons [to having left]." (Cowan et al. 2020) | Theme: Being ready for CBT (Kilbride et al., 2013)<br>Quote: He wanted to get back to his normal life and not dwell on his psychosis. After his second psychotic episode he joined a second group and explained why he continued in this group: "I think you have to understand that you have an illness." (Nilsen et al., 2014)<br>Theme: Understanding of Diagnosis (Artaud et al., 2020)<br>Quote: This service user's denial seemed to support his self-perception as someone who did not have problems that needed addressing. (Cowan et al. 2020) |
| | Only there for their family's sake (G) | N/A | Quote: Patients participated in the intervention because of their families, or because they were involved in a good healing process… Family members realised that patients often joined the group for the sake of their families. (Nilsen et al., 2014) |
| **Emotional distress** | Digital therapy navigation overwhelming (D) | ' I saw that there was forums and stuff. And I wanted to go and do it, but then I just couldn't navigate it. And I was just like, "Oh, I can't be bothered." (Arnold et al. 2020) | Theme: Overwhelmed by navigation (Arnold et al., 2020) |
| | Emotional triggering to face and share experiences (I+D+G) | 'Depending on how you're feeling, it can be quite triggering… and it kind of makes you fear the reality of this is really how you're feeling. Yeah, it kind of puts it into reality what's there.' (Arnold et al., 2020)<br>There were times when I spoke to [therapist], you know, and it's, you know, I was speaking about things from the past, and you know it brings it all back to you again, and there was times I left the session and you know my mood felt a bit low, but that's just because, you | Theme: You Do Not Want to Dig Too Deep (Arnold et al., 2020)<br>Quote: 'Speaking about mental health difficulties was described as a difficult process which generated uncomfortable emotions. These included anxiety, suspiciousness, fear, frustration and anger.' (Bradshaw et al. 2019)<br>Quote: Anxiety and Tension When participating in a family intervention, patients and family members are supposed to expose their feelings. This can be difficult in the beginning, and the levels of anxiety and tension are described as a journey from insecurity to security by most of the service users. (Nilsen et al., 2014) |

| | | | |
|---|---|---|---|
| | | know bringing sh-t from the past, it’s like a reminder. (Byrne et al., 2014)<br>“I was tired of dealing with my shit. I was tired of the emotional work that I put in coming here. Therapy was amazingly helpful, but I was still crying by the end of it, so it’s still emotional labor. I was just kind of tired of being a patient.” (Cowan et al., 2020)<br>‘ It was hard, it wasn’t easy...to go through things that had happened in the past. Erm...I got upset a lot, so it wasn’t easy but...I knew it had to be done...just to get past it.’ (Kilbride et al., 2013)<br>‘…talking about it really, it was quite difficult, trying to get things across about past memories from school. It was quite difficult talking about that really ….cos it takes me back to a time where I …don’t really wanna remember it and I’d rather forget about, it’s something I had to talk about but didn’t want to talk about. (Mankiewicz et al., 2018)<br>‘‘I was just really nervous and yeah, sussing it out.’ (Sidis et al., 2020) | Quote: Anxiety about meeting together and expressing emotion. Both of the young people interviewed expressed nervousness about the family meetings. (Sidis et al., 2020) |
| | Interpersonal challenges (D+G) | ‘I was really anxious, I um, was very fidgety and I didn’t, I was like, completely uncomfortable because I didn’t want to open up and I knew that it would, it could like, get very nasty between us ... Something that was hard for me, was seeing different family members, like, in a lot of emotion over something you’d like, something you didn’t even mean to do or, not do.’ (Sidis et al., 2020)<br>‘Just that fear if someone messages me, I have a responsibility to talk to them, to support them, to basically just be their secondary psychologist.’ (Valentine et al., 2020) | Quote: Listening to other patients’ problems was sometimes experienced as emotionally difficult…. Feelings of sadness occurred when listening to how the patients were struggling with their lives (Nilsen et al., 2014)<br>Theme: ‘Responsibility to… Basically Just be Their Secondary Psychologist” (Valentine et al., 2020)<br>Theme: Acceptability of Technology in Psychosis and Mental Health (Bucci et al., 2018) |
| | Stigma and fear of judgement (I+D) | ‘If the app is asking you to pull it out every time, you’re in a social situation, it gets embarrassing and that can add to the anxiety you feel in a social situation.’ (Bucci et al., 2018)<br>‘ I guess that wore off on me, made me a bit erm . . . ashamed as well. Maybe I wouldn’t have been as ashamed of it as . . . I am if my parents hadn’t been sort of the instigators of the shame . . .’ Harris et al., 2012)<br>‘And therapy is like a weakness.’ . (Mankiewicz et al., 2018)<br>‘It would just sit there, and no one would respond to it...and then I’d be like “ah ok” I’m just kind of in an echo chamber [laughs]...so embarrassing … [interviewer: how come?] cos like no one would really care. It would just kind of sit there and look weird. It’s like having a | Quote: Service users described their experiences of other people’s judgements about their diagnoses and behaviours and how these initially impacted on their willingness to talk about their experiences. This was interpreted as illustrating a link between the service users’ personal feelings of shame and the judgments made by others. (Harris et al., 2012)<br>Service users also described experiencing social anxiety related to the complex psychological process of posting in the social network. This anxiety is generally related to how others might perceive them and prevented many young people from posting on the platform. For example, Ruby expressed fear of overwhelming others with the content of her posts and wrote and deleted “5 to 10” messages that she ultimately never shared with the group. Babak felt that his thoughts may not be important enough to share (Valentine et al., 2020) |

| | | | |
|---|---|---|---|
| | | spotlight on yourself and everyone just staring at you and it's completely silent. (Valentine et al., 2020) | |
| | Worries about feeling worse (I) | 'I`ve done that before you know had some CBT and I just worried that it would make me feel worse' (Bradshaw et al., 2019)<br>'…opening up about the actual experience itself because I was afraid that it could happen again. Until X put my mind at ease, I think he was actually in the room that time he actually said to me, cos I said to him 'I'm sort of worried it could happen again by talking about it.' (Mankiewicz et al., 2018) | Quote: For some service users the fear was linked to a return of positive symptoms of psychosis and the possibility of relapse (Mankiewicz et al., 2018) |
| **Fluctuating symptoms** | Feeling better so not engaging (I) | 'I think I'm doing a lot better, and I really feel like I'm helping myself, more than anything else.' (Cowan et al., 2020)<br>"It was fine. I was in school, I was working, friends were fine, everything was good. […] It was more like I was really busy and there wasn't enough to say during sessions that warranted me coming in, because everything was basically the same, month to month, I didn't have much to add." (Cowan et al., 2020)<br>"I found [the social group] wasn't for me, that it didn't help. At the beginning it was to help me socialize better, but afterwards I didn't find I liked it. (Cowan et al., 2020) | Quote: For others, the most important actions they took to improve their well-being occurred outside the treatment context. These service users often perceived the depth of their personal commitment to self-improvement as the primary barometer of their engagement, rather than attending appointments and therapeutic activities:<br>(Cowan et al., 2020)<br>Quote: Service users also spoke of choosing to leave particular aspects of the service rather than services as a whole (Cowan et al., 2020) |
| | Psychosis symptoms interfering (I+D) | 'and it's really hard to get motivated to do anything. And that was sort of like the last thing, you know? Like getting up is hard enough. Let alone trying to [use the website]' (Arnold et al., 2020)<br>I personally don't feel comfortable typing any of the answers to any of these things into a website. Because, part of my paranoid thoughts is this feeling like, issues about privacy and technology. And it's just all too much for me to type. (Arnold et al., 2020)<br>I guess I just can't really stand the screen and words get jumbled up and things like that… I wouldn't have been able to make sense of the topics…(Arnold et al., 2020)<br>'somebody's listening my conversation' (Islam et al., 2015)<br>'I think when I used to have the voice in my head, it would be quite difficult because a lot of stuff he would say to me I wouldn't wanna bring it up and I wouldn't wanna talk about it cos then always afterwards he'd come back. So, I think talking about him was really difficult. ' (Mankiewicz et al., 2018) | Quote: Service users spoke about motivation difficulties associated with psychosis and mood difficulties. During periods of low energy and motivation, the efforts of service users were focused on tasks of daily living. As such, anything extra, such as the website, was not a priority or deemed too burdensome to consider (Arnold et al., 2020)<br>Quote: Paranoid thoughts also impacted service users' willingness to engage with the website. A total of 3 service users reported fluctuating levels of suspiciousness toward technology and concerns about the privacy of the information on the web:<br>(Arnold et al., 2020)<br>Quote: In addition, some clients (N=11) described symptoms, delusions, depression, fears, lethargy, and self-consciousness as making engagement difficult. Individual examples included sleeping a lot; being unable to attend cognitively; and feeling disoriented, irritable, or paranoid (Lucksted et al., 2015)<br>Quote: A number of young people identified paranoia, social anxiety, and internalized stigma as experiences that interrupted them from being in the Horyzons space. These types of interruptions generally occurred during the young person's engagement with the platform. (Valentine et al., 2020) |

| | | | |
|---|---|---|---|
| | | ‘I just get really paranoid about like who's behind this and stuff like that…like what are the motives behind this, and stuff like that.’ (Valentine et al., 2020) | |
| | Too cognitively demanding (G+I) | ‘I couldn’t think of the thoughts, I struggled identifying the thoughts, cos I had loads running through my head.’ (Kilbride et al., 2013)<br>‘I think it’s hard to get into them at first [thought diaries] because when you’re stressed out you don’t want to write it down... it kind of passes by and then you remember afterwards’ (Kilbride et al., 2013) | Quote: CBT was considered effortful due to concentration on specific cognitive processes: (Kilbride et al., 2013)<br>Quote: A number of service users found that homework tasks were difficult to complete outside therapy because their ability to undertake them was often dependent on their mood, memory or circumstances (Kilbride et al., 2013)<br>Quote: Family members experienced that they were ready to participate from day one of the illness, but they also realised that the intervention was too exhausting for the patients directly after a psychotic episode. As one family member said, “The patients must be able to concentrate, take some medication, and not be too suspicious about others.” (Nilsen et al., 2014) |
| **Negative expectations** | Expectations of being a passive recipient (I) | ...when I first like you know got told I was gonna have CBT you just expect you get better but it doesn’t, there’s a lot of like, you got a put a lot in yourself to get a lot out really (Kilbride et al., 2013) | Finding that therapy was more demanding than expected was often related to widely-held cultural understandings of psychological therapy, where clients are most often seen as passive recipients of therapists’ professional expertise, rather than as active partners within a more collaborative process (Kilbride et al., 2013) |
| | Consequences for disclosing experiences (I) | ‘I think it was the first time I saw him was that I was scared that if I opened my mouth that I would be locked up… cos you hear about it on TV and they are straight away white jackets the lot.’ (Mankiewicz et al., 2018) | Theme: Fear of consequences.<br>Quote: Many service users discussed their fear of negative consequences resulting from disclosure of their experiences of psychosis (Mankiewicz et al., 2018) |

| | | | |
|---|---|---|---|
| | Limited cultural and spiritual understanding (I) | “Just that . . . we can’t blame them because they’re upbringing is like westernized, they can’t understand if we talk about Jinns . . .” (Islam et al., 2015)<br>We had . . . a Baptismal Service, and, quite a number of the staff came, and one of the service users suddenly spoke in tongues, . . . The result of that was a bit of a shock wave, and his psychiatrist was thinking of upping his medication . . . So of course I was then, able to speak to that particular consultant psychiatrist . . . I acquainted him to the fact that according to, the Christian Scriptures, this was something that was happening in the early Christian days, with all the early Christian leaders in the beginning, and from time to time it happens. So this chap said, this psychiatrist said, “Oh, so I don’t need to up his medication?” I said, “No, . . . this happens.” (Islam et al., 2015) | Theme: Meeting cultural, spiritual, religious, and individual needs. (Islam et al., 2015)<br>Quote: They believed that professionals (i.e., care coordinators and doctors) would not understand their views/perceptions of health and well-being, or the use of traditional remedies for the treatment of distress or illness including psychological and emotional difficulties within a spiritual framework. Concerns were also raised about professionals’ lack of knowledge and understanding of cultural and spiritual needs of their clients (Islam et al., 2015) |
| | No immediate benefits (I+G) | ‘I didn’t feel that much was coming out of my sessions with [a new clinician].’ (Lucksted et al., 2015)<br>‘I didn’t think it was gonna help because the voices were so strong I didn’t think nothing would stop them apart from the medication’ (Mankiewicz et al., 2018)<br>‘Kind off feel like I'm still stuck. And, like, you feel some progress but not very much… (Tindall et al., 2020)<br>“I found [the social group] wasn’t for me, that it didn’t help. At the beginning it was to help me socialize better, but afterwards I didn’t find I liked it. (Cowan et al., 2020)<br>‘I didn’t think it would because I had been dealing with it for so long, …and I felt like I was just so far gone that I felt so closed away that like it wouldn’t do anything.’ (Mankiewicz et al., 2018) | Quote: but a few service users did not see their potential benefits, because they could not see the “immediate benefits.” (Islam et al., 2015)<br>Quote: Conversely, not perceiving effectiveness reduced engagement. (Lucksted et al., 2015)<br>Quote: Several service users discussed their negative impressions of therapy and disclosed their view of CBTp as a weak and ineffective option when compared with alternative methods to aid their recovery ((Mankiewicz et al., 2018)<br>Quote: Patients experienced that they needed the whole intervention period to see progress both in themselves and in others. (Nilsen et al., 2014)<br>Quote: Service users also spoke of choosing to leave particular aspects of the service rather than services as a whole (Cowan et al., 2020)<br>For other service users the chronicity of their experiences was presumed to negatively influence their chance of recovery (Mankiewicz et al., 2018) |
| | Privacy concerns (D) | ‘There’s some things I don’t share with my [clinician] that I don’t want him to know yet and for him to be able to find it in a diary, I want to be able to say ‘actually can we skip that day? It’s a really personal day’(Bucci et al., 2018)<br>‘I would describe my symptoms as not as bad because I wouldn’t want my [clinician] worrying or thinking that the treatment wasn’t working.’ (Bucci et al., 2018) | Quote: other service users said that if they knew that their information was shared with their care team, they might interact differently with the app, for example, by being a “little less honest,” (Bucci et al., 2018)<br>About two-thirds (16/21, 76%) of service users expressed concerns about data protection and information governance.<br>Concerns were expressed about data being linked to outside agencies (eg, commercial search engines, iCloud, and social networking sites) (Bucci et al., 2018) |
| **Physical capacity** | Homeless, no space or time (D+G) | ‘… around late February my living situation changed drastically. And so, yeah, I no longer have the time or space to do it.’ (Arnold et al., 2020) | Theme: Lack of Time, Space, and Resources (Arnold et al., 2020)<br>Quote: A total of 7 service users reported struggling to find time to spend on the website or simply forgot: Time was an important factor. I just didn't have the time that I'd like to spend on it. And, I couldn't get into it as thoroughly as I would have liked (Arnold et al., 2020)<br>Quote: Overall, 5 service users experienced significant psychosocial stressors during their participation period, including periods of homelessness, physical health difficulties, and accidents (Arnold et al., 2020) |

| | | | |
|---|---|---|---|
| | | | Theme: Time (Nilsen et al., 2014)<br>Quote: Participating in a family intervention is demanding. The question of the appropriate time to be introduced to the intervention, and the length of the intervention, was experienced as important for the service users (Nilsen et al., 2014) |
| | No internet, phone or data (D) | ‘ On my phone I only get like 1 GB out of it which runs out quick’ (Bucci et al., 2018) | Quote: For 4 service users, gaining access to the website was also a practical barrier to engagement. Some service users did not have ready access to the internet because of financial limitations or homelessness, and others had limited data on their mobile phones. As the majority of service users had only 1 device available to them, this meant that service users did not have the means to access the website (Arnold et al., 2020)<br>Quote: Practical barriers, such as forgetting to turn on or charge the phone and losing or breaking the phone, could impact engagement with digital tools.<br>Furthermore, the concept of the “digital divide” (inequalities with regard to access to, use of, or provision for information and communication technologies) was noted by some service users who highlighted that some people do not have access to smartphones, thus limiting their ability to access DHIs. Indeed, even service users with access to smartphones stated that poor data allowance would prevent them from using the technology (Bucci et al., 2018) |
| | Seeking practical help with benefits, housing and applications (I) | ‘So like I said I valued the practical support like help with benefits and reapplying for my licence but what I avoided was talking about my feelings’ (Bradshaw et al., 2019) | Difficulties in accessing supports or unclear expectations on what the EIS could provide also led to periods of aimless engagement, as demonstrated by service user group one. The young person and their caregiver identified an urgent need for support with accommodation and finances (Tindall et al., 2020).<br>Lack of stable accommodation and fluctuating income for illness-related reasons were impeding other aspects of recovery, such as reengaging in vocational activities. However, the capacity to influence these specific goals sat outside the clinician's influence, leading to a rupture in the therapeutic relationship and a lack of clear purpose for ongoing engagement (Tindall et al., 2020) |
| **Service Limitations** | Change in clinician (I) | ‘Like, [Clinician 1a], I probably talked more to and let more out, but I can't with [Clinician 1b]. Just cause, I got sort of trust in [first clinician] … Now I can't trust anyone, not even family.’ (Tindall et al., 2020) | Any change in key clinician had marked, negative impacts on service engagement. At the 12month time-point, two young people had experienced changes in key clinicians and three young people had further changes pending. Reasons for this included clinician resignations and junior clinicians stepping into key clinician roles for time-limited periods, as part of graduate training programs. The impact of change in key clinicians was associated with a sense of loss. (Tindall et al., 2020) |
| | Appointment availability and cost (I) | ‘Because I'm starting work and I still want to see a psychologist. I reckon one thing I could change about [EIS] is, not changing but adding, like you guys are open like 2, 3 hours on a Saturday or a Sunday. So, for people that might be busy during the week, they can still have a session’ (Tindall et al., 2020)<br><br>‘ … and I’ve often said, ‘won’t you pay for a psychologist or something’ and they’ve said ‘naa’ … I was probably just lazy and stuff, and it would probably … they thought that if I just got started in a new | A more intense type of disengagement process was experienced when there was a clear change in circumstance. For some service users, this was due to positive reasons, such as returning to work or school. Engagement with the EIS became a second priority that young people would follow through with if it did not impact on their primary priority. Unfortunately, the constraints of the EIS (i.e., only operating during business hours) meant that disengagement often occurred in these circumstances (Tindall et al., 2020) |

| | | | |
|---|---|---|---|
| | | school and got the day structured … then I wouldn't think so much … because then you do something' (Jansen et al., 2015) | |
| **Therapy preference unmet** | Digital content not relevant or unhelpful (D) | 'Either it wasn't relevant or it was stuff I'd sort of thought about previously already. So I didn't feel I needed to go over it again.' (Arnold et al., 2020)<br>'It was just odd, and it didn't feel like it could be genuine because it's not my experience of how people interact with each other in the everyday world, you know?' (Valentine et al., 2020) | Quote: When service users had previously encountered similar material, or they deemed the website irrelevant to their immediate needs, their interest in continuing waned (Arnold et al., 2020)<br>Quote: On one end of the spectrum, Celeste described feeling frustrated and patronized by this approach and described the social network as "mind-numbingly positive." She argued that this type of environment impedes the process of sharing the "bad stuff" that young people living with mental health problems can experience.' (Valentine et al., 2020)<br>Quote: Eugene experienced engaging with the Horyzons platform as incongruous with his sense of self. He considered himself older, more independent, and more advanced in his career than the other members of the platform and as a result, he felt an internalized pressure that he "shouldn't need this." (Valentine et al., 2020) |
| | Medication favoured above therapy (I) | ' I have a science background and I feel I am biased in favour of medication' (Cowdrey et al., 2018) | Quote: Some SUs felt strongly that medication was the best option (Cowdrey et al., 2018) |
| | Self-reliance instead of treatment, own ideas on how to get better (I) | 'I think people may have their own ideas on how to get better as well' (Cowdrey et al., 2018)<br>'. . . they've (EIP service) offered me the psychology, they've offered me support in every area . . . but what they can't do is provide a solution yer see, they can only help, . . . there is no one who can actually provide the solution, other than yourself' (Harris et al., 2012)<br>'So far what they've offered I've just been kind of like I guess I can do it myself.' (Lucksted et al., 2015)<br>I thought it wouldn't help me as much cos I'm used to just talking to my mum and dad about things (Mankiewicz et al., 2018) | Quote: Three SUs indicated that they believed that people can recover without medication and also that individuals may have their own ideas about what will help them (Cowdrey et al., 2018)<br>Quote: His sense of agency was elaborated further, as although service users attributed aspects of their progress to the EIP services actions; they also recognized their own role and the importance of personal responsibility for their future (Harris et al., 2012)<br>Quote: A few clients (N=6) described self-reliance as affecting their engagement. The effect was described in two ways: self-reliance defined as taking responsibility for one's health prompted engagement, but self-reliance defined as striving to solve problems without others' help could discourage it (Lucksted et al., 2015) |
| | Wanting more human connection (D) | 'To be honest, I haven't connected with anyone on the SMART website… Nothing has jumped out at me, and I haven't really gone in there and attempted to make contact… If I had to point to a negative, it would be the fact that it's not social, it's not socially enabled.' (Arnold et al., 2020)<br>'Talking to somebody is very personal. You can get their instant reaction, their emotions and everything. When you're opening up it's crucial that you have somebody there to reassure you. ' (Bucci et al., 2018) | Quote: When service users sought connections with others but did not have this experience as part of using the website, their motivation to continue using aspects of the website, such as the forum or the videos, decreased (Arnold et al., 2020)<br>Some interviewees described the absence of a human quality and lack of emotional reassurance and feedback offered by apps problematic because DHIs provide limited opportunities to connect and interact at an emotional and interpersonal level (Bucci et al., 2018) |

| | | | |
|---|---|---|---|
| | | ‘If you are talking to a machine, you know you’re talking to a machine, so if it tries to pretend it’s a human, even if you’re allowing yourself to go along...you are being degraded in a way’ (Bucci et al., 2018) | |
| | | ‘ I think it would not replace one-to one talking therapy but I think there are aspects of [an intervention] which could be put into an app, which you could access in-between sessions of talking one-to-one with someone’ (Bucci et al., 2018) | Quote: A few service users, however, felt that apps should be used as an adjunct to, rather than a replacement for, direct clinician contact so that DHIs complement rather than replace clinician-supported care (Bucci et al., 2018) |

## **Appendix C** first and second order data for facilitators

| | **Third order subthemes** | **First order data (participant quotes from primary studies)** | **Second order themes (developed by primary authors)** |
|---|---|---|---|
| **Destigmatizing and connecting with peers** | New perspectives and helping others (G) | ‘ It was good because you got to meet people like yourself:: : and that’s it, and you went over your strategies and stuff like that and you could help each other and stuff like that’ (Newton et al., 2007)<br>‘Um, well, um, I talked about um/cos like Mark was saying about how he felt like killing himself, he felt that there was nothing to live for, and I tried to explain to him that you shouldn’t let the voices ruin your life. You shouldn’t let the voices affect your life in a way where you can’t deal with things or go places or have a normal life – just live like everybody else’ (Newton et al., 2007)<br>‘Sometimes they would say something that I didn’t really think about when she [mother] was talking and so it made me think about it in another way, um, and then yeah kind of made me rethink what she meant’ (Sidis et al., 2020)<br>“I felt really calm, relaxed and over the moon because I was able to help someone.” (Valentine et al., 2020) | Theme: Learning from and helping others (Newton et al., 2007)<br>Quote: In addition to this, the role of helping others was expressed by a subset of participants who had reached a point of recovery where they were currently functioning in the community with minimal support. These participants appeared to have developed a more extensive coping repertoire, which they felt could be usefully shared with others (Newton et al., 2007)<br>Quote: The sharing of coping strategies was mentioned by all eight participants. The comments of the young people indicated that, at worst, the group reinforced the use of successful strategies, and at best, taught more effective ways of coping (Newton et al., 2007)<br>Quote: Furthermore, they felt they heard new perspectives on the situation and experienced mutual (Nilsen et al., 2014)<br>Theme: Therapist reflections bringing new perspectives (Sidis et al., 2020)<br>Theme: “I Love Being a Massive Resource for That Sort of Thing” (Valentine et al., 2020)<br>Quote: Many participants described offering support and advice to others based on knowledge gained via their own mental health experiences as an empowering, validating, and, at times, joyful function of the Horyzons platform. (Valentine et al., 2020) |
| | Normalizing, peer support and reduces isolation (G+I+D) | ‘ You've got these people turning up at your front door and they’ve got their health things on round their necks...you might as well be wearing a sign really…whereas everyone uses an app these days innit? It’s normal now. (Bucci et al., 2018)<br>‘it just helped me at the time to feel, felt like I belonged to somewhere…’ (Byrne et al., 2014)<br>‘It’s given me more understanding and knowledge of it. So, I feel like I know a bit more about it, that it’s not just in my head cos I feel like other people have had it’ (Mankiewicz et al., 2018)<br>‘Just that there are more people :: : ofmy age group have this problem. I’m not the only person that’s got this problem, so I don’t have to feel like I’m crazy or anything like that.’ (Newton et al., 2014)<br>‘Going to “group” is very important; it was very important for me. First of all, being able to get an insight about the illness, being able to see people with problems and then, after realizing everything that I’ve got, actually staying in group and trying to help new people and reinforcing in myself the things that I’ve thought are helpful.’ (Steward, 2013)<br>‘Definitely the groups [kept me engaged]. When we used to all just sit around there in a circle, it felt really warm and easy to talk, and I looked forward to it. I looked | Quote: Participants expressed the view that technology has the capacity to be destigmatizing. Smartphones, as opposed to mental health settings, were viewed as inherently normalizing because majority of people use and carry this technology (Bucci et al., 2018)<br>Quote: Interpersonal engagement with research staff was consistently highlighted as a valued element of participants’ involvement with the trial, and in many cases was considered integral to continued engagement with assessment and therapy processes. Many of our participants had experienced social withdrawal or isolation, and EDIE 2 staff may have been the only people with whom they were communicating meaningfully about their mental health concerns, or at all (Byrne et al. 2014)<br>Quote: Many of our participants had worried that they were ‘going mad’, and the normalizing effects of research assistants’ calm, empathic responses to disclosures of unusual psychological experiences were thought to have helped reduce this fear (Byrne et al., 2014)<br>Theme: Normalising (Mankiewicz et al., 2018)<br>Quote: Recognition that participants were not alone with their experiences was described as useful component of psycho-education (Mankiewicz et al., 2018)<br>Theme: Normalizing and destigmatizing (Newton et al., 2007) |

| | | | |
|---|---|---|---|
| | | forward to going there and hearing other people’s stories as well. Sometimes it was comforting, and getting to know some of the other people that went along to the groups and the other groups that were organized as well, and I just felt a lot more positive.’ (Steward, 2013)<br>‘It helped sort of reinforce that some of my experiences and feelings are normal… I’m not a weirdo. ‘ (Valentine et al., 2020) | Quote: Jocasta suggested that meeting other voice-hearers provided a sense of relief. She described the group as enabling her to feel less isolated and lonely (Newton et al., 2007)<br>Quote: The meetings were described as being both hurtful and relieving. Listening to others and knowing that you no longer were alone was important. (Nilsen et al., 2014)<br>Quote: the dynamics of the peer-group culture that participants saw as encouraging engagement included normalizing the experience of the illness, reducing isolation, and increasing an ability to cope (Steward, 2013)<br>Many participants reported that meeting and gaining support from people with similar problems also reduced the negative impact of the illness on social development. For many participants, belonging to a peer group gave them a sense of friendship, an opportunity to talk in a positive and non-judgmental atmosphere, and the chance to experience a collective determination toward recovery (Steward, 2013)<br>The sharing of experiences on the Horyzons platform by group members had a normalizing impact for some participants. (Valentine et al., 2020) |
| | | ‘I was interested in the forums and to see what other people were saying about their experiences with mental health and hearing voices. And to see if there was any similarities with my experience and other people, and to kind of connect’ (Arnold et al., 2020)<br>‘I was talking to people who have similar experiences to myself, so it was quite helpful to understand and see the similarities between cases – which was quite remarkable how similar it was’(Newton et al., 2007)<br>‘Yeah that helped a lot, cos you got to know people who was/who had the same problems as you and you can just/like Jocasta – I have made a friend like/who’s like/who’s been through the same thing as me and she’s just cool with it.’ (Newton et al., 2007)<br>‘We sat laughing and crying, sharing our inner thoughts, we had a strong emotional bond.’ (Nilsen et al., 2014)<br>‘So, I went there, and I would talk, talk about my achievements. I felt proud of myself for doing something. People would encourage me or commend me, yeah. So, it was a nice place to be’ (Valentine et al., 2020)<br>‘It's like… war veterans… where you have all the gatherings of people who have been through wars and they don’t necessarily know each other personally, but they’ve all got that common war experience. And they can relate to each other, and they know what they’ve been through’ (Valentine et al., 2020)<br>‘My story is not as twisted as it is common, shit that happens. I could feel more comfortable sharing knowing that it’s common...’ (Valentine et al., 2020) | Theme: Connecting With Peers (Arnold et al., 2020)<br>Quote: Overall, 5 participants resonated with the experiences of their peers in the videos, or with other users on the forum. For those who did connect with the experiences of others, this shaped their experience of the website into a positive one. For some users, this connection facilitated the ongoing use of the website.<br>Theme: A safe place to talk (Newton et al., 2007)<br>Quote: All eight participants viewed the primary utility of the group as providing a forum in which they could share similar experiences. This was expressed quite concisely and directly in most of the accounts. (Newton et al., 2007)<br>Quote: Our participants appeared to believe that peers with similar difficulties were more able to understand and empathize with their difficulties, and therefore more able to provide them with meaningful support (Newton et al., 2007)<br>Quote: Jocasta said that although she did not learn any new coping strategies, she was not disappointed because she ‘got to meet people like me’ (Newton et al., 2007)<br>Quote: The ability to be involved emotionally and to connect with others in the same situation emerged as important in order to both support others and be supported during the intervention.<br>Quote: The ability to be involved emotionally and to connect with others in the same situation emerged as important in order to both support others and be supported during the intervention. Some referred to this as sharing a “common fate” and a “mutual comfort.” (Nilsen et al., 2014)<br>Theme: Emotional Involvement and Connecting with Others (Nilsen et al., 2014) |

| | | | |
|---|---|---|---|
| | | ‘hereas I guess with traditional social media you don’t just go up to random people and say “hey I’ve got this thing, do you want to talk about it?” whereas on Horyzons it was sort of specially crafted for that sort of thing, so it was a lot easier to approach people and sort of form bonds and stuff. (Valentine et al., 2020)<br>‘I connected to them a lot more easier than I would with others… I felt like I was in a more calm relaxed space connecting with them than other people that I meet at Uni… Like they were more open, non-judgemental... I felt relaxed…Yeah I felt really relaxed.’ (Valentine et al., 2020)<br>They don't really know unless [they’ve] experienced it. [Abigail] Like peer support really is helpful for me in particular, just cos like, I kinda find it more difficult to open up to someone that doesn’t really fully get the picture, even if they’re like a completely trained professional’ (Valentine et al., 2020) | Themes: “Don’t Necessarily Know Each Other Personally” But a Connection Through Shared Experience. ‘“A Barrier That’s Automatically Broken Down”  ‘I Just Felt Like Relieved That I Wasn't The Only One’ “Don‘t Really Know Unless You’ve Experienced It”<br>(Valentine et al., 2020)<br>Quote: For some, sharing their personal stories with the group was a therapeutic activity in itself. The act of sharing supported the young person to unpack and reflect on their mental health experiences. Many participants described a greater sense of ease on the platform between peers than in other social spaces, both on the web and offline<br>(Valentine et al., 2020) |
| **Accessibility of digital therapy** | Digital therapy helps share information with clinicians (D) | ‘For me personally, I’d rather talk online. You know, if people aren’t going to talk to someone [face-to-face] then with an app they can still deal with their problems.’ (Bucci et al., 2018)<br>‘It’s easier for me to type than speak cos I was brought up with computers.’ (Bucci et al., 2018)<br>‘I think there’s one side of it that could really work which is kind of like the exercises...it could talk you through them, and actually not being in front of a person, you might do them more truthfully.’ (Bucci et al., 2018) | Quote: Some younger participants identified that because they have grown up with technology, they find digital means of communication easier than face-to-face methods (Bucci et al., 2018)<br>Quote: Some participants said that they would feel much more comfortable using an app to support their mental health problems rather than talking to a member of their care team. On the whole, participants thought that reporting risk to their care teams would be advantageous and potentially life-saving, leading to better focused care.<br>(Bucci et al., 2018) |
| | Flexibility, ownership and control (D) | ‘ I do think that [technology] is really good cause it’s going to be accessible to people that will need the help. Some people don’t always want to speak outwards. It would be much easier on an app where I could take it with me anywhere at anytime and open it up and record how I am doing....’ (Bucci et al., 2018)<br>It’s not like a GP [general practioner] where you’ve gotta go up the road and then speak to him. [using technology] You can easily sit in your own home and read through the app...when I’m going to a GP...I’m silent.’ (Bucci et al., 2018)<br>‘I think it would cut down on time that people will have to wait to see a health professional...some people wouldn’t need to see a professional face-to-face, they might just be able to deal with their issues via the app’ (Bucci et al., 2018)<br>‘If you are someone that’s awake all night and you sleep all day or you struggle to leave the house then you’re going to struggle with face-to-face’ (Bucci et al., 2018) | Quote: Technology was viewed as a good way of accessing help and support when needed because participants reported often feeling restricted by traditional face-to-face service provision (Bucci et al., 2018)<br>Quote: In many instances, participants expressed the view that apps could overcome barriers to traditional service set-up and, in particular, increase access to treatment and services because the use of technology does not depend on workers being available at specific times. Participants’ accounts suggested that technology could extend the reach of service delivery, circumventing resource limitations and reducing waiting time (Bucci et al., 2018)<br>Quote: Furthermore, a few participants (n=6) commented on the fact that secondary or related symptoms of psychosis (eg, sleep problems and social withdrawal) or negative beliefs about technology itself causing harm can make it difficult to attend traditional clinic’ (Bucci et al., 2018) |
| | | ‘Having the prompts all the time like the emails was really good, because it sort of made me think, “Oh, you know, I should jump on and have a look and see if there's | Quote: The majority of participants (n=15) reported finding the system-automated or support emails particularly helpful for the ongoing use of the website (Arnold et al., 2020) |

| | | | |
|---|---|---|---|
| | | anything that I can find that might help me stay positive and keep my mental health going well while I'm sick' (Arnold et al., 2020)<br>'I knew that [the web-based therapist] would be responsive no matter what I said. So, it kind of made me look forward to those email and sign back on to the website. It was like a hook' (Arnold et al., 2020)<br>I've already had CBT [cognitive behavior therapy]...I think I would have been more successful with it if I had something like this because there's lots of elements of it [CBT] where you're supposed to be keeping diaries of your moods and if you're low...If there's nothing to prompt you other than yourself, it's very hard to motivate yourself and then you might find yourself coming to your weekly appointment realizing you haven't bothered to fill in any of this stuff out for the last 4 days and just trying to make it up on the spot (Bucci et al., 2018) | Quote: Additionally, the support emails from the web-based therapist served as an incentive for some participants to persist with the website. They not only reminded participants about the website but also made individuals interested in returning to the website and more invested in using the resource (Arnold et al., 2020) |
| | Technology use is modern progressive and upbeat (D) | 'I'm very good on computers so it's easier for me to type than it is for me to speak to someone. People these days are quite up on apps and stuff...' (Bucci et al., 2018) | Quote: Nearly half of the participants (10/21, 48%) held the view that technology is progressive, modern, and relevant and that mental health apps reflect a good way of "moving with the times," which is more in keeping with how young people communicate on a daily basis.' (Bucci et al., 2018) |
| | | 'You know, go on Instagram-... type in eating disorder, you got a whole world there. You know? You can type in depression; you've got a whole world of people struggling. And it's a good and a bad thing. So, it's good as in they can connect with other people. But, it's bad as in you get triggered constantly. Rather than that, Horyzons was, "Yeah, we're all struggling... but this is a place for improvement.' (Valentine et al., 2020) | Quote: Audrey identified the "positive" environment on Horyzons as an important element of her high usage level. She did not want to spend time at a place where "the people are all negative."<br>Olivia's experience was similar to Celeste's in that she experienced the "upbeat" nature of the platform as different from that of commercial social network sites (SNS). However, she also identified that although it was positive for people with mental health difficulties to connect with others in certain mental health pockets of social media, such as "Instagram," certain relationships and dynamics that are borne from these unregulated digital spaces can have negative impacts on the young people who frequent them (Valentine et al., 2020) |
| **Belief that therapy will help and early benefits** | Feeling worse and thinking therapy will help (I) | 'My symptoms got a lot worse and I couldn't ignore them anymore, and I started missing my therapy sessions and I started emotionally missing them… okay, I think I'm done running away from this. I clearly was there for a reason, and I clearly need more help, and I think this has – this has gone on long enough.' (Cowan et al., 2020)<br>"Really, really I didn't want to get involved with the program, but I knew it was going to better me so I had no choice but to go to the program." (Lucksted et al., 2015) | Quote: At the same time, self-concern regarding symptoms and functioning led some interviewees (N=10) to want services, highlighting that distress can facilitate engagement (Lucksted et al., 2015) |
| | | 'A lot of thoughts were coming into my mind and it would drive me stir crazy and I hoped that when I went to therapy he could give me, give me some cognitive behavioural therapy in ways that I can learn to cope.' (Mankiewicz et al., 2018) | Quote: Participants hoped to gain valuable skills during therapy to support them with their experiences of psychosis (Mankiewicz et al., 2018) |

| | | | |
|---|---|---|---|
| | | ‘Talking to someone, explaining your thoughts, like what you should do about them, like when to, when to know if something’s wrong and what to do.’ (Mankiewicz et al., 2018) | |
| | Help with symptom reduction and daily routine (I) | ‘When I got to say what was going on, things opened up, in a way. I feel that this is what helped me the most. I think that one ofthe things with having stuff like this going on is that you have to talk it through many times, and then it will sort of encapsulate within a kind of understanding. It is also important to be challenged when you talk about stuff that is really weird. It can help putting things into perspective. Things may not be how you think they are.’ (Bjornestad et al., 2018)<br>‘even if I do hear voices, I know that it’s not actually people talking, I know its actually just going off in my own brain . . . I’m able to, to think, I can challenge it myself . . . . . . Jane (EIP Psychologist) helped with that as well . . . . . . when I do hear the voices, I go straight to my list that I got off Jane and it works . . .’ (Harris et al., 2012)<br>“I want to keep coming because it just helps me. It’s as simple as that.”“After a while I got to realize how the program was working for me . . . so that’s when I really got into it.” Some cited specifics, such as, “I feel a lot healthier.”“[The program is] help[ing] me to feel okay with who I am right now.”“[I’m] not feeling constantly anxious.”“[I’m] realiz[ing] that I don’t really need [smoking marijuana] to keep on.” (Lucksted et al., 2015) | Quote: Suggestions aimed at daily structures, such as sleep habits, were often seen as particularly useful. Early reduction of frightening positive symptoms, such as negative voices, was seen as crucial to alleviate pain, and obtain a feeling of mastery. Together with their therapist many participants developed specific strategies to handle positive symptoms. These were assessed as particularly helpful when they contained both a detailed description of the individual symptom phenomenology, i.e., who the voices belonged to, and context, i.e., voices occurred when they were alone in bed. Being reassured that they already had been handling their positive symptoms gave patients a boost in self-confidence, reduced anxiety and helped them (in their experience) prevent new episodes. (Bjornestad et al., 2018)<br>Quote: Other participants described a sense of active control over their experiences, which was supported by the EIP service (Harris et al., 2012)<br>Quote: Many of the 32 interviewees (N=18) described positive results as engaging (Lucksted et al., 2015)<br>Quote: These first treatment steps often gave rise to a feeling of safety and hope. Success at this stage was seen as crucial for future treatment adherence (Bjornestad et al., 2018). |
| | Awareness of support and gaining independence (G) | ‘I guess, good to hear what they [family members] thought was going on, and their opinions of things and um, yeah they made me more aware of that support I did have’ (Sidis et al., 2020)<br>‘I feel like, if it made me realise something, it was that people were trying to understand me and trying to help at some level, even though like that’s what I couldn’t see before, that’s why I wouldn’t talk to people.’ (Sidis et al., 2020) | Quote: Another important element of this subtheme was the experience of becoming more aware of the support in the network (Sidis et al., 2020) |
| | | ‘I think really what it is about is finding something meaningful to get out of bed for. Talking to people, talk to a psychologist and get some advice to bring along. Pulling out those pieces of advice when you sit there, alone, feeling down. Use them’ (Bjornestad et al., 2018)<br>‘That’s the thing. I have become more open after therapy. I have talked to other people. Told at work what was going on, to the project manager and manager. Everything should be focused on functioning in society, not on functioning well in the psychiatric ward’ (Bjornestad et al., 2018)<br>‘I’m already used to the program, I just got to openmyselfup I guess. . . . It’s just if I want to do [that] or not’ (Lucksted et al., 2015) | Quote: Being psychotic was, for most participants, incompatible with regarding oneself as a full citizen. This perception engendered a sense of hopelessness. In order to recover, participants saw it as crucial to break the pattern of passivity and what they perceived as being excluded from the community. Recovery, to them, related to creating a meaningful place in society. Here, the therapist role was described as a regulating supporter and a consultant; one that could be consulted when needed, but should stay in the background during periods of greater drive, self-esteem and independence (Bjornestad et al., 2018)<br>Quote: Interviewees described information, reassurance, patience, and focus on getting help with personal life goals as helpful in overcoming ambivalence. Some acknowledged a conscious decision’ (Lucksted et al., 2015) |

|  |  |  |  |
|---|---|---|---|
|  |  |  |  |
|  |  | ‘I’d walk outside the building and there was like a weight that had been lifted… it was a good feeling to walk out the building and you’ve just spoke for an hour and that hour served me better than any hour I have ever had before’ (Mankiewicz et al., 2018)<br>‘When you’re talking about it you don’t realise how much weight it lifts off your shoulders… get an hour or so after where you’re thinking about it and then you get a massive sigh of relief, like oh I’ve got through it, and that you’ve spoke about it, and you feel a lot better afterwards’ (Mankiewicz et al., 2018) | Theme: Sense of relief (Mankiewicz et al., 2018)<br>Quote: A number of participants reported feeling unburdened following their hour of therapy, which they appeared to value highly (Mankiewicz et al., 2018) |
|  | To gain a new perspective (I) | ‘I thought that maybe if I spoke through certain things I could gain like a different perspective, I could gain like an outsider looking in they could come in with like a fresh pair of eyes and see things differently. Cos sometimes when you’re in a situation you’re not always thinking clearly so I thought maybe a fresh pair of eyes would sort of give me a better understanding of the way things were working, why I agreed to do it. Cos, I thought you know, someone else’s opinion might help me out with it.’ (Mankiewicz et al., 2018)<br>‘By talking about it really and getting someone else’s point of view… cos you’re not seeing it from your family’s point of view, you’re seeing it from an outsider’s point of view’ (Mankiewicz et al., 2018) | Quote: Many participants discussed their positive expecta- tions of CBTp prior to beginning therapy and viewed of the role of CBTp as a route to obtaining an alternative perspective of their experiences through the process of talking (Mankiewicz et al., 2018) |
| **Service Factors** | Easy to access and arrange appointment (I) | N/A | Quote: How nearby, easy to get to, safe-feeling, and pleasant the program location was affected the ease with which interviewees were able to engage.<br>Similarly, transportation was described as either facilitating or impeding engagement, depending on how stressful, affordable, safe, and convenient it was for each person (Lucksted et al., 2015) |
|  |  | N/A | Quote: Participants most often characterized staff members’ informal approach in terms of their use of ‘everyday’ language (rather than psychiatric terminology), non-catastrophic reactions to disclosures of unusual psychological experiences, and a flexible, collaborative approach to making practical arrangements for meeting (Byrne et al., 2014) |

| | | | |
|---|---|---|---|
| | | | Quote: Clients((N=17) also perceived staff and program flexibility, especially regarding appointment times, locations, and late arrival, as embodying respect and as facilitating rapport and trust (Lucksted et al., 2015) |
| | Small group size and session predictability (G) | “After a while the group was reduced to only two patients and those still participating became more talkative.” (Nilsen et al., 2014)<br>‘When having a bad day I often felt that the structure slipped. I talked too much and used up too much time, and I would have liked to be stopped. The group leaders could have summarised my talking.’ (Nilsen et al., 2014) | Quote: The size of the group also is a matter for consideration, with participants reporting that having fewer patients in the group created less anxiety (Nilsen et al., 2014)<br>Theme: Predictability (Nilsen et al., 2014)<br>Quote: Every meeting had a time frame and a structure to be fol- lowed. When patients were having a bad day with symptoms, this predictability was important for them and when the structure slipped it was experienced as tiring. One of the patients described how she felt when the meeting lasted ten minutes longer than expected: “It was exhausting when the meeting lasted much longer than agreed.” Some became more talkative when having a bad day and felt responsible for taking up too much time (Nilsen et al., 2014) |
| | Staff continuity and impartiality (I) | ‘I saw [Research Assistant1] and [RA2] to start with and then, that was the first session, and then I just saw [RA2] the rest of the time and you do build up a little bit of a relationship with themand I think that is good because you feel, you feel more reassured seeing the same person because you feel they understand you and they have got to knowyou and them...when I first met her I could not stop crying because I felt so weird, talking about it was really difficult whereas towards the end it was a lot easier’ (Byrne et al., 2014) | Quote: In this context, staff continuity was important for most participants, and in some cases was considered crucial in helping participants to maintain engagement and openness (Byrne et al., 2014)<br>Quote: Of the nine case-studies, six young people and most caregivers specifically discussed the importance of consistency. The therapeutic relationship between all parties deepened over time and was unanimously described to be the main positive influencer of engagement (Tindall et al., 2020) |
| | | ‘When you talk to family members or friends, they can’t understand... they will do their best to but unless they’ve obviously suffered mental health they can’t understand it. With X it’s his profession to understand people with problems, mentally, it’s refreshing’ (Mankiewicz et al., 2018)<br>Just talking about what I’m going through. It’d be even worse if I was going through it alone. I don’t hold anything back when I come to therapy. I tell them everything that I’m experiencing; some of it is embarrassing, some of it is degrading, but I tell them everything just to get their perspective from another human, an intelligent human who knows what, has the training, and all that is helpful (van Schalkwyk et al., 2015) | Theme: Helpful talking to a professional (Mankiewicz et al., 2018)<br>Quote: Many participants compared the positive benefits of talking to a professional who can understand their experiences, to less helpful options [friends or family who don’t understand] (Mankiewicz et al., 2018) |
| **Therapists interpersonal approach and skills** | Warmth, trust and support (I) | ‘I felt he had a caring way about him. . . With looks, body language, with what he said. . . He showed that he was present. It was not like a distant look or “let us just get this over with, with her, give her a prescription or something.” It seemed to me that he was really into his job, that he enjoyed his job. There was, like, contact with the eyes and. . . I understand that you are having a hard time, I want to help. . .’ (Bjornestad et al., 2018) | Quote: they saw it as crucial that their therapist had a warm and respectful style, and that he or she had specific suggestions and advice how to handle specific issues. For instance, suggestions about how to handle the expectations of others (Bjornestad et al., 2018)<br>Theme: Warm respect.<br>(Lucksted et al., 2015) |

| | | | |
|---|---|---|---|
| | | ‘It was not like you was in a study, it was like you was sitting in your living room having a conversation with a friend and have a brew with you or whatever, so, without being a friend they was as close to it, you know for a while, and like [therapist] came and visited me when I was in hospital and stufflike that, so, it just helped me at the time to feel, felt like I belonged to somewhere…even if it is just one person who cares you know it gives you something to fight for’ (Byrne et al., 2014)<br>‘They were there for me. . . . If it was just another program I wouldn’t have honestly cared, I would have just disappeared. . . . But . . . they put the time and effort into trying to help me [and] all they ask from me is just to be better . . . to see how I feel. ...SoIdid understand, like I really do got to shape it up and come in.’ (Lucksted et al., 2015)<br>‘They are very kind people and very inviting, very caring, very genuine, very—like soft— spoken . . . . Just their demeanor that made me feel comfortable and their intentions. Their intentions were pure, they really wanted to help me.” (Lucksted et al., 2015)<br>‘It may be this, being allowed to be exactly who you are and that there is somebody who understands you and knows your story and has backed you. . ..’ (Bjornestad et al., 2018)<br>‘I started trusting her, and she was good at asking the right questions and pull things out of me, ask me kind of these a bit scary questions.’ (Bjornestad et al., 2018)<br>‘I hadn’t had a shower in 3 weeks. She never went into that. But then she has been “on me” as soon as I start pulling myself up, being very supportive about the choices I make. Really nurtured what was healthy. If I said that I feel so depressed, she has said “well, are you, really? Isn’t that a completely natural reaction, being sad, with what you are having to deal with?” She treats me according to how sick I am. It is she who is dynamic according to where I’m at.’ (Bjornestad et al., 2018)<br>It was helpful with the trail of questions like, like I said, like the yes or no criteria about what you were experiencing, feeling, and, then again it was getting that realization out and, stepping into normality a bit, you know, which, constantly being asked about how you feel, like that, with somebody who is really supportive at the same time, it does help.’ (Byrne et al., 2014) | Quote: The Connection Program model emphasizes staff warmth and respect for clients. Interviewees (N=28) described a staff combination of friendliness, interest, patience, and sincerity as very important to their engagement (Lucksted et al., 2015)<br>Quote: The majority of participants identified that successful engagement was attributable to relationships in which clinicians taught them about the illness, guided them through treatment, identified and supported their personal strengths, and instilled an optimistic view of the future. They described these clinicians as genuine, unconditionally accepting, and comfortable with personal closeness (Stewart, 2013)<br>Quote: A majority of participants described their relationship to a therapist as being central to their treatment. They described this relationship as a source of social engagement and support, as allowing for an honest discussion of personal difficulties, and, at times, as a source of wellinformed advice (van Schalkwyk et al., 2015)<br>Quote: They valued when the therapist offered unconditional acceptance and genuine closeness. This built trust and helped reduce stress, but also made it easier to address what was difficult. To many, the therapist was seen as a companion: a person they could trust, and to whom they could confide their deepest secrets, including psychotic content and traumatic experiences, which they found shameful.<br>(Bjornestad et al., 2018)<br>Putting Psychosis in Brackets and Cultivate All That Is Healthy (Bjornestad et al., 2018)<br>Many participants appreciated it when their therapist actively reinforced progression and adaptive behavior while at the same time giving less attention to problematic behavior.<br>(Bjornestad et al., 2018)<br>Theme: The importance of personal engagement and trust.<br>(Kilbride et al., 2013)<br>Quote: The theme of interpersonal engagement emerged as a common element in clients’ discussions of valued experiences of CBT, with five of nine clients making specific reference to trust and personal comfort being central to their ability to engage with therapy (Kilbride et al., 2013)<br>Quote: The therapeutic alliance was the second major theme and appeared central to recovery for most participants, who discussed the trusting and impartial qualities of the therapist. Other partici- pants identified the importance of trust in the therapist to facilitate open and honest conversation (Mankiewicz et al., 2018)<br>Quote: Issues related to trust, openness, and confidentiality emerged when participants were asked about their experiences during the process of beginning the intervention and about changes that occurred throughout the intervention (Nilsen et al., 2014) |

| | | | |
|---|---|---|---|
| | | 'If you don't trust them you aren't gonna tell them what you've been through and you aren't going to go into depth with people' (Kilbride et al., 2013)<br>'I think it's just having someone there really...that you can trust and that...that knows what's going on and understands' (Kilbride et al., 2013)<br>'He was like the only person that I really trusted, so I could talk about absolutely anything, um.. we could discuss it together and sort of, sort it out… He was really the only person I felt like I could tell anything that's going on' (Mankiewicz et al., 2018) | |
| | A safe and empowering place to talk (G+I) | 'Because if you talk to someone they don't know what it's all about, so...Like people take the mickey around my area, so… Other people find it weird.' (Newton et al., 2007)<br>'Even though I was uncomfortable, I felt like it was a more comfortable situation, because, um, basically, it's just us, but with people helping us understand what we are saying, it felt more casual because I felt like I could say what I wanted to say ... probably the best thing that I would see about this is that. It encourages conversations about what we really mean to say and what we are really feeling' (Sidis et al., 2020) 'After they [clinicians] left I would, basically me and mum would just talk about, like we'd go over how we were miscommunicating. What we could do better, to communicate and also how we could not step on each other's toes, so to speak' (Sidis et al., 2020)<br>'I think we're closer than before, so it helped, I guess my initial reaction is always to shut down, when she [mother] asks me things but I'm trying to be more open'(Sidis et al., 2020)<br>'I never really talk to my brothers about anything um, so yeah it was like it created more, like a connection with them that I didn't really have'<br>(Sidis et al., 2020)<br>'He took me seriously' (Bjornestad et al., 2018)<br>'She saw me and listened. She didn't disregard my reality or my feelings. She stuck with me.' (Stewart, 2013)<br>Interviewer: You spoke a bit about things are better with [new clinician], so what was helpful? Participant 3: Well, she really listens to you when you talk. She really understands what you're going through. And she doesn't miss things. She pays attention to the details of what you're saying…' (van Schalkwyk et al., 2015) | Quote: Although stigma is not explicitly mentioned in any of the transcripts, it is implicit within the young people's need for understanding and safety. The participants clearly discriminated between safe people (such as close family members, friends and nursing staff) and unsafe people (for example neighbours, people at college or potential employers) in terms of disclosing their experiences of auditory hallucinations (Newton et al., 2007)<br>Quote: However, the group leaders' ability to ask the right questions made the situation feel more secure. Family members described the meetings as a safe place with much humour. The patients' determination to be open made it possible to bring in themes that were difficult to talk about at home. Others found it useful at an early stage of the illness when families were not able to talk openly with each other (Nilsen et al., 2014)<br>Quote: Valuing 'opening up' and learning how to talk to each other—Family members expressed an appreciation for being able to speak to and hear from one another about things that felt important to them. (Sidis et al., 2020)<br>Quote: They cited experiences in which staff "take my opinion seriously" (Lucksted et al., 2015)<br>Clinicians who influenced engagement shared a rational understanding of problems and reflected a commitment to finding solutions. The participants' ideas and insights were utilized in treatment, and the natural potential of each young person unfolded through support and guidance. They adopted a humanistic, client-centered approach to treatment that focused on the patient as a person rather than the illness (Stewart, 2013) |
| | Flexibility and collaboration (G) | 'Yeah, they were all right, yeah…I mean, I could see what helped me and what didn't…What made the voices, what made me stop hearing voices, and what didn't stop me from hearing voices [:::]. So now I can see why playing football, watching TV, going out, helps, but if I just sit alone and keep listening to my voices its not going to help'(Newton et al., 2007) | Theme: The role of the facilitators<br>(Newton et al., 2007)<br><br>Quote: Within the group, participants were positioned by the facilitators as experts in voices. This enabled the young people to use their expertise to help each other, and to |

|  |  |  |  |
|---|---|---|---|
|  |  | ‘[The facilitators] made us all get our voice heard and stuff like that, made us all feel important [:: :]. Interviewer: Why do you think you needed help with that?<br>Participant: Cos some people just talk over other people, cos they don’t know any better but the leaders will help.’<br>(Newton et al., 2007)<br>I think it’s definitely got to be a mixture of the staff, and the pivotal point will be the staff and then the staff attract people. Like, the patients attract the other people, and so you have the combined pulling of the staff and patients who engage other patients, who will stick around [stay in treatment] because the staff are so great as people. There’s some form of stimulus and entertainment and fun. Definitely “group”; without the groups you wouldn’t have the social dynamic. You probably wouldn’t be able to get to know the staff as well as the other patients without group’ (Stewart, 2013)<br>‘ It was very much a partnership between myself and the psychologist, it was really put to me as team work, which I thought was great. It wasn’t that someone else has an agenda...it was centred around me which I’d not come across before in anything really in medicine or psychiatry’ (Kilbride et al., 2013)<br>‘..she puts an agenda down what we need to go through but she’ll also ask if there’s anything that I need to...if anything’s been difficult that I want to talk through or if there’s anything else I want to talk about’ (Kilbride et al., 2013)<br>‘...if something wasn’t so much of a problem later on we could reduce that, if something else came up we could add that in to the plan’ (Kilbride et al., 2013)<br>‘.if something wasn’t so much of a problem later on we could reduce that, if something else came up we could add that in to the plan’ (Kilbride et al., 2013) | share their experiences. For some participants, this meant taking up the helping role, but for most participants, this meant sharing their coping strategies with others. The facilitators’ role was not only to enable the sharing of experiences and coping strategies, but also to employ their psychotherapeutic skills to bring about positive change. The facilitators’ questions guided XXX towards seeing what useful coping strategies he could employ (e.g. ‘playing football’ and ‘watching TV’), and what behaviours exacerbated the distress caused by auditory hallucinations (e.g. ‘sitting at home and listening to the voices’).<br>The third subtheme relates to the facilitators’ role in managing the group. Several participants discussed the role of the facilitators in encouraging turn-taking, allowing quieter group members to be heard, and preventing those with a tendency to speak continuously from dominating conversations. They felt that the way that the therapists had facilitated the group not only gave everyone the chance to speak but had a positive impact on the participants’ self-esteem by making them feel better about themselves (Newton et al., 2007)<br>Quote: The “joining in” period was experienced as important for pa- tients’ ability to build a good and mutual relation with the group leaders. Group leaders who were described as open-minded and honest, and who disclosed issues from their own lives and were supportive while also being able to disagree with participants, were seen as more trustworthy than those who were not described this way. All participants emphasised the importance they attached to talking to group leaders by themselves. (Nilsen et al., 2014)<br>Family members described the group leaders as dedicated to the intervention, involved in the participants’ daily life, and doing much more than expected: “They [group leaders] had a passion for the intervention.” This allowed patients to talk about their struggles in an open way, in contrast to how they did at home. (Nilsen et al., 2014)<br>Theme: Valuing collaboration and openness (Sidis et al., 2020)<br>Quote: This theme incorporates experiences that families described as valuable; three subthemes were: valuing transparency, experiences of collaboration, and helping the family speak about what they wanted to speak about (Sidis et al., 2020)<br>Quote: The mixture of staff and peer relationships synergized a social dynamic that encouraged young people to stay in treatment: (Stewart, 2013)<br>Quote:  Partnership and collaboration in CBT emerged as a valued aspect of engagement. The concept of partnership in particular was identified as a respectful recognition of participants’ personal worth as individuals capable of contributing meaningfully to the therapy process (Kilbride et al., 2013)<br>Theme: Sharing control with clients (Kilbride et al., 2013)<br>Most participants highlighted shared control of therapy as an integral part of their experience, and identified individualized, client-led agenda-setting in particular, as important (Kilbride et al., 2013) |

| | | | |
|---|---|---|---|
| | | | Flexibility was highlighted as an important attribute of therapy that improved participants' ability to remain engaged. Flexibility was most often discussed as an attribute of the perceived control (Kilbride et al., 2013)<br>Flexibility within therapy also meant being allowed to re-evaluate their difficulties and to determine their own priorities for therapy (Kilbride et al., 2013) |
| | Feeling listened to and taken seriously (I) | 'He took me seriously' (Bjornestad et al., 2018)<br>'She saw me and listened. She didn't disregard my reality or my feelings. She stuck with me.' (Stewart, 2013)<br>Interviewer: You spoke a bit about things are better with [new clinician], so what was helpful? Participant 3: Well, she really listens to you when you talk. She really understands what you're going through. And she doesn't miss things. She pays attention to the details of what you're saying…' (van Schalkwyk et al., 2015) | Quote: They cited experiences in which staff "take my opinion seriously" (Lucksted et al., 2015)<br>Clinicians who influenced engagement shared a rational understanding of problems and reflected a commitment to finding solutions. The participants' ideas and insights were utilized in treatment, and the natural potential of each young person unfolded through support and guidance. They adopted a humanistic, client-centered approach to treatment that focused on the patient as a person rather than the illness (Stewart, 2013) |
| | Help with putting experience into words (I) | 'It was very hard talking about it, but she helped me put things into words. She got me to open up quite a bit. . . well, the sort of things you don't say to your parents or friends. It really helped to put things into words. To find out what it was really about. . . That was scary. The fog lifted a little. I hadn't had that experience before. I found the missing words, for these thoughts and feelings' (Bjornestad et al., 2018)<br>'I feel that I got to disentangle the reasons for why I had been behaving as I did. I did have this feeling that someone was tailing me. It was only in therapy that I could talk about this. When I got to say what was going on, things opened up, in a way. I feel that this is what helped me the most' (Bjornestad et al., 2018)<br>'I just needed to, like, talk things through, really, about myself, cos pretty much all my life I have kept things bottled up basically and…think I just needed to talk about stuff and get stuff out of me.' (Byrne et al., 2014)<br>'And we could talk about how I used to be before and. . . Someone who has kept my story, in a way. Someone I dared talk to.' (Bjornestad et al., 2018) | Quote: Many participants experienced a lack of language for expressing frightening thoughts and emotions, particularly in the initial phase of therapy. This was seen to increase stress and to maintain or even make symptoms worse. Participants described therapy as a language- creating process. Within a frame of stress reduction, focus was usually split between expressing on-going internal states, and expressing oneself prior to when emotions became overwhelming. Psychotherapy was most often described as the only arena for these types ofconversations to take place. (Bjornestad et al., 2018)<br>All participants described positive experiences of disclosing their personal concerns in confidence with research assistants or therapists. For some participants, 'opening up' primarily involved the disclosure of unusual or distressing psychological experiences, while for others it involved the disclosure ofvery difficult life experiences such as bullying or childhood trauma. Disclosure was commonly described as difficult, but also as a crucial stage in the process of recovery (Byrne et al., 2014 )<br>Quote: Many participants highlighted that an important role of the therapist was to keep their life story and to maintain a meaningful tie between life events (Bjornestad et al., 2018)<br>This was seen as particularly helpful in periods of on-going psychosis and acted as a remedy for mental chaos, disorganization and cognitive deficits, including memory problems (Bjornestad et al., 2018) |
| | Normalizing, non-judgmental and informal, | 'I'm not just a service user, I'm someone on her level you know, really as a service user you get looked down on and you don't get considered at all, your feelings don't get considered at all when you're ill, you know people tend to talk over you or at you, or at someone else for you, but people in [therapist's] position, and people on her level and people such as you don't do that you know' (Kilbride et al., 2013) | Quote: They cited experiences in which staff "take my opinion seriously" with "no judgment at all" as strongly engaging (Lucksted et al., 2015)<br>Theme: Therapist qualities: impartiality (Mankiewicz et al., 2018)<br>A nonjudgemental and impartial therapeutic stance was reported by many participants to be beneficial to building a strong alliance (Mankiewicz et al., 2018) |

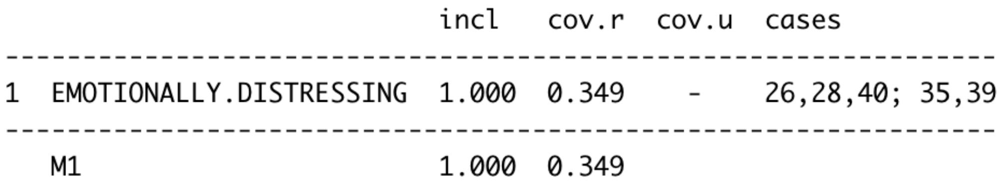
| | | | |
|---|---|---|---|
| | | 'H'e's got no ties, she got no loyalties to anyone and so she can say it, how it is and I sort of needed that … I just wanted someone who was completely impartial, completely not emotionally invested in and would just tell me how it was' (Mankiewicz et al., 2018)<br>'I feel like she got a good idea, good picture of who I was, and she never really judged or what I said was wrong, she just like, she was just listening, and had quite a good picture built up of who I was' (Mankiewicz et al., 2018)<br>'Interviewer: So if you felt that something you were saying was stupid or was embarrassing or something, how did you find [therapist]'s reaction to those things? Participant: She did not, she was not like really shocked or anything … it is nice to have someone, who gets it, you know like [therapist], like when you, to not be shocked and to know why you are saying it and just, to feel normal' (Byrne et al., 2014)<br>'The EDIE 2 people were the only people I felt like I could talk to, because I thought like, I thought if I went to a doctor and said that, I always thought it was like what you saw on Eastenders and that and that I wasgoing to get arrested and put in a padded call and I wasnever gonna get out again, and stuff, and I thought if I admit that I am going to be locked away and I am never going to see my family and friends again, so the EDIE 2 people have been the only people I have felt like I could talk to' (Byrne et al., 2014)<br>'I never expected it to be a wondercure, and that EDIE 2 at the end of it I was going to feel normal again, but in terms oflooking at the horrible side ofmental health, I feel as though they have confirmed that I am not going down that road, and that has helped me feel better inside I guess' (Byrne et al., 2014)<br>'She [EPP staff member] kept us going and—each person—she made us feel special like, normal, like she would treat normal people. She listened, never pushed on an issue, gave us ideas, an analogy, and left it to us. That was good. She always encouraged us' (Stewart, 2013) | Quote: Suggestions were seen as most helpful when presented in the form of direct and everyday language (Bjornestad et al., 2018<br>Theme: Informality & normalization (Byrne et al., 2014)<br>Quote: Our participants frequently identified the informal interpersonal approach ofEDIE 2 staff as an important factor in their ability or willingness to maintain engagement with ongoing assessment and therapy processes. Participants most often characterized staff members' informal approach in terms of their use of 'everyday' language (rather than psychiatric terminology), non-catastrophic reactions to disclosures of unusual psychological experiences, and a flexible, collaborative approach to making practical arrangements for meeting (Byrne et al., 2014)<br>Quote: In many cases, participants were disclosing their primary concerns for the first time, either because they had been unwilling to disclose those to family or friends for fear of being seen as 'weird', or because they had habitually 'kept things to themselves' over many years '(Byrne et al., 2014)<br>Quote: For a number of participants, the fear of 'going mad' was also reduced with the reassurance they gained from recognizing that they had not reached the diagnostic threshold for serious psychological conditions (such as psychosis or schizophrenia '(Byrne et al., 2014) |
| **Therapy preferences met** | Medication alongside talking therapy (I) | 'And then after I started to feel better I like trusted in my medication and stuff, yeah. Yeah, but I reckon it's heaps more, like probably about 40 per cent medication and like 60 per cent like other things, like talking through it and peer support and like all that sort of stuff ' (Cadario et al., 2012)<br>' The medication definitely helps when used in conjunction with other techniques e.g. CBT, psychology work' (Cowan et al., 2020)<br>'Don't think psychological understanding is separate to using medication' (Cowan et al., 2020)<br>Didn't really want to take meds in first place and didn't make much difference […] some people can be alright with CBT or other means without drugs (Cowdrey et al., 2018) | Quote: Sometimes the benefit of medication was only acknowledged after initial reluctance and viewed as only one part of a more comprehensive treatment package (Cadario et al., 2012)<br>Quote: some SUs felt strongly that medication was the best option; others felt it was best used in combination with other approaches, such as talking therapies (Cowan et al., 2020)<br>Quote: A minority of SUs indicated that they were not in favour of medication. Reasons were given for this and included not finding that they alleviated the symptoms that they were experiencing and knowing that people can recover with other, non-drug treatments (Cowdrey et al., 2018) |

|  |  |  |  |
|---|---|---|---|
|  | Personal contact with web therapist valued (D) | ‘It sort of made it feel a little more personalised, made me more open to accessing the service. Knowing that there was a real person… on the other end made a fair difference’ (Arnold et al., 2020)<br>‘I trust the early intervention team and people associated with it, so I would be fairly confident that it would be secure, if they said so’ (Bucci et al., 2018) | Quote:  Some participants felt a sense of connection with their web-based therapist. When individuals felt supported by their therapist, it facilitated connection and made participants more open to using the website (Arnold et al., 2020)<br>However, participants stated that their fears about information safety could be allayed if services reassured them about data safety. Many participants said that endorsement of a DHI by a valid institution (eg, university, health service, or respected, well known mental health charity) would be sufficiently reassuring and would increase DHI uptake. However, a minority of interviewees said they would prefer endorsement by individuals (eg, care co-ordinator and doctor) rather than by organizations because “organizations have hidden agendas” (Participant 13). Alternatively, a strong relationship between a service user and staff member working in a service would be sufficiently reassuring for some interviewees. (Bucci et al., 2018) |

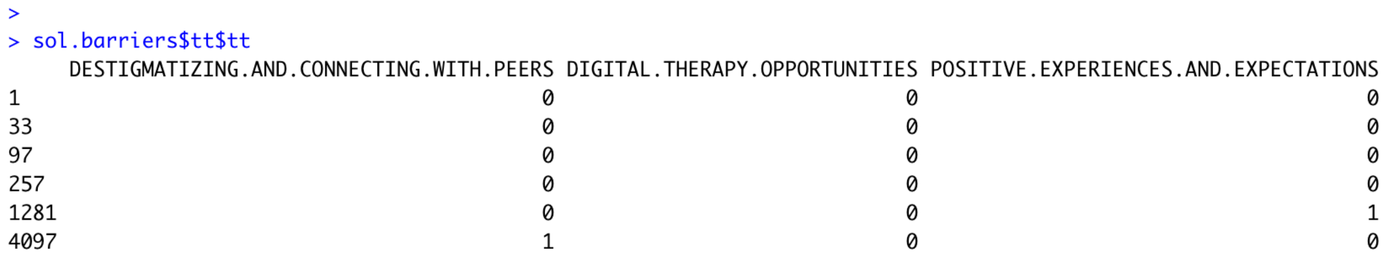
## Appendix D

## R coding, Truth Tables and Minimisation: Barriers

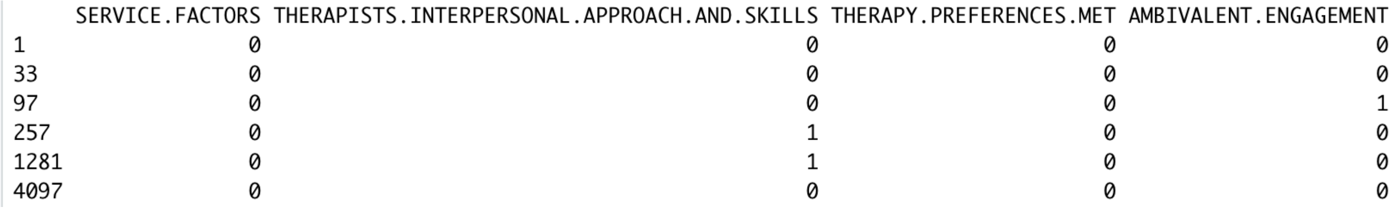
```
# derive the solutions for barriers, with details and cases (minimisation) #fuzzy

> sol.barriers <- eQMC(df, outcome = "facil", relation = "suf", sol.type = "ps", n.cut= 2,
+                  details = TRUE, show.cases = TRUE, neg.out = TRUE)
 # neg.out = TRUE if want to look at barriers

> sol.barriers

n OUT = 1/0/C: 5/29/0
Total: 34

Number of multiple-covered cases: 0

M1: EMOTIONALLY.DISTRESSING => barriers
```



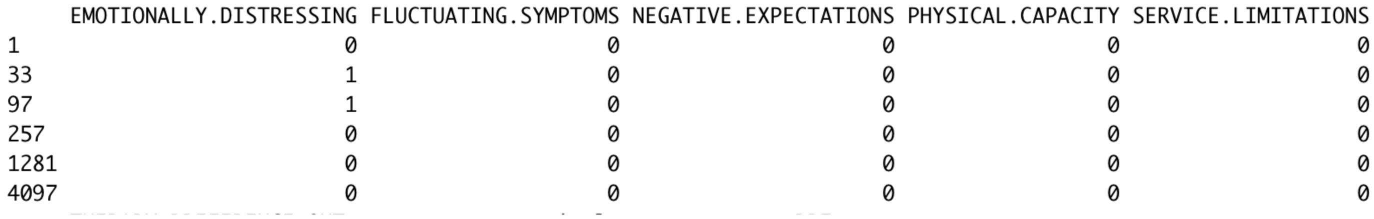
```
                               incl   cov.r  cov.u  cases
--------------------------------------------------------------
1  EMOTIONALLY.DISTRESSING   1.000  0.349    -    26,28,40; 35,39
--------------------------------------------------------------
   M1                        1.000  0.349
```



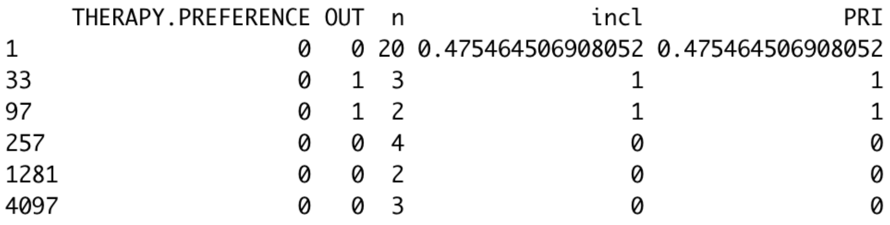
```
>
> sol.barriers$tt$tt
     DESTIGMATIZING.AND.CONNECTING.WITH.PEERS DIGITAL.THERAPY.OPPORTUNITIES POSITIVE.EXPERIENCES.AND.EXPECTATIONS
1                                           0                             0                                     0
33                                          0                             0                                     0
97                                          0                             0                                     0
257                                         0                             0                                     0
1281                                        0                             0                                     1
4097                                        1                             0                                     0
```



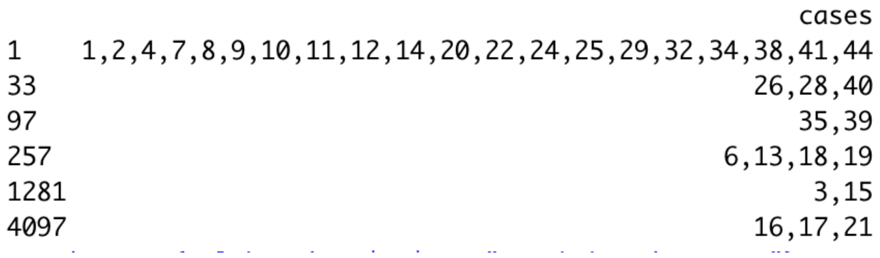
```
     SERVICE.FACTORS THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS THERAPY.PREFERENCES.MET AMBIVALENT.ENGAGEMENT
1                  0                                            0                       0                     0
33                 0                                            0                       0                     0
97                 0                                            0                       0                     1
257                0                                            1                       0                     0
1281               0                                            1                       0                     0
4097               0                                            0                       0                     0
```



```
     EMOTIONALLY.DISTRESSING FLUCTUATING.SYMPTOMS NEGATIVE.EXPECTATIONS PHYSICAL.CAPACITY SERVICE.LIMITATIONS
1                          0                    0                     0                 0                   0
33                         1                    0                     0                 0                   0
97                         1                    0                     0                 0                   0
257                        0                    0                     0                 0                   0
1281                       0                    0                     0                 0                   0
4097                       0                    0                     0                 0                   0
```

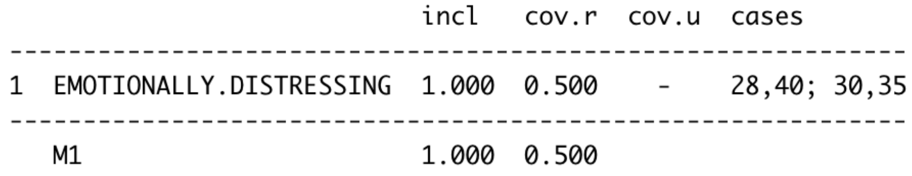


```
     THERAPY.PREFERENCE OUT  n              incl               PRI
1                     0   0 20 0.475464506908052 0.475464506908052
33                    0   1  3                 1                 1
97                    0   1  2                 1                 1
257                   0   0  4                 0                 0
1281                  0   0  2                 0                 0
4097                  0   0  3                 0                 0
```



```
                                                     cases
1    1,2,4,7,8,9,10,11,12,14,20,22,24,25,29,32,34,38,41,44
33                                                26,28,40
97                                                   35,39
257                                            6,13,18,19
1281                                                  3,15
4097                                              16,17,21
```

```
> #crisp
> write.csv(sol.barriers$tt$tt, "truth_barriers.csv")
> cr.barrier <- eQMC(df1, outcome = "facil", relation = "suf", sol.type = "ps",  n.cut= 2,
+ details = TRUE, show.cases = TRUE, neg.out = TRUE)
> cr.barrier

n OUT = 1/0/C: 4/19/0
 Total: 23
Number of multiple-covered cases: 0
M1: EMOTIONALLY.DISTRESSING => barrier
```



```
                          incl   cov.r  cov.u  cases
-------------------------------------------------------
1  EMOTIONALLY.DISTRESSING  1.000  0.500    -    28,40; 30,35
-------------------------------------------------------
   M1                       1.000  0.500
```

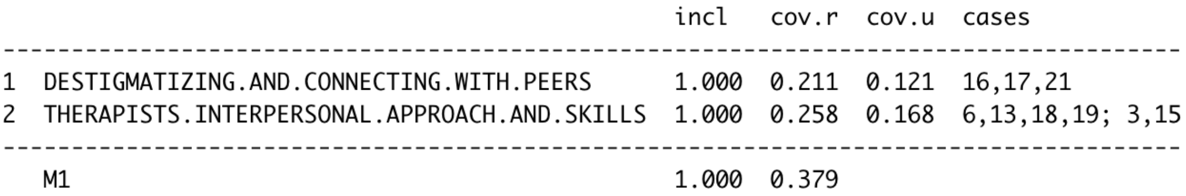
## Appendix E

## R coding, Truth Tables and Minimisation: Facilitators

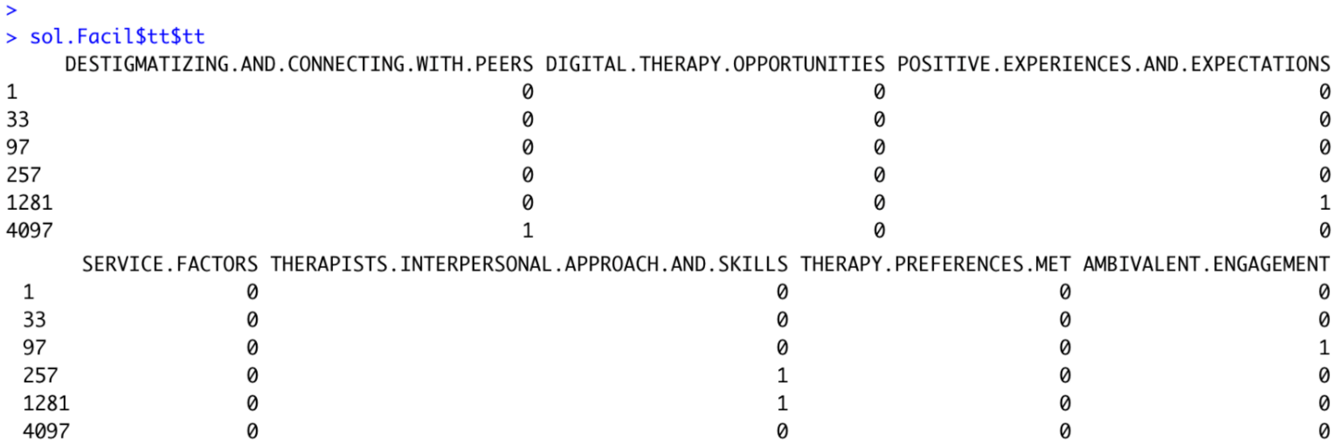
> # derive the solutions for Facil, with details and cases (minimisation) **#fuzzy**

> sol.Facil <- eQMC(df, outcome = "facil", relation = "suf", sol.type = "ps", n.cut= 2,
+  details = TRUE, show.cases = TRUE, neg.out = FALSE)  # neg.out = TRUE if want to look at barriers
> sol.Facil
n OUT = 1/0/C: 9/25/0
  Total: 34
Number of multiple-covered cases: 0
M1: DESTIGMATIZING.AND.CONNECTING.WITH.PEERS +

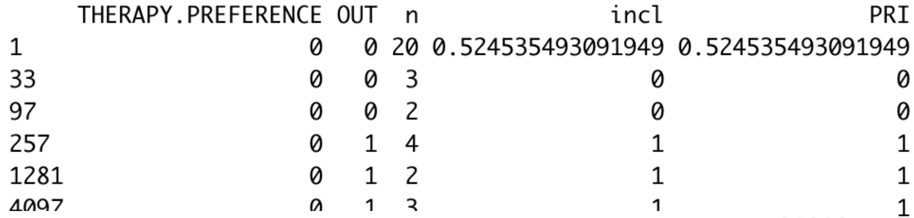
THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS => FACIL



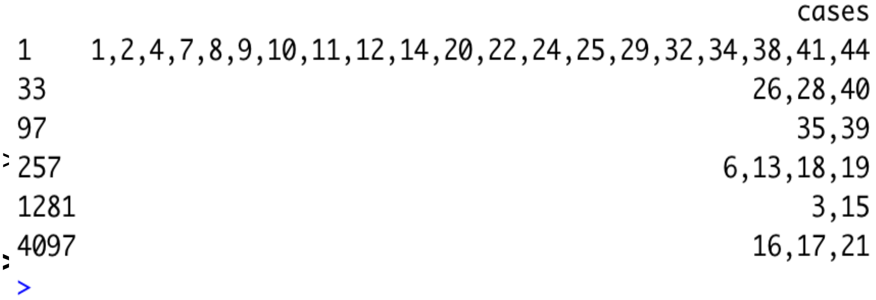
```
                                               incl   cov.r  cov.u  cases
-------------------------------------------------------------------------------
1  DESTIGMATIZING.AND.CONNECTING.WITH.PEERS      1.000  0.211  0.121  16,17,21
2  THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS  1.000  0.258  0.168  6,13,18,19; 3,15
-------------------------------------------------------------------------------
   M1                                            1.000  0.379
```



```
>
> sol.Facil$tt$tt
   DESTIGMATIZING.AND.CONNECTING.WITH.PEERS DIGITAL.THERAPY.OPPORTUNITIES POSITIVE.EXPERIENCES.AND.EXPECTATIONS
1                                         0                             0                                      0
33                                        0                             0                                      0
97                                        0                             0                                      0
257                                       0                             0                                      0
1281                                      0                             0                                      1
4097                                      1                             0                                      0
     SERVICE.FACTORS THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS THERAPY.PREFERENCES.MET AMBIVALENT.ENGAGEMENT
1                  0                                            0                       0                     0
33                 0                                            0                       0                     0
97                 0                                            0                       0                     1
257                0                                            1                       0                     0
1281               0                                            1                       0                     0
4097               0                                            0                       0                     0
```



```
     THERAPY.PREFERENCE OUT  n              incl               PRI
1                     0   0 20 0.524535493091949 0.524535493091949
33                    0   0  3                 0                 0
97                    0   0  2                 0                 0
257                   0   1  4                 1                 1
1281                  0   1  2                 1                 1
4097                  0   1  3                 1                 1
```



```
                                                      cases
1     1,2,4,7,8,9,10,11,12,14,20,22,24,25,29,32,34,38,41,44
33                                                 26,28,40
97                                                    35,39
257                                             6,13,18,19
1281                                                   3,15
4097                                               16,17,21
>
```

> cr.Facil <- eQMC(df1, outcome = "facil", relation = "suf", sol.type = "ps",  n.cut= 2,

+  details = TRUE, show.cases = TRUE, neg.out = FALSE)

```
# neg.out = TRUE if want to look at barriers
> cr.Facil
n OUT = 1/0/C: 11/12/0
  Total: 23
Number of multiple-covered cases: 0
M1: THERAPY.PREFERENCES.MET + POSITIVE.EXPERIENCES.AND.EXPECTATIONS
+ (THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS)
    => FACIL
M2: THERAPY.PREFERENCES.MET + POSITIVE.EXPERIENCES.AND.EXPECTATIONS
+ (DESTIGMATIZING.AND.CONNECTING.WITH.PEERS)
    => FACIL
```

```
                                                               -------------------
                                                 incl   cov.r  cov.u  (M1)   (M2)   cases
----------------------------------------------------------------------------------------------------
1  POSITIVE.EXPERIENCES.AND.EXPECTATIONS         1.000  0.318  0.136  0.136  0.227  8,10,11
2  THERAPY.PREFERENCES.MET                       1.000  0.182  0.091  0.182  0.091  7,9; 1,5
----------------------------------------------------------------------------------------------------
3  DESTIGMATIZING.AND.CONNECTING.WITH.PEERS      1.000  0.409  0.045         0.227  16,19; 6,17; 1,5
4  THERAPISTS.INTERPERSONAL.APPROACH.AND.SKILLS  1.000  0.455  0.091  0.273         16,19; 6,17
----------------------------------------------------------------------------------------------------
   M1                                            1.000  0.773
   M2                                            1.000  0.727
```