Running head: DROPOUT FROM AN INTERNET-DELIVERED CBT INTERVENTION
A qualitative study of dropout from an internet-delivered CBT intervention for adults
with depression and anxiety
Master in Science in School of Psychology
2020
Kate Lawler

#### Declaration

I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and it is entirely my own work. I agree to deposit this thesis in the University's open access institutional repository or allow the Library to do so on my behalf, subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement. All research complies with PSI ethical guidelines, and has received full ethical approval from the NHS Health Research Authority Research Ethics Committee (Appendix B). I consent to the examiner retaining a copy of the thesis beyond the examining period, should they so wish (EU GDPR May 2018).

Signed: Kate Lawler Date: 29<sup>th</sup> January 2020

This research project was carried out as a joint interest between Trinity College Dublin and SilverCloud Health, funded by the Irish Research Council Enterprise Partnership Scheme. The project was a nested qualitative study, part of a larger RCT investigating the effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety in the United Kingdom's Improving Access to Psychological Therapies programme (Richards et al., 2018). Ethical approval was originally obtained by Dr Derek Richards and extended to include the qualitative research in August 2018. I developed the semi-structured interview schedule with Caroline Earley, clinical trials associate at SilverCloud Health. The development of the interview schedule was reviewed and audited by Dr Derek Richards and Dr Angel Enrique at SilverCloud Health. I recruited the participants for this study and conducted the qualitative interviews with eleven participants and the remaining four interviews were conducted by Caroline Earley. I carried out the data analysis which was audited by my supervisor

at Trinity College Dublin Dr Ladislav Timulak and Caroline Earley, Dr Angel Enrique and Dr Derek Richards at SilverCloud Health.

#### Summary

This was a qualitative study exploring the subjective experiences of dropout from an internet-delivered cognitive behavioural therapy (iCBT) intervention for depression and anxiety. It was a nested study part of a larger RCT investigating the effectiveness of iCBT interventions in the Improving Access to Psychological Therapies (IAPT) service in the UK (Richards et al., 2018).

Participants had been using one of two 8-module iCBT programmes developed by SilverCloud Health: 'Space from Depression' and 'Space from Anxiety'.

Psychological well-being practitioners from the IAPT service supported them during treatment. Participants were eligible for the present study if they had completed less than six online reviews with their supporter and completed at least one module on the online programme.

Fifteen participants who met eligibility criteria were purposively sampled from the main RCT population. They were interviewed using a semi-structured interview schedule that was designed for this study following an extensive literature review. Interviews were conducted via telephone and were recorded and transcribed.

The data was analysed using the descriptive-interpretive method (Elliott & Timulak, 2005). This method of qualitative analysis allows for a degree of flexibility while also being structured so that all stages of the analytical process may be audited (McElvaney & Timulak, 2013). Results were discussed and reflected upon with the other authors (AE, CE, DR, LT) to ensure clarity and consensus on interpretations of the data and its meanings.

Ten domains describe the experience of dropout from an iCBT intervention:

Relationship to Technology, Motivation to Begin, Background Knowledge and

Attitudes towards iCBT, Change in Motivation, Usage of the Programme, Changes due to the Intervention, Engagement with Content, Experience Interacting with the Supporter, Experience of Online Communication and Termination of the Supported Period. The domains had both positive and negative connotations.

Looking more closely at the domain of Change in Motivation, participants (n=13) can be categorised into two distinct groups according to their responses: those who feel ready to leave treatment early and those who have negative reasons for a change in motivation. Participants who feel ready to leave treatment early (n=5) describe getting what they needed from treatment and deciding to leave when they felt ready. Participants who had negative reasons for their change in motivation (n=8) reported not being in a receptive frame of mind, having contextual obstacles to their engagement with treatment and considering iCBT to not be personally fitting.

Treatment experiences across the other nine domains were compared between these two groups of participants. For the most part, both participants who feel ready to leave treatment early and those who had negative reasons for their change in motivation report similarly. However, proportionately more participants who feel ready to leave treatment early report positive usage practices, positive experiences with support and positive experiences with online communication than those who have negative reasons for their change in motivation. Conversely, proportionately more participants with negative reasons for their change in motivation report life stressors as a motivation to start treatment, negative experiences with content, support and online communication than those who feel ready to leave treatment early.

These findings are discussed in light of the current conceptualisation of online treatment dropout. It would appear that they present a nuanced picture of the

phenomenon, outlining how dropout is not reflective of an exclusively negative treatment experience and it is not necessarily a negative consequence of treatment.

# Acknowledgements

Thank you to the people who gave up their time to participate in this study and who shared their experiences with me so openly and honestly. To Dr Ladislav Timulak, I express my sincerest gratitude and appreciation for the advice and expertise you have provided me over the last year. Thank you to Dr Derek Richards for encouraging me to pursue this research opportunity and for your ongoing guidance throughout. This research project would not have been possible without the support of Caroline Earley, Dr Angel Enrique, Daniel Duffy and the wider team at SilverCloud Health. I would also like to extend my gratitude and appreciation to the Irish Research Council for backing my research proposal and providing the funding to carry it out. And of course thank you to my wonderful family and friends.

#### Abstract

Despite the efficacy and widespread use of online-delivered psychological interventions, treatment dropout remains a problem that for the most part is poorly understood. This qualitative study investigated the subjective experience of dropout from a supported iCBT programme for adults with depression and anxiety. This was a nested study part of a larger RCT investigating the (cost)effectiveness of iCBT for depression and anxiety in the UK's Improving Access to Psychological Therapies programme. Fifteen purposively sampled participants (8 female) were interviewed via telephone using a semi-structured interview schedule that was developed from the existing research in the field. Data was analysed using the descriptiveinterpretive approach. The experience of treatment leading to dropout can be understood in terms of ten domains: Relationship to Technology, Motivation to Start, Background Knowledge and Attitudes towards iCBT, Change in Motivation, Usage of the Programme, Changes due to the Intervention, Engagement with Content, Experience Interacting with the Supporter, Experience of Online Communication and Termination of the Supported Period. Dropout participants have a wide variety of experiences that are both positive and negative. Reported changes in motivation categorise dropout participants into two groups: those who feel ready to leave treatment early and those who have negative reasons for dropping out. The diversity of experiences and evidence of the role played by patient discretion in the decision to drop out brings into question the current conceptualisation of the phenomenon as a homogenous, negative construct. Dropout is a nuanced phenomenon, requiring further exploration in terms of its parameters and patient typology.

Keywords: depression; anxiety; iCBT; dropout; internet interventions

# Contents

Title	1
Declaration	2 - 3
Summary	4 - 6
Acknowledgments	7
Abstract	8 - 9
Contents	10 - 11
List of Tables and Figures	12
Literature Review	13 - 46
Method	47 - 58
Results	59 - 89
Discussion	90 - 119
Conclusion	120 - 122
References	123 - 143
Appendices	144 - 209

Appendix A: Ethical Approval for Main RCT Investigating Effectiveness and Costeffectiveness of internet-delivered Interventions

Appendix B: Ethical Approval of Amendment to Include Qualitative Interviews

Appendix C: Participant Information Sheet

Appendix D: Participant Consent Form

Appendix E: Qualitative Interview Schedule

Appendix F: Preliminary Literature Review – Summary of Relevant Readings

Appendix G: Summary of Additional Readings

Appendix H: Analysis of Findings and Questions in Existing Literature

Appendix I: Potential Qualitative Questions Relating to Experience of Technology

Appendix J: Potential Qualitative Questions Relating to Motivations to Engage in

Treatment

Appendix K: Potential Qualitative Questions Relating to Experience of Intervention's

Content

Appendix L: Potential Qualitative Questions Relating to Experience of Support

Appendix M: Categorisation of Meaning Units

# List of Tables

Table 1: Domains of Investigation	21 - 22
Table 2: Characteristics of the Participants	49
Table 3: Participants' Reports relating to their Change in Motivation	59
Table 4: Participants' Experiences of Treatment based on their Reported Reasons for their Change in Motivation	60 - 63
List of Figures	
Figure 1: Stages of Formation of the Interview Schedule	58

A Qualitative Study of Dropout from an internet-delivered CBT Intervention for Adults
with Depression and Anxiety

Delivering psychological interventions online is increasing, especially as part of stepped care approaches in mental health services (Cuijpers & Riper, 2014; Proudfoot, 2004). Research into the use of internet-delivered interventions for the treatment of psychological disorders, such as depression and anxiety disorders began more than twenty years ago (Riley & Veale, 1999; Selmi et al., 1990) and today a vast evidence base exists supporting their efficacy in treating depression and anxiety (Andersson & Cuijpers, 2009; Andrews et al., 2018; Richards, Enrique, & Palacios, 2019; Richards & Richardson, 2012; Wright et al., 2019). In particular, evidence supporting significant clinical outcomes and client reported satisfaction with internet-delivered Cognitive Behavioural Therapy (iCBT) has led to its recommendation as a structured alternative to traditional low-intensity methods (NICE, 2009, 2011), including bibliotherapy and group courses. For the majority of service-users, online psychological interventions are considered to be useful, easy-to-use, relevant and of benefit to their symptoms and circumstances (Kaltenthaler et al., 2008). The provision of online psychological therapies has also been reported to have the potential to remove barriers to treatment access and the stigma associated with mental health (Richards & Timulak, 2012; Todkill & Powell, 2013). Research to date strongly supports the efficacy of iCBT in the treatment of depression and anxiety, grounded in its potential to provide a personcentred treatment in which the user takes control, actively participating in their own symptom management and recovery (Richards et al., 2016).

Despite the established efficacy and reported satisfaction, including its many benefits for reducing access barriers, treatment dropout remains a problem for the online-delivery of psychological therapies (Karyotaki et al., 2015). Waller and Gilbody (2009) highlighted this

issue, noting that just over half of patients complete a full course of iCBT. However, the phenomenon of treatment dropout is not restricted to online therapies, nor would research suggest that it is a cause for greater concern in supported online treatments than it is in face-toface treatments (Cuijpers et al., 2010; Piper et al., 1999; Wallin, Mattsson, & Olsson, 2016). In fact, online treatment dropout rates are equivalent to face-to-face therapies or other treatments (Kaltenthaler et al., 2008; Proudfoot, 2004; Richards & Richardson, 2012; Wallin et al., 2016). A systematic review of computer-based psychological treatments for depression found an overall dropout rate of 57% across forty studies (Richards & Richardson, 2012). This review detailed three different support types for treatment and compared the dropout data across these conditions: unsupported, therapist-supported and administrative-supported. A high dropout rate of 74% was recorded for unsupported treatments, but much lower dropout rates of 28% and 38% from therapist-supported and administrative-supported treatments respectively (Richards & Richardson, 2012). These findings indicate that the provision of some level of support online can reduce dropout rates by 30-40%. Furthermore, the dropout rates observed in the therapistsupported and administrative-supported treatment conditions can be considered at the lowerend of dropout when compared to dropout rates in face-to-face therapies, where dropout is typically recorded as 30-60% (Kaltenthaler et al., 2008; Piper et al., 1999).

Recent research examining the efficacy of iCBT and factors affecting its outcomes has highlighted both the role of support and completion rates (Wright et al., 2019). This meta-analysis reports that iCBT with modest amounts of support results in relatively large mean effect sizes on measures of depressive symptoms. However, what is more interesting in terms of treatment dropout and its implications, is the finding that lower treatment completion rates are associated with lower mean effect sizes (Wright et al., 2019). In other words, individuals who adhere to treatment have significantly different outcomes to those who dropout. The authors comment that considering completion rates in terms of the number of modules accessed

could be problematic as an indicator of adherence as it doesn't necessarily account for time spent on the modules (Wright et al., 2019). In light of these new findings linking treatment outcomes with treatment completion rates, the importance of understanding treatment dropout has become even more evident.

The necessity in studying online treatment dropout does not necessarily stem from it posing greater problems than in face-to-face treatment scenarios, although the two cannot often be meaningfully compared as their length of commitment varies considerably. However, an examination of dropout might yield more relevant and interesting information when considered from the viewpoint that the goal of online psychological treatments, iCBT in particular, is to provide an evidence-based treatment and also a cost-effective treatment. The online provision of psychological therapies also helps to reduce therapist time and waiting lists, compensate for a lack of trained professionals and alleviate the burden on mental health services of meeting demands (Griffiths et al., 2006). Symptomatically, early withdrawal from treatment is associated with less remission and greater worsening of symptoms, and this is also the case in iCBT (McIvor & Carson, 2004; Wright et al., 2019). In light of the evidence supporting its effectiveness and cost-effectiveness and to ensure that both mental health service providers and clients are maximally benefitting, it is important to investigate online treatment dropout.

# Science of Attrition – The Need to Develop a Model for Dropout from internetdelivered Interventions

The need to develop a robust body of knowledge relating to the discontinuation of online psychological therapies has been noted in the call for a "science of attrition"

(Eysenbach, 2005, p. 4). For the majority of the general public, internet-delivered interventions are still a novel treatment approach and therefore can be explained in terms of the diffusion of innovation (Eysenbach, 2005). One approach proposed by Rogers' (2003) theory stipulates that innovation is "an idea perceived as new by the individual" (p. 11) and diffusion is "the process by which an innovation spreads" (p. 5). According to this theory, when an individual is seeking reinforcement for their adoption of the innovation and a dissonance is encountered, they may abandon the innovation (Rogers, 2003). This decision to abandon the innovation is categorised as either, disenchantment discontinuance, which is rejection of innovation due to dissatisfaction or replacement discontinuance, which is rejection of the innovation in order to adopt a better alternative. The characteristics affecting the decision to reject and ultimately dropout of an intervention are its relative advantage, compatibility, complexity, trialability and observability (Rogers, 2003). For example, a service-user may decide to drop out of an iCBT treatment if they feel as if they are not benefitting from it (relative advantage) and if the user dashboard is difficult to use (usability).

In a review of the literature on dropout, Barrett et al (2008) combined two models of behavioural health to help develop a conceptual framework for studying early withdrawal from mental health treatments. Andersen's (1968, 1995) model of health services utilisation outlines four categories that influence a patient's use of services: patient characteristics, enabling factors, need factors and environmental factors. Patient characteristics are descriptive of the individual seeking treatment such as sociodemographics and expectations. Enabling factors refer to the barriers and facilitators encountered when trying to access health care services. Need factors relate to the individual's symptomology, their need for health care services and treatment length. Environmental factors are categorised by influences on service utilisation such

as accessibility and treatment setting. In the second model of behavioural health, Owens et al (2002) proposes three domains of factors blocking or impeding service utilisation: client perceptions of mental health and mental illness, client perceptions and beliefs about mental health treatment and structural factors similar to those mentioned by Andersen (1995). Owens and colleagues' (2002) proposed domains add to Andersen's (1995) work by acknowledging the role played by client perceptions, assumptions and attitudes about mental health and its treatment. An example of this would be an individual choosing not to seek treatment for a mental health problem due to its associated stigma.

In taking both of these models of behavioural health into account, Barrett and colleagues (2008) presents a framework for understanding dropout and one which will provide a useful starting point for research into dropout in the context of online psychological therapies. While Eysenbach's (2005) utilisation of the theory of diffusion of innovation to determine the reasons why an individual drops out of an internet-delivered intervention, it offers little explanation towards the subjective experiences of treatment among them.

#### **Existing Research Examining Dropout from Online Interventions**

Even if treatment dropout in traditional therapies was fully understood, it could not be assumed that online dropout operates according to the same mechanisms. The research on dropout from internet delivered treatments is limited despite this being a common issue reported in research trials and service evaluations, with service-users continuing to disengage from mental health services at a rate comparable to that found almost 70 years ago (Rogers, 1951). To date, research into dropout from online

psychological therapies has mostly been of a quantitative nature (Karyotaki et al., 2015; Melville, Casey, & Kavanagh, 2010), with few qualitative studies specifically examining this phenomenon in internet-delivered treatments. Quantitative research has explored variables associated with dropout, in an attempt to predict which individuals may be more at risk of prematurely terminating internet programmes (Melville et al., 2010). Melville and colleagues (2010) conducted an analysis of the literature on online dropout and its associated variables. They concluded that age, gender, socioeconomic status and relationship status could be potential predictors of treatment dropout. In addition to these sociodemographic and contextual variables, they hypothesised that variables related to psychological problems (duration and severity of condition, comorbidities, personality variables) and treatment-related variables (treatment credibility, computer experience, motivation to participate) could also be associated with dropout. However, evidence was limited in identifying any one variable in making an individual more likely to drop out of internet-based treatment. Subsequently, a metaanalysis of individual patient data collected from ten randomised controlled trials (RCTs) of self-guided web-based interventions for depression concluded that male gender, lower educational level, CBT-based interventions and comorbid anxiety symptoms significantly increased the risk of dropping out, but significantly decreased with every additional four years of age (Karyotaki et al., 2015). These findings help to identify individuals who are at risk of prematurely terminating online treatment, but reveal little about the subjective experience leading to dropout.

Both the complex nature of the study of online psychological treatment dropout and its limited evidence base calls for more innovative and exploratory means of research (Barrett et al., 2008). Efforts have been made to qualitatively examine subjective experiences of internet-delivered psychological therapies. Some researchers

even point to the importance of first determining what encourages treatment adherence in order to understand dropout (Todkill & Powell, 2013). Prior research into what drives adherence cited a balance between the flexibility and convenience of an online intervention and feeling understood, supported and informed (Mathieu, Barratt, Carter, & Jamtvedt, 2012). Todkill and Powell (2013) explored individuals' motivations for participating in an iCBT program for improving mental wellbeing and their reasons for continuing. A number of key themes emerged into which individuals' experiences were organised: trust in brand, motivations to enrol (altruism, substitute for offline help, salience to mental health condition), feeling benefit from the intervention and negative experiences with the intervention (language on the programme). In a similar qualitative study, primary care patients using an iCBT program for depression reported a similar trade-off between the advantages and disadvantages of online delivery (Holst et al., 2017). Patients reported a sense of freedom and privacy in using the iCBT programme while at the same time feeling alone, lacking in confidence and expressing a need for face-to-face contact with a therapist. While qualitative research into the experience of online treatment adherence offers insights into what may or may not be important to consider when investigating dropout, it cannot be assumed that online treatment dropout operates according to the same mechanisms as online treatment adherence. Again, studying online treatment adherence lacks the specific focus required to fully understand the subjective experience that leads to online treatment dropout.

It is evident that there are gaps in the existing literature, but efforts are being made to address this with studies beginning to emerge that exclusively explore the subjective experience of online psychological therapies and the reasons for dropping out of them (Fernández-Álvarez et al., 2017; Johansson, Michel, Andersson, & Paxling, 2015). Johansson and colleagues (2015) introduced a working model theory consisting

of two core categories, perception of the treatment and patient's situation. The relationship between these categories is used to understand an individual's decision to dropout, the experience of online treatment dropout can be described as an incompatible relationship between the underlying concepts in each category. In other words, a mismatch between any treatment feature and personal perquisite, such as extensive content and life factors, lack of face-to-face contact and the need for face-to-face meetings, demands of reading and writing capabilities and individual capability, side effects and psychological vulnerabilities, limited information and awareness about the treatment, results in the decision to non-adhere (Johansson et al., 2015).

Taking a closer look at Johansson and colleagues' (2015) underlying concepts, it becomes evident that a disconnect between patients' expectations for a treatment and the reality of the treatment can lead to dropout. This disconnect proves even more of a problem in novel treatments such as iCBT where the management of expectations is important in reducing these dropout rates. Expectations are not only thought to have a direct relationship with treatment outcomes, but to be key predictors of non-adherence (Constantino et al., 2011). Likewise, this link between expectations and dropout was identified in a recent qualitative analysis of client experiences of dropping out of a transdiagnostic online intervention, in which it was concluded that more tailored management of expectations would reduce dropout rates (Fernández-Álvarez et al., 2017). In addition, this qualitative analysis found a pattern regarding the insufficient provision of support due to the absence of a therapist and the lack of specificity of the contents to the individual's problems.

Recent research in this area is making important headway in beginning to determine the reasons for dropping out of an online psychological intervention and to understand the subjective experiences that non-adherers have had along their treatment

journey (Fernández-Álvarez et al., 2017; Johansson et al., 2015). However, due to the fact that research into online treatment dropout is in its infancy, with few studies fulfilling the criteria with an adequate level of specificity, as of yet there are no definitive findings to explain this phenomenon. From the existing literature, broad domains of investigation (Table 1) have begun to emerge such as experiences of technology, motivations for engaging in treatment, experience of intervention's content and experiences of support (Fernández-Álvarez et al., 2017; Holst et al., 2017; Johansson et al., 2015; Melville et al., 2010; Todkill & Powell, 2013). In order to fully understand the reasons that drive an individual to drop out of an online psychological intervention and to get a clear picture of the experiences they have during treatment, it will be necessary to consider each of the aforementioned phenomenon in relation to online dropout. The frameworks outlined by Eysenbach (2005) and Barrett et al (2008) may act as a guide to the application of the potential findings here in furthering research in the area of dropout from an online psychological intervention.

Table 1

Domains of Investigation

Domains of Investigation	Categories	References
Experiences of Technology	Tech literacy and familiarity; attitudes towards technology and using it for the provision of mental healthcare; difficulties with technology; privacy and security	(Beatty, Binnion, Kemp, & Koczwara, 2017; Fernández-Álvarez et al., 2017; Holst et al., 2017; Melville et al., 2010; Stangeland-Lie, Karlsen, Oord, Graue, & Oftedal, 2017; Todkill & Powell, 2013)
Motivations for Engaging in Treatment	Motivation to begin treatment; symptomology; change in motivation; ability to prioritise	(Barrett et al., 2008; Beatty et al., 2017; Fernández-Álvarez et al., 2017; Holst et al., 2017; Melville et al.,

	treatment; organisation of usage of the programme; sense of commitment; treatment credibility and expectations; locus of control; identification with treatment approach; removal of barriers	2010; Stangeland-Lie et al., 2017; Todkill & Powell, 2013)
Experience of Intervention's Content	Relevance; tailorisation; treatment demands and workload; experience of interactive elements; addressing concerns	(Beatty et al., 2017; Fernández-Álvarez et al., 2017; Johansson et al., 2015; Stangeland-Lie et al., 2017; Todkill & Powell, 2013)
Experiences of Support	Therapeutic alliance; online medium of communication; preference or need for face- to-face contacts; level of supportiveness; quality of contact	(Barrett et al., 2008; Beatty et al., 2017; Fernández-Álvarez et al., 2017; Holst et al., 2017; Johansson et al., 2015; Melville et al., 2010; Stangeland-Lie et al., 2017)

# The Ecological Validity of Studies Evaluating Online Treatment Dropout

An important point to consider when evaluating research relating to treatment dropout is the ecological validity of the intervention in the real world. For example, the qualitative research carried out by Fernández-Álvarez et al (2017) analysed clients' experiences of dropping out from the transdiagnostic online intervention 'Transversal' across two RCTs (Díaz-García et al., 2017; González-Robles et al., 2015). González-Robles et al (2015) conducted their research within the public mental health specialised care system in Spain and Díaz-García et al (2017) utilised a Spanish community sample. The limitation of researching online interventions that are not typically used in these ecological settings and the resulting patient and clinician acceptability and

attitudes towards internet interventions may have acted as barriers to successful implementation (Díaz-García et al., 2017; González-Robles et al., 2015). Researching dropout from an online intervention within an ecological setting that doesn't routinely use this format of delivery for treatment presents its own challenges, as clients who are not expecting this type of treatment may have negative attitudes towards it and the health care system may lack the structural and procedural supports for its successful implementation (Schröder et al., 2017).

Applying findings from studies lacking ecological validity to our knowledge of online treatment dropout may not be completely accurate. While they are exploring the scarcely researched area of subjective experience of online treatment dropout, they are not doing so in a routine care setting. In comparison, the UK's Improving Access to Psychological Therapies (IAPT) programme operates according to a five-step approach to psychological care for people with depression and anxiety and offers iCBT as a treatment alternative for step 2, low-intensity treatment (Clark, 2011; NICE, 2009, 2011; Richards et al., 2018). In this way, studying online treatment dropout and its subjective experience within the IAPT programme, or indeed a similar setting, would ensure a high degree of ecological validity.

# **Technologisation**

Incorporating or introducing modern technology into the provision and delivery of psychological therapy and the impact that this may have on an individual's ability or decision to engage with a treatment.

### The Digital Divide

When investigating dropout from internet-delivered psychological interventions, one cannot ignore the effects that the technologisation of mental health services may have on users' decisions to non-adhere. The first obstacle for the use of technology in delivering mental health treatment is the digital divide (Ennis et al., 2012). First and foremost, the benefits that online treatments such as iCBT can offer, can only be realised to the extent that individuals have the ability and the access to such systems. Recent statistics report that 83% of adults in the UK have access to the internet and 89% of UK adults report that they use the internet either at home or in other locations (Ofcom, 2017). Despite the high statistics reporting on the accessibility of the internet, sociodemographic differences remain and are often referred to as the digital divide. Ofcom (2018) reports that older people and those belonging to lower socioeconomic groups are less likely to be online. These findings echo existing work in this area regarding mental health service users' access to technology, skills in using technology and appetite for various technologies (Ennis et al., 2012; Kontos et al., 2014; Neter & Brainin, 2012).

Despite its existence in certain sub-groups of the general population, the digital divide is diminishing, as access to technology and the internet becomes more widespread. The digital divide was first discussed in terms of ownership, availability and affordability of technology services, but today the divide is considered to be a knowledge gap (Neter & Brainin, 2012). This knowledge gap is presented as differing levels of eHealth literacy, "the ability to seek, find, understand and appraise health information from electronic sources and apply knowledge gained to addressing or solving a health problem" (Norman & Skinner, 2006). EHealth literacy is of particular importance when examining dropout from online psychological interventions due to the fact chronic illness, such as depression, is associated with lower eHealth literacy scores

(Neter & Brainin, 2012). The barriers posed by the use of technology to deliver psychological treatments should not be solely considered in terms of improving accessibility, but also in terms of matching these technologies to the skills of the intended users (Norman & Skinner, 2006).

## Acceptability of the Use of Technology to Deliver Mental Health Services

After acknowledging the issues of accessibility and eHealth literacy, attention is turned to the acceptability of the use of technology to deliver mental health services and the barriers it may pose for adherence to treatment (Musiat, Goldstone, & Tarrier, 2014). Acceptability is described as a cognitively based positive attitude (Ebert et al., 2015). Schröder et al (2015) stipulates that once effectiveness has been established, user acceptance of the online-delivery of psychological treatments must be achieved to ensure their successful implementation and this includes reducing dropout rates. In a systematic examination of user-relevant attitudes towards online treatments for depression, Schröder et al. (2015) identified four dimensions: scepticism and perception of risks, confidence in effectiveness, technoligisation threat, anonymity benefits. Scepticism and perception of risks relates to the client's expectation that the online intervention will not offer long-term effectiveness or professional support, that it will increase isolation and loneliness and that the suggested strategies are difficult to implement effectively. Confidence in effectiveness refers to the client's belief that the online intervention will be able to help and inspire them and that the concept of internet-delivered treatment makes sense. Technologisation threat is characterised by the client's belief that they are more likely to stay motivated, understand therapeutic concepts, learn skills to better manage and cope in a crisis with a therapist than with an online intervention. Finally, anonymity beliefs refer to the idea that online interventions are more confidential and discreet than visiting a therapist and that it is easier to reveal

feelings online. These findings are reflective of the ambivalent attitudes expressed in public discourse towards online psychological interventions and further reinforce the idea that the experience of online treatment and dropout is unique to each individual with complex variables at play. Consideration must also be given to the potential for change in these attitudes as an individual progresses through treatment and becomes more familiar with it (Schröder et al., 2015).

As has already been mentioned, Eysenbach (2005) has referred to the use of the internet to deliver mental health services as an application of Rogers' (2003) diffusion of innovation theory. Carper, McHugh and Barlow (2013) agreed that its emphasis on potential adopter perceptions as being key to understanding adoption decisions and used it as a framework to investigate patients' perceptions of the use of technology to deliver psychological therapies. Patients rated observability very low which suggests that they perceive the online intervention as not frequently used and had a lack of access to information about the novel intervention. In terms of relative advantage, patients did not perceive any benefits over other forms of care. Patients did not think the intervention was more complex to use than other treatments and reported that only a familiarity with computers was required. Overall, patients expressed neutral to slightly negative perceptions of online psychological therapies and reported low intentions for future use (Carper et al., 2013).

Other work in the area of technology acceptance in healthcare and the adoption of the decision to use an online-delivered treatment has analysed the uses of various other models (Ward, 2013). The technology acceptance model outlines the perceived usefulness and the perceived ease-of-use as key determinants in the decision to use and continue using an online-delivered intervention (Davis, 1989). Further studies of this model and its application in the field of psychology extended this theory to include

beliefs and social factors (Malhotra & Galletta, 1999). Venkatesh et al (2003) integrated existing models of technology acceptance and formulated the unified theory of acceptance and use of technology (UTAUT). The UTAUT has four core determinants of intention and usage, performance expectancy, effort expectancy, social influence and facilitating conditions, and has been shown to outperform each of the individual models it was based off (Venkatesh et al., 2003). Research into a model to explain technology acceptance in healthcare settings is ongoing (Ward, 2013), however the findings presented here highlight important considerations for the role of technology acceptance in an individuals' decision to drop out of an online psychological therapy. With regards online treatment dropout, it is important to look at both the usability and accessibility aspects of the intervention but also social factors and attitudes.

# **Privacy and Security Online**

Perceived privacy and security online and the fear of being caught using an online treatment are also concerns reported by service-users (Young, 2005). Ware et al (2017) reported that the security of information and confidentiality are factors considered to be important by the individuals using these online interventions.

However, research suggests that with careful assurances and ethical practices these attitudes can easily be changed and the privacy concerns alone are not sufficient to terminate acceptance of online therapies (Angst & Agarwal, 2009; Chen & Chen, 2015). Privacy concerns are a complex issue when dealing with online psychological treatments due to the fact that they have to be sufficiently secure and confidential but at the same time the service-user expects a level of personalisation. To overcome this privacy-personalisation paradox, trust is required (Guo, Zhang, & Sun, 2016). Concerns and uncertainties that a service-user may have with regards an online psychological therapy bring them to rely on the trustworthiness of the provider or brand. It is

important to assess the individual's experience of privacy when investigating online dropout, as the literature proves that it can interact with treatment adherence in a variety of ways.

#### Motivation

The reasons an individual engages or disengages in online treatment and the factors influencing this such as readiness for change, intrinsic motivation, personality variables and expectancy-credibility beliefs.

When considering dropout from an online-delivered psychological intervention, it is necessary to go back to the beginning and look at what the motivation was to seek treatment (Drieschner, Lammers, & van der Staak, 2004). It is important to question this motivation and evaluate how it evolves as an individual progresses through treatment and ultimately decides to non-adhere. Due to the fact that psychological therapy requires active participation, a patient's motivation to participate is a vital factor for treatment outcome (Krause, 1966). Motivation is thought to be associated with treatment adherence and lack of motivation is most often reported to be the reason for treatment dropout (Ryan, Plant, & O'Malley, 1995).

# Applying the Stages of Change Model to the Motivation to Engage in Online Treatment

Within the existing literature, there are many models related to motivation to change health behaviours, however, Prochaska and DiClemente's (1983) stages of change model receives the most attention due to its focus on the decision-making of the individual. The stages of change model was originally developed for the study and treatment of addiction (Prochaska & DiClemente, 1983) and is now more widely used

in the field of health psychology for intentional behaviour change for problem behaviours. Therefore, an air of caution must be taken when applying it to the context of the treatment of mental health problems. However, that being said, Prochaska and DiClemente's (1983) stages of change model continues to be utilised in the literature on community-based mental health services (Lewis et al., 2009; Littell & Girvin, 2002; Monaghan et al., 2015).

This transtheoretical model outlines that techniques or treatments intended to change behaviours, such as iCBT, are differentially effective depending on an individual's readiness for change. Within the literature, stages of change and motivation for change are interpreted as the same concept, "with each progressive stage being characterized as increased motivation to engage in the process of behaviour change" (Tierney & McCabe, 2001, p.178). There are five stages of change: precontemplation, contemplation, preparation, action and maintenance (Prochaska & DiClemente, 1983). In precontemplation, the individual has no intention to change in the foreseeable future and is unaware of their problematic behaviour. In contemplation, the individual recognises their problematic behaviour with an intention to start the healthy behaviour in the foreseeable future but still holds some ambivalence. In preparation, the individual will begin to take action soon. The action stage is described as the stage in which the individual has recently changed their behaviour and has the intention to keep moving forward. The maintenance stage is characterised by the active engagement of the individual in relapse prevention and consolidating gains achieved during the action stage. Evidently, an individual's readiness for change can cause problems for treatment adherence depending on what stage they are in when they start treatment.

Treatments are thought to be the most effective when they match the individual in terms of readiness for change (Lewis et al., 2009) and failing to do so could be an important factor in an individual's decision to dropout of online treatment. Motivation for treatment has been shown to be associated with treatment outcome (Dozois et al., 2004). In a study investigating stages of change and response to medication in patients with panic disorder, patients who scored higher on precontemplation before treatment were significantly less likely to improve, whereas patients who scored high on contemplation were significantly more likely to improve (Beitman et al., 1994). Dozois et al (2004) examined stages of change in anxiety and found that patients with lower action scores were more likely to drop out of CBT therapy than those with higher action scores. Further support for the association between motivation and treatment outcomes comes from a study of the role of readiness for change and the treatment of depression in adolescents (Lewis et al., 2009). Higher action scores were associated with better outcomes for depression regardless of treatment modality. Symptomatically, patients who enter treatment with higher symptom severity do not tend to experience low motivation, indicating a negative correlation with the precontemplation stage and a positive correlation with the maintenance stage (Monaghan et al., 2015). This correlation between higher symptom severity and the maintenance stage could be explained by past experience with mental health treatment and an increased focus to build on prior gains.

# **Self-Determination Theory and Personality**

On the other hand, Møller (2010) comments that it is better to look at what is motivating for the individual and not how motivated they are. Wilhelmsen et al (2013) support this opinion, reiterating the importance of considering social contexts and interpersonal relationships when examining motivation for treatment. This is in line

with the self-determination theory which describes how humans' intrinsic motivation requires supportive conditions to maintain and enhance it (Ryan & Deci, 1985).

According to this theory, the three basic psychological needs of relatedness, competence and autonomy need to be met in order to enhance intrinsic motivation. In keeping with self-determination theory, previous iCBT research has identified a sense of control, an ability to identify with the iCBT programme and support from important others as motivation to persist with treatment (Donkin & Glozier, 2012). Wilhelmsen et al (2013) found similar results, patients are motivated to persist when their overall need for relatedness is satisfied.

The study of motivation and its relationship with treatment dropout is complex and there appears to be a multitude of variables at play. Research has been working towards not only investigating the reasons for dropping out of an online psychological therapy, but also the type of person that is likely to do so (Melville et al., 2010). Impulsivity, distractibility and lack of conscientiousness are personality variables that have been found to be associated with dropout from online psychological treatment (Melville et al., 2010). Patients scoring high in impulsivity may be more likely to dropout due to their higher sensitivity to immediate rewards rather than longer-term rewards of the treatment. These patients may become bored with the routine tasks set out by the treatment and so they decide to prematurely disengage (Blaszczynski, Steel, & McConaghy, 1997). Similarly, patients who are easily distracted are more likely to dropout due to the ease with which they disengage with an online treatment when they become bored. Patients rating low in conscientiousness are generally less responsible, reliable and committed to a treatment and find it easier to prematurely dropout of a treatment. Högdahl et al (2016) similarly found that personality traits are predictive of dropout from treatment in an eating disorder population. Alfonsson, Olsson and Hursti (2016) discuss how dropout later in treatment is predicted by a personality pattern of focussing on immediate consequences and rewards. Patients whose behaviours were governed in this way found an online CBT programme boring and unsatisfying and reported a lower tendency to focus on future goals. This research indicates that personality and its variables are important factors when examining the relationship between motivation and dropout from online treatment.

# The Influence of Treatment Credibility and Expectancy on Dropout

Cavanagh and colleagues (2009) states that higher pre-treatment credibility and expectations positively impact on treatment completion. This finding supports the relevance of the constructs of therapeutic expectancy and credibility for treatment adherence and therefore their potential role in treatment dropout. Expectancy is defined as improvements that patients believe will be achieved and credibility is the logicalness, success in reducing symptoms and confidence in recommending to someone else (Devilly & Borkovec, 2000). Past research has found patients' expectations to be associated with the success in psychotherapy (Goldfried, 1980). According to Constantino et al (2011), patients' expectations for treatment relate to outcomes for the most part and refer to prognostic beliefs about the consequences of engaging in treatment. Typically patients consider the potential benefits of a treatment with little thought given to potential negative effects. Not only do patients possess expectations before beginning treatment, but they also have during-treatment expectations that are influenced by prior experience, therapist interactions and their ongoing appraisal of the efficacy and suitability of the treatment (Schulte, 2008). Due to this ongoing appraisal treatment efficacy and suitability, if a patient's treatment expectations are not being met, could potentially lead to the decision to prematurely dropout of treatment. In

addition, the construct of credibility has been found to predict early treatment dropout from an internet-based psychotherapy treatment (Alfonsson et al., 2016).

The body of research presented on motivation and readiness for change, suggests that these phenomenon should be studied in terms their effects on online treatment dropout. There also seems to be evidence to suggest that premature dropout can be attributed partly to personality variables (Alfonsson et al., 2016; Melville et al., 2010). Finally, therapeutic expectancy and credibility have been proven to be relevant constructs within the field of treatment adherence (Alfonsson et al., 2016; Goldfried, 1980), and so their potential effects on treatment dropout should be considered.

#### Content

The psychoeducational information and CBT tools that are included in the modules of the online programme and the effect that the individual's experience of interacting with the content has on dropout.

When examining treatment dropout in internet-delivered psychological therapies, the role played by the content and tasks contained within these interventions should not be overlooked. Previous research has reported that finding the intervention interesting and engaging may influence a patient's decision to adhere to that treatment and complete prescribed tasks (Alfonsson et al., 2016). In light of this finding, it could be assumed that failing to find the content of the intervention interesting, relevant or engaging could contribute to treatment dropout.

The content of online psychological therapy programs typically mirrors that of face-to-face treatments (Andersson et al., 2014). Although online therapy is carried out over a ten week timeframe instead of the sixteen to twenty sessions typically offered by

face-to-face therapy, it delivers the same treatment content as is offered in face-to-face, manualised CBT with elements such as psychoeducation, behavioural activation, cognitive restructuring, relapse prevention and homework assignments (Andersson et al., 2009; Johansson & Andersson, 2012). In an essence, online treatments are self-help texts with some interactive elements (Andersson et al., 2013). Currently, there is little evidence to suggest that more interactive programs are better and this is thought to be due to the fact that often more interactive programs are brief and do not convey the same quantity or quality of treatment as text-based iCBT. Andersson et al (2013) goes further in suggesting that text-based iCBT treatments include more information and components than in typical face-to-face session. In the delivery of iCBT and other online interventions it is important that the texts are easy to understand, provide clear behavioural instructions and fit the entire range of problems that can be experiences with a certain diagnosis (Andersson et al., 2013).

Tailoring is another factor to consider when examining the content of an online intervention and its relevance to dropout. Tailoring posits that the patient receives a treatment that is personalised (Andersson et al., 2013). Perhaps a lack of personalisation or a failure to address concerns can lead to the decision to non-adhere. To cater to the individual differences among patients with the same or different diagnoses, iCBT is often tailored in terms of patient preferences and symptom profiles (Carlbring et al., 2011). In a study investigating tailoring of the content available to the patient, removing references to specific disorders, accounting for comorbidities and enabling the patients to choose large parts of the treatment content worked well and showed no negative effects on treatment outcomes (Andersson et al., 2011). Berger (2015) concludes that a tailored program suits most patients, whereas a standardised program suits some

patients but not all. Thus, tailoring is an important element in accommodating patient preferences and individual differences in the online delivery of psychological therapies.

In online interventions, it is also important that the texts of the content convey empathy and understanding for the reader (Richardson, Richards, & Barkham, 2010). In doing so, it is possible that a patient can establish a sense of alliance with the content itself, as in self-help interventions there is minimal contact with a therapist. Recent research has suggested that the patient's agreement with the tasks and goals provided by the online psychological programme is more important than their agreement with their therapist (Berger, Boettcher, & Caspar, 2014). This research posits an important role for programme content in online psychological treatments as it could potentially influence a patient's decision to prematurely dropout.

#### **Support**

Relates to the impact the patient-clinician relationship has on treatment adherence, in particular to dropout and how this alliance operates online.

#### **Bordin's Conceptualisation of Therapeutic Alliance**

Support in traditional therapy has been largely understood as being provided through a strong therapeutic alliance, with particular emphasis on the element of bond as described in Bordin's (1979, 1994) conceptualisation of the alliance. According to this conceptualisation, the relationship between the change seeker and the change agent lies at the core of the change process, in other words, the relationship between the client and the therapist is central to treatment outcome (Bordin, 1979). Both the strength of this relationship and goodness of fit of the respective personalities of client and therapist are considered to be more important for treatment outcomes than the type of

therapeutic alliance (Bordin, 1979). This gives way to the idea that a strong working alliance is not restricted to the confines of a face-to-face psychotherapy setting, a sentiment echoed by Bordin (1979). Therefore, the relevance of the therapeutic alliance must be considered in the context of online interventions.

The working alliance is characterised by three key features: agreement on goals, assignment of tasks and development of bonds (Bordin, 1979). Agreement on goals is an important starting point for this relationship and it requires mutual agreement and understanding between the therapist and client regarding the client's current experiences and life history in order to examine, modify and ameliorate the client's own contributions to or exacerbation of their difficulties. The assignment of tasks relates to the collaborative effort between client and therapist to address the explicitly specified change goal. It is further stipulated that the interaction of therapeutic tasks with the client's problematic behaviours can stimulate strains in the working alliance, the resolution of which is an important key to change (Bordin, 1994). This reference to the role played by the rupture of the therapeutic relationship to treatment outcomes is important when one considers the role of the supporter in treatment dropout. Both the change goals and collaboration are linked to the nature of the human relationship between therapist and client, also known as the bond (Bordin, 1979). At first this bond is based off a basic level of trust but as treatment progresses, deeper bonds of trust and attachment are formed. The bond that grows out of the experience of association in a shared activity creates a sense of 'partner compatibility' which is expressed in terms of liking, trusting, showing respect, having a common commitment and shared understanding (Bordin, 1994).

#### Moving the Patient-Clinician Relationship Online

As discussed, the patient-clinician relationship has been long established as a crucial variable in treatment adherence and outcomes in traditional therapies (Horvath et al., 2011). Questions remain regarding its relative importance in online treatment scenarios. To date, the evidence base investigating this phenomenon in online psychology treatments is sparse and somewhat inconclusive (Berger, 2015). Indeed, the online delivery of a psychological therapy may alter the dynamics of the patient-clinician relationship (Proudfoot, 2004) and so it cannot be assumed that therapeutic alliance operates in the same way online as in face-to-face.

Due to online-delivery, and especially in iCBT, the clinician is no longer the main gateway to health information, patient education, treatment and support (Proudfoot, 2004). Both the geographical distance between patient and clinician and the asynchronous nature of the support have been causes of concerns for many therapists due to their potential effects on the establishment of therapeutic alliance (Sucala, Schnur, Brackman, Constantino, & Montgomery, 2013). However, there is research to suggest that even asynchronous support such as text-based email communications can foster the expression of thoughts and feelings in words, compensating for the lack of visual social cues and triggering a close and strong bond between patient and therapist (Berger, 2015). As has previously been discussed the tailoring of online psychological treatment programmes can establish a sense of 'alliance with content' (Berger et al., 2014).

In online delivered CBT, support or therapist contact involves regular text-based communications, providing answers to questions, encouragement and feedback on homework assignments (Paxling et al., 2013). The text-based communications usually take the form of short text or email messages and typically take fifteen minutes per patient per week. Evidence is beginning to emerge outlining how best to support

patients using psychological therapies online. An effective online supporter will build trust with the patient, effectively manage patient expectations, create a sense of expertise and facilitate the patient in defining their own goals (Mohr, Cuijpers, & Lehman, 2011). Paxling et al (2013) found that task reinforcement, task prompting, self-efficacy shaping and empathetic utterances are therapist behaviours associated with higher patient completion of modules. The potential role played by support in online treatment dropout could be explained by the failure of a therapist to engage in these adherence promoting behaviour.

Further consideration needs to be given to the role played by support in internet interventions and its influence on accountability and adherence. Mohr, Cuijpers and Lehman (2011) describes the patient-therapist relationship as 'supportive accountability', meaning that the patient is accountable to a trust-worthy and empathetic supporter who is believed to have a level of expertise. This idea of supportive accountability could have particular significance in online therapies due to the distance, asynchronousity and limited contact. Due to these factors, the interpersonal relationship between the therapist and patient can diminish, increasing the importance of offering a supportive framework to support active engagement with the online treatment (Mohr et al., 2011). This theory ties in with Cavanagh's (2010) proposal to extend our understanding of therapeutic alliance to include the patient, the online psychological programme and the supporter in what is known as the 'triangle of alliance'. Supportive accountability could have important implications for dropout from online treatments.

Online Communication with a Therapist Enhances Anonymity, Giving Way to the Disinhibition Effect

39

The privacy and anonymity that accompany the online communication medium provided by an internet-delivered intervention are factors that deserve consideration. Users report that the greater anonymity offered by seeking treatment online as opposed to in a face-to-face environment is appealing (Proudfoot, 2004). Users also report that they are more comfortable self-disclosing online (Newman, Consoli, & Taylor, 1997) and that they are more likely to disclose suicidal tendencies to a computer than in a face-to-face scenario (Greist et al., 1973). In an investigation of client attitudes towards online counselling, Young (2005) similarly reported that online offered an increased sense of anonymity as opposed to face-to-face encounters, especially among white, middle-aged, university-educated men. It is thought that this increased sense of privacy or anonymity removes the fear of stigma and anxiety about addressing sensitive issues, leading to the engagement with mental health services of those who may not otherwise have sought help (Childress, 2000). However, recent studies of client attitudes and expectations of online self-help interventions rated anonymity the least important out of twelve dimensions for decision to engage with an online psychological therapy (Musiat et al., 2014). While online interventions were considered to be significantly more anonymous, face-to-face treatment did not score low in this domain. These findings suggest that anonymity is not necessarily perceived as an advantage of online (Carper McHugh & Barlow, 2013).

Elaborating on the role played by an enhanced sense of privacy and anonymity in online communications, it has been reported that moving a psychological intervention online leads to a disinhibition effect (Suler, 2004). During online therapy, some patients self-disclose or act-out more frequently or intensely than they would in person and this can lead to therapeutic breakthroughs or breakdowns in the therapeutic relationship (Joinson, 1998; Richards, 2009). Benign disinhibition refers to people

revealing personal information they wouldn't otherwise feel comfortable sharing or would be much slower to share with a therapist. There are six interacting factors that are thought to create this effect: dissociative anonymity, invisibility, asynchronousicity, solipsistic introjection, dissociative imagination and minimisation of authority (Suler, 2004). In an essence, the ability to avert responsibility, compartmentalise, be physically invisible and the perceived distance of the supporter amplifies the disinhibition effect. On the positive side, this effect can bring people towards deeper expression more steadily and quickly in treatment (Suler, 2004). On the other hand, such rapid disclosures can create a false sense of intimacy between the patient and therapist which can later lead to the patient feeling exposed and regretting sharing so much. For this reason, the online disinhibition effect is important to consider when investigating online treatment dropout and the subjective experience of this.

# Comparing the Effects of Online Support and Face-to-Face Therapy

Throughout the literature, the effects of online support are first considered in comparison to face-to-face support. When comparing face-to-face and online counselling, patients reported no differences in working alliance, describing a collaborative, bonding relationship with their therapist in both conditions (Cook & Doyle, 2002). Further research carried out by Barak and Bloch (2006) found that meaningful and smooth conversations resulting in positive responses and emotional arousal were possible online and comparable to face-to-face sessions. From a patient perspective, a positive therapist alliance can be established in online interventions independent of delivery modes and communication modalities (Berger, 2015).

Therapeutic alliance can be established online and is comparable to face-to-face treatment (Reynolds, Stiles, & Grohol, 2006). In addition, it is also important to consider whether the type of support provided for online treatments such as iCBT has

an effect on therapeutic alliance and if this construct is relevant at all in terms of online treatment. Andersson et al (2014) state that guided interventions have significantly greater efficacy than unsupported ones. Titov et al (2009) stipulates support can be given by a trained technician and can be just as effective therapeutic advice as that from a professional. Research on earlier online psychological programmes found clinicianguided iCBT to be associated with superior outcomes relative to self-guided iCBT and fully automated iCBT (Andersson & Titov, 2014).

In an interesting point of view, Cuijpers et al (2010) hypothesise that just because comparable effects have been established between face-to-face support and online support for psychological treatments, this does not imply that the patient-therapist relationship is necessary for success in iCBT programmes. Previous research has found that even though alliance-outcome correlations are in a positive direction, they often lack statistical significance (Berger, 2015). Furthermore, it has been proposed that in online interventions it is more likely the agreement on goals and tasks than the bond between therapist and patient that is vital. It could also be the case that therapeutic alliance is more important to some patients rather than others depending on their preferences and needs (Berger, 2015). Investigating the role of support in patient dropout experience could provide insights into the relevance of the patient-therapist relationship for online psychological treatments.

## **Patient Preferences for Communication Medium**

Even though research supports the efficacy of guided self-help interventions such as iCBT as comparable to face-to-face treatments, this may not effect patient preferences for the type of support delivered. As has just been discussed, some patients have preferences regarding the level of contact they would like to have with their

therapist or supporter (Berger, 2015). These patient preferences also apply to a preference for face-to-face therapy over online-delivered treatment. Of course, preferences could be based upon previous experiences with online interventions or mental health treatment. However, even among populations with no prior experience with mental health treatment, there is an over-whelming preference for face-to-face treatment options among the majority (Wallin et al., 2016). Interestingly, Mohr et al (2010) found that while 48% of individuals consider online psychological therapy to be a valid treatment format, 92% had a preference for face-to-face treatment. The reasons for this are poorly understood, but some research suggests that it could be due to low acceptability rates of internet interventions (Wallin et al., 2016). Ultimately, the advantages of internet interventions need to trump both its disadvantages and the benefits of face-to-face therapy.

## The Conceptualisation of Online Treatment Dropout

Various definitions exist regarding treatment dropout (Högdahl et al., 2016).

Cavanagh (2010) defines it as stopping use of an intervention prior to a planned ending. When face-to-face CBT is considered, dropout is described as ending treatment before reaching therapeutic objectives, against the therapist's advice and without discussing it with them (Bados, Balaguer, & Saldaña, 2007). However when it comes to online treatment dropout, its conceptualisation is less straightforward. Melville, Casey and Kavanagh (2010) have defined online dropout as the failure to complete a pre-defined number of treatment sessions or modules. As Högdahl et al (2016) point out, it would appear that online dropout is conceptualised in terms of treatment proportions, i.e. the

amount of modules completed, and not necessarily in terms of clinical relevance, i.e. the effect of treatment received on symptoms.

As has already been discussed, the online-delivery of psychological treatment brings with it an abundance of variables, the effects of which require investigation as it cannot be assumed that online treatment is operating according to the same mechanisms as traditional treatment. In light of this, conceptualising online dropout based on what is already known of dropout from face-to-face therapies could be misleading and result in research measuring the wrong construct. It is crucial to question whether leaving active online treatment should be considered dropping out (Eysenbach, 2005).

Eysenbach (2005) comments on the discretion of the patient in the decision to non-adhere. This is an important consideration when conceptualising online treatment dropout as there appears to be an emerging idea that patients may 'dropout' of online interventions because they believe they have made sufficient progress and have got what they needed regardless of criteria for clinical improvement and recovery (Hynan, 1990). Supporting this argument, Proudfoot et al (2004) contradict the assumption that non-adherence and dropout are negative outcomes and reflect negative experiences with the online intervention. In an examination of the features and benefits of online counselling, Richards (2009) discusses the phenomenon of single session counselling. The text-based nature of online interventions means that patients utilising them are likely being influenced by the disinhibition effect and the therapeutic benefits of writing. These processes trigger patients to make personal and relevant disclosures earlier in treatment and to reflect on what they have disclosed (Richards, 2009).

In applying these findings to what is considered dropout from online treatments such as iCBT, it could be proposed that a patient 'dropped out' because their needs

were met in fewer treatment sessions than the pre-defined cut-off point and they no longer saw the use of staying in treatment. Previous research into non-adherence has found that some patients prematurely leave treatment because they believe they have achieved sufficient progress (Vandereycken & Devidt, 2010). Exploratory research carried out on the parameters that influence the effectiveness and retention of users on open access websites providing brief and full CBT programs for depression found that short internet interventions can lead to an immediate small to moderate reduction of depressive symptoms (Christensen, Griffiths, Mackinnon, & Brittliffe, 2006). Similarly significantly higher usage in the first four weeks was reported in a study of adherence to an iCBT programme (Enrique Roig, Palacios, Ryan, & Richards, 2019). The concept that some patients leave treatment early because they have 'got what they needed' could be due to the fact that for some people advice, the reframing of a problem or normalising difficulties is all the psychological support that is required (Cameron, 2007). This type of psychological support builds on an individual's resourcefulness and psychological mindedness.

Moving forward, careful consideration needs to be given to the conceptualisation of online treatment dropout. From the research presented here, it appears that dropout could potentially be a unary construct which, depending on the individual's experience and reasons for their decision, can be positive or negative.

# The Current Study

The existing literature lacks in-depth studies of the subjective experiences and reasons for dropout from online psychological treatments. The qualitative research that has been carried out to date has many limitations. Firstly, there is a lack of research

exclusively examining the phenomenon of dropout from internet interventions, with a focus instead on treatment adherence. There is also a tendency to focus on over-arching themes based on dropout literature relating to face-to-face therapies. Additionally, the current body of literature does not discern the nuances of each patient's experience, whether positive or negative, with online treatment and instead concentrates on the patient's reason for dropping out, assuming that online treatment dropout is a homogenous concept. This lack of focus is inaccurate and results in the reasons for online treatment dropout to be over-generalised and the subjective experience to be disregarded. Other research has referred to this lack of specificity in the investigation of the experience of dropout from an online intervention, citing the abundance of quantitative research into the phenomenon and calls for more robust qualitative research (Cavanagh, 2010). Finally, in light of the questions that have been raised regarding the current conceptualisation of dropout (Eysenbach, 2005; Proudfoot, 2004; Wright et al., 2019), its validity in terms of clients' lived treatment experiences needs to be explored. A large portion of the research to date has unquestionably accepted the existing definition of the phenomenon when carrying out qualitative analyses and that could potentially be responsible for the failure to provide an in depth and subjective account of dropout.

The current research will explore participants' subjective experiences of dropping out of internet-delivered CBT programmes 'Space from Depression' and 'Space from Anxiety'. This research will supplement the existing body of research on online treatment dropout and address its existing limitations to offer a more in depth insight into the experiences of using an internet intervention that lead to dropout. It intends to do so by first developing a robust semi-structured dropout interview based on an analysis of the existing literature, its gaps and observations made during the follow-

up of a larger RCT investigating the effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety disorders in the Improving Access to Psychological Therapies programme with the NHS (Richards et al., 2018). The central objective of the proposed research is to document, analyse and understand the subjective experiences of dropout from an iCBT treatment in a routine care setting. It is hoped that the following research questions will be answered: 1) What online treatment experiences are clients who drop out having? 2) Is the current conceptualisation of treatment dropout valid?

### Method

# Design

A qualitative design using semi-structured interviews explored patients' subjective experiences of dropout from an internet-delivered cognitive behavioural therapy (CBT) programme for depression and anxiety. This was a nested (Creswell et al., 2006) qualitative study, part of a larger randomised controlled trial (RCT) investigating the effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety in the United Kingdom's Improving Access to Psychological Therapies (IAPT) programme (Richards et al., 2018)

# **Participants and Recruitment**

The main study included 340 individuals in the RCT, of which 234 were randomised to the immediate treatment group and 106 to the waiting list control group. The iCBT treatments were delivered for a duration of 8 weeks and treatment group participants received regular post-session feedback from Psychological Well-being Practitioners (PWPs). PWPs monitored participants' progress throughout the trial and messaged participants at their first login highlighting certain aspects of the iCBT programme and encouraging usage. Over 8 weeks, the PWP logged in on 6 separate occasions to review participants' progress, leave feedback and respond to completed work. Participants completed a variety of research measures including the Patient Health Questionnaire -9 (PHQ-9; Kroenke, Spitzer & Williams, 2001) and Generalised Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006) at baseline, during, at the end of the 8-week treatment and at 3, 6, 9 and 12-month follow-up. The Mini-International Neuropsychiatric-Interview (M.I.N.I.; Sheehan et al.,1998) was administered at baseline and 3-month follow-up. Waiting list control group participants completed research

measures at baseline and after 8 weeks waiting for treatment, at which point they gained access to the iCBT treatment.

All adult users of the Berkshire NHS Trust IAPT Talking Therapies Step 2 services were invited to participate. Participants were screened in line with the eligibility criteria: minimum age of 18 years old, score of  $\geq 9$  on PHQ-9 or score of  $\geq 8$  on GAD-7, no suicidal intent/ideation, absence of psychotic illness, not currently in psychological treatment for depression and/or anxiety, no alcohol/drug misuse and no previous diagnosis of an organic mental health disorder. The PWP assessed participants' suitability for an internet intervention based on their willingness to engage with an iCBT intervention, presence of low to moderate levels of anxiety and depression, no suicidal or self-harm risk and having internet access. For the purposes of the RCT, a participant was considered to have dropped out of treatment if they completed less than six reviews with their supporter, i.e. they failed to login and check the feedback and/or advice left for them by their supporter at least six times.

Purposive sampling (Silverman, 2001) was utilised to recruit individuals for the semi-structured interviews from the sample of RCT participants who were considered to have dropped out. This process of intentional selection is widely used in qualitative research in the field of treatment dropout as it enables the selection of individuals with particular characteristics (Fernández-Álvarez et al., 2017; Manicavasagar et al., 2010; Todkill & Powell, 2013). For this study, participants were eligible for inclusion if they had received less than six reviews from their supporter and had completed at least one module in the online programme. It was necessary to have completed at least one module on the online programme so that participants reporting on treatment dropout had some experience with each of the domains of investigation; experience of technology, motivations to engage in treatment, experience of intervention's content

and experiences of support. Individuals who satisfied the eligibility criteria were scheduled to be invited to participate by telephone at their 6-month or 9-month follow-up point. Fifteen (N=15) participants (8 female: 7 male) were interviewed. The mean age of participants was 33.5 years (SD=9.1). Characteristics of the group are summarised in Table 2.

Table 2

Characteristics of the Participants

Gender	Age	Modules completed	Reviews received	Interview length
Female	24	1	4	67 mins
Female	51	4	5	53 mins
Female	36	3	5	55 mins
Female	26	7	3	43 mins
Male	33	8	3	55 mins
Male	37	5	4	35 mins
Male	27	1	3	41 mins
Male	41	7	2	27 mins
Female	45	4	2	58 mins
Male	44	3	1	28 mins
Male	23	4	4	38 mins
Male	21	3	5	38 mins
Female	38	1	4	35 mins
Female	35	3	5	28 mins
Female	22	2	1	33 mins

# **Ethical Approval**

Ethical approval to conduct the original RCT was granted by the National Health Service (NHS) England Research Ethics Committee (REC) on 16<sup>th</sup> May 2017 [REC Reference: 17/NW/0311] (Appendix A). An ethical amendment to include the current qualitative research was approved by the NHS England Research Ethics Committee on 6<sup>th</sup> August 2018 (Appendix B).

Ethical considerations. There were several ethical considerations for a study of this nature. Due to the fact that this was a nested study and that the participants were recruited from a parent study, participants may have felt obligated to participate when invited. In order to ensure participants' sense of agency when it came to participation in the qualitative interviews, researchers highlighted to them that whether or not they engaged with the study was their choice and explained to them that this decision would not affect their involvement in the parent study.

Participants were offered a financial incentive of a £20 gift voucher for their participation in this study. To avoid undue inducement, exploitation or biased enrolment, researchers established that a gift voucher to the value of £20 would be an appropriate level of payment. This level of payment matched the payment given at each follow-up point in the parent study.

Consideration was also given to the nature of the interviews. This study required participants to explore in depth their treatment experiences, potentially causing them to revisit a negative time in their lives. This may have elicited negative feelings or distress among participants. To handle and manage this potential distress during the interviews, this study utilised a risk protocol whereby there was always a qualified psychologist onsite during the phone calls and the Berkshire NHS Trust IAPT Talking Therapies

Step 2 services with which the participants had been involved with were aware of these nested qualitative interviews and participants could be linked back in with the service/crisis team where necessary. Furthermore, there can be concerns among participants when engaging in qualitative research that they could be identified through the detailed accounts they provide. To address these concerns, participants were made aware of the confidentiality and data storage protocols relating to their interviews. All interviews were anonymised by the researchers.

### **Procedure**

In order to identify the eligible participants, Kate Lawler (KL) manually went through each RCT participant's SilverCloud Health account history from the treatment group to verify the number of modules viewed, reviews received and how responsive each of these participants was to research contacts, i.e. participants who usually answer calls from the research team. An excel database was created listing all potential participants for the qualitative interviews. Twenty-seven participants met eligibility criteria and were scheduled to be contacted by telephone at their 6-month or 9-month follow-up point in order to be invited to participate in the qualitative semi-structured research. The online programme was free to access and an incentive of a £20 gift voucher to participate in the qualitative research was offered. Twenty participants were contacted and invited to participate, fifteen of which expressed an interest in participating in the interviews. They received an information sheet (Appendix C) and consent form (Appendix D) via email and committed to a set time for a telephone interview.

The telephone interviews were scheduled with each participant on a day and time that was convenient for them. The interviews were conducted by two researchers

(Kate Lawler (KL); Caroline Earley (CE)) and followed a semi-structured interview schedule (Appendix E). The interviews lasted 27-67 minutes depending on the extent to which each participant explored their own experience of treatment dropout. After the fifteenth participant was interviewed, saturation was reached and recruitment ceased (Strauss & Corbin, 1998) i.e. the fifteenth interview provided no new information regarding the experience of dropout that had not already been accounted for in the previous fourteen interviews and interviewing additional participants would be to the point of diminishing returns. The interviews were recorded and transcribed verbatim by a third party transcription service, Transcription City.

### Measures

Development of the interview schedule. Research measures administered at follow-up as part of the main RCT (Richards et al., 2018) included one open question asking for details about the specific reasons for dropout (where applicable). The need for a more in depth exploration of drop out became evident when the existing drop out question contained in the original RCT protocol did not elicit adequate information, i.e. participants provided very brief responses such as, 'I forget why I stopped', 'I didn't like it', 'I didn't have time'. At the same time, while administering research measures over the phone, researchers observed that there seemed to be a willingness among participants to share their drop out experiences in a more informal conversational style.

Therefore, the initial objective of the research was to develop a robust questionnaire to explore the subjective experience of treatment dropout. This was achieved through an initial review of the existing literature on treatment dropout carried out by KL and CE independently. KL & CE summarised their findings and presented them to the auditors (Derek Richards (DR) & Angel Enrique (AE)) to discuss how best

to proceed (Appendix F). KL then carried out an additional literature review on supplementary research (Appendix G). KL and CE independently analysed these findings in an excel file (Appendix H), identifying reoccurring themes in the area of treatment dropout and systematically categorising them as well as identifying common questions that were asked in similar research (Barrett et al., 2008; Beatty et al., 2017; Fernández-Álvarez et al., 2017; Holst et al., 2017; Johansson et al., 2015; Melville et al., 2010; Stangeland-Lie et al., 2017; Todkill & Powell, 2013). This analysis was reviewed and audited by DR and AE and four domains of investigation for treatment drop-out were identified: Experience of Technology, Motivations to Engage in Treatment, Experience of Intervention's Content and Experiences of Support (see Table 1 describes each of the domains of investigation, emerging categories and corresponding research papers). The process of generating questions for each domain of investigation was undertaken by KL and CE who separately elaborated on the domains of investigation to form questions and then agreement was reached by comparing the two lists of questions, balancing the greatest number of topics with the least number of questions (Appendix I, J, K & L). The interview was designed in line with the four main domains of investigation and it was concluded that once these four domains were interviewed, there would be adequate information to address the research question. Interview questions were developed based on these four broad domains and organised in such a way that the interview flowed like conversation. In order to achieve this, interview questions belonging to particular domains of investigation may appear elsewhere. DR and AE oversaw the selection of questions for the interview schedule and advised on how best to organise the questions within each domain. KL and CE made amendments to the questions and to the overall flow of the interview before trialling the interview with a test participant. The interview schedule was refined once

more in collaboration with DR and AE before the final version was complete. Figure 1 details the stages of formation of this interview schedule.

Semi-structured interview. The interview (Appendix E) is comprised of twenty-two questions exploring the experience of online treatment from the perspective of the individual who has dropped out and their reasons for doing so. The semi-structured style of the interview provides the participant with plenty of opportunity to give feedback. The questions are divided into four sections: 3 questions in the Experience of Technology section, 5 questions in the Motivations to Engage in Treatment section, 9 questions in Experience of Intervention's Content section and 6 questions in the Experiences of Support section. This interview schedule provides a flexible framework for the interviews with scripted prompts for the interviewer. The prompts were included on a side panel of the interview schedule to ensure the interviewer covered all domains of investigation, checking them off as they went and to avoid repetition if a question had already been addressed in a different domain. Prompts also encouraged participants to adequately explore their subjective experiences of treatment dropout and to expand on them if their responses were lacking or they found it difficult to remember.

## **Interventions**

The 'Space from Depression' and 'Space from Anxiety' interventions are internet-delivered CBT-based programmes for the treatment of depression and anxiety. Both of the interventions contain five core modules: Getting Started introduces CBT and the Thought Feeling Behaviour (TFB) cycle, Understanding Feelings focuses on the 'feelings' component of the TFB cycle, Spotting Thoughts focuses on the 'thoughts' component of the TFB cycle, Challenging Thoughts focuses on taking action against

negative and distorted thoughts and Bringing it All Together prepares the user for coming to the end of the programme. 'Space from Depression' has two additional modules: Boosting Behaviour focuses on the inactivity and lack of motivation associated with depression and Core Beliefs targets the underlying root of unhelpful thoughts that keep the cycle of depression going. 'Space from Anxiety' has two additional modules: Facing Your Fears focuses on the role of avoidance in maintaining fears and anxiety and Managing Worry focuses on recognising real or hypothetical worries and identifying strategies to manage. All of the modules are comprised of cognitive and behavioural components such as: self-monitoring, thought recording, behavioural activation, and cognitive restructuring along with incorporating relaxation exercises and personal stories from past users of the programme to help guide clients on how to adapt the cognitive and behavioural strategies learned into their own lives (Richards et al., 2015).

# **Supporters**

A Psychological Well-being Practitioner (PWP) in the NHS Improving Access to Psychological Therapies (IAPT) service was assigned to support each participant. A dashboard interface gave supporters an overview of their participant's level of engagement with the programme. Supporters monitored their participant's progress and provided asynchronous post-session feedback of between 10 and 15 minutes.

# Background of Researchers, Co-researchers and Auditors

The first author and researcher KL has a background in research into internet interventions and worked as a member of the research team on the main RCT investigating the effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety in the United Kingdom's Improving Access to Psychological

Therapies programme (Richards et al., 2018). Both KL and CE carried out the initial literature review before analysing the data collected from the interviews. CE, DR and AE are members of the Clinical and Research Innovation team at SilverCloud Health and the e-Mental Health Research Group at Trinity College Dublin, all having extensive research and career experience in the field of internet interventions. Ladislav Timulak (LT) is a member of the e-Mental Health Research Group at Trinity College Dublin and also has extensive research and career experience in the field of internet interventions and the provision of various psychological therapies.

# **Data Analysis**

Data was analysed using the descriptive and interpretive qualitative research method (Elliott & Timulak, 2005) led by the first author (KL). This approach allowed for a degree of flexibility while also being structured in such a way that all stages of the analytic process may be audited (McElvaney & Timulak, 2013). Results were discussed and reflected upon with the other authors (AE, CE, DR, LT) to ensure clarity and consensus on interpretations of the data and its meanings. The method of analysis followed clear steps:

- 1. The interview transcriptions were read several times to establish an overall feel for the data and irrelevant digressions and repetitions were omitted.
- 2. The data was divided into discrete meaning units that captured the essence of what participants were trying to convey. A discrete meaning unit should provide understanding of that data irrespective of the context (McElvaney & Timulak, 2013).
- 3. Meaning units were coded according to the order in which they occurred and to which participant they belonged. For example PA1 refers to the first

meaning unit belonging to the first participant, PC5 refers to the fifth meaning unit belonging to the third participant and so on. This process provided a clear audit path.

- 4. Meaning units were assigned to the domains of investigation headings (Experiences of Technology, Motivations to Engage in Treatment, Experiences of Intervention's Content, and Experiences of Support) in order to organise the data. The preliminary literature review that informed the creation of the semi-structured interview schedule which was used for this study suggested domains of investigation, but these were not finalised until after the data analysis.
- 5. Meaning units within the domains were grouped into categories based on having similar meanings. Some meaning units are included in more than one category because they contained more than one relevant meaning (therefore the categories are not mutually exclusive). This process of categorisation is subjective and interactive. The data is organised in a way that corresponds with the participants' meanings while also acknowledging the impact of existing theoretical knowledge (McElvaney & Timulak, 2013) as outlined in the background of the researchers, co-researchers and auditors.
- 6. Strategies were employed to maintain rigour and ensure reliability and validity throughout data analysis. Audits were carried out at various intervals, domains and categories were commented on and feedback was provided by fellow researchers (AE, CE, DR, LT) and records maintained of each step of the analysis. The feedback provided sometimes outlined a need for the clarification of particular meaning units or indeed their reallocation. Utilising this feedback sometimes resulted in the creation of new domains and/or categories or the removal of existing domains and/or categories.

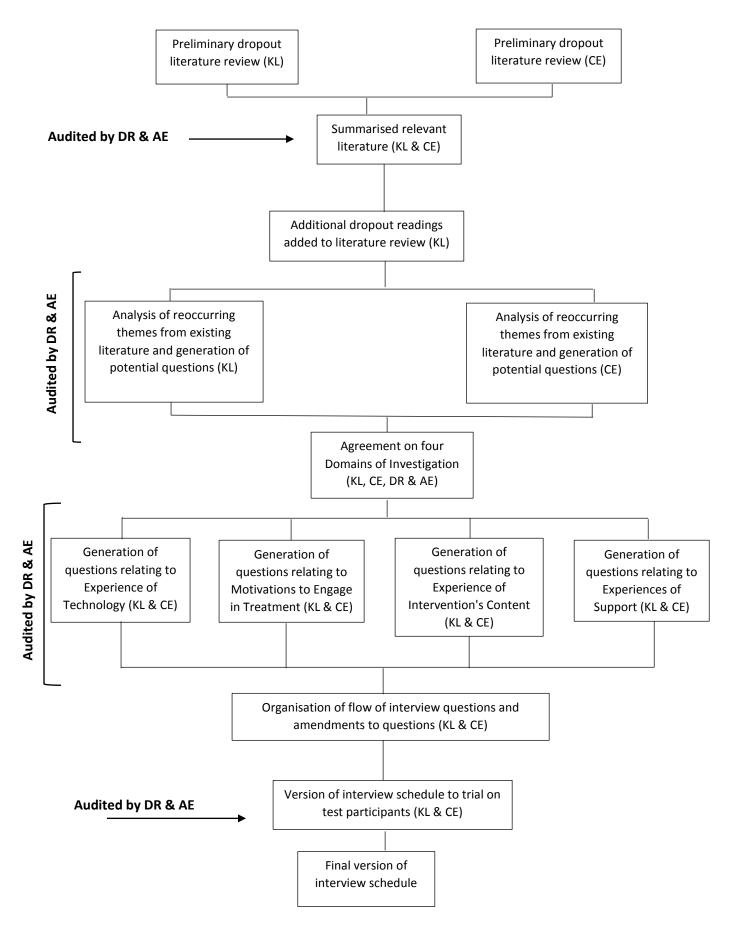


Figure 1. Stages of formation of the interview schedule.

### Results

The analysis of the data derived from the participant interviews is presented below. Ten domains capturing the areas of investigation of the subjective experiences of dropout from an iCBT intervention were established (see method section): Relationship to Technology, Motivation to Start, Background Knowledge and Attitudes towards iCBT, Change in Motivation, Usage of the Programme, Changes due to the Intervention, Engagement with Content, Experience Interacting with the Supporter, Experience of Online Communication and Termination of the Supported Period (See Appendix M). Within each domain, there were positive and negative connotations to participants' reports. The Change in Motivation domain (Table 3), which is characterised by participant reports regarding their reasons for no longer being motivated to continue with the iCBT treatment, illustrates two distinctive participant groups: participants who reported a positive reason for their change in motivation (felt ready to leave treatment early) and participants who reported a negative reason for their change in motivation to engage with treatment. The negative reasons described by participants in this domain are: not being in a receptive frame of mind, contextual obstacles and iCBT considered not to be personally fitting.

Table 3

Participants' Reports relating to their Change in Motivation

Change in Motivation	Categories	No. of participants
Positive reason	Felt ready to leave treatment early	5/15
Negative reason	Not in a receptive frame of mind	4/15
	Contextual obstacles	3/15
	iCBT not considered to be personally	7/15
	fitting	

The findings are presented within the domains and categories yielded by the qualitative analysis described in the method section (see Table 4). Table 4 distinguishes participants' experiences of treatment depending on whether they felt ready to leave treatment early (positive reason for change in motivation to engage with treatment; n=5) or if they had negative reasons for their change in motivation to engage with treatment (n=8). Two participants did not report on the reason for their change in motivation to engage with treatment and so are not included in this comparison.

Table 4

Participants' Experiences of Treatment based on their Reported Reasons for their Change in Motivation

		Change in Motivation			
		(n=13)			
Domain	Categories	Felt ready	Negative	Did not	
		to leave	reason for	report on	
		treatment	their	change in	
		early	change in	motivation	
		(n=5)	motivation		
			(n=8)		
Relationship	Being familiar with	5/5*	8/8*	2/2	
with	technology				
Technology	Sense of privacy and	5/5	8/8	1/2	
	anonymity online				
	Good memorability	5/5	7/8	1/2	
	Trusted the platform	4/5	7/8	1/2	
	Easy-to-use online platform	4/5	6/8	2/2	
	Spends too much time	0/5	2/8	0/2	
	online				
	User dashboard not clear	0/5	2/8	0/2	
	enough				
	Layout too structured	0/5	2/8	0/2	
	Difficulty figuring out how	1/5	1/8	0/2	
	to use it				
	Poor computer literacy	1/5	0/8	0/2	
Motivation to	Symptoms of psychological	5/5	8/8	1/2	
Start	distress				
	Stressful life events	1/5	4/8	1/2	
Background	Belief that iCBT could help	4/5	7/8	2/2	
knowledge and	Willingness to try it	4/5	4/8	2/2	
Attitudes	Had an understanding of	1/5	4/8	1/2	

towards iCBT	CBT			
	Trusted provider of online treatment	1/5	4/8	0/2
	No prior knowledge or awareness of CBT	4/5	4/8	1/2
	Sceptical of treatment approach	3/5	2/8	1/2
Usage of the Programme	Could use it wherever and whenever needed	5/5	8/8	2/2
C	Productive and regular use	5/5	4/8	1/2
	Using the programme for own benefit	3/5	4/8	2/2
	Couldn't prioritise time to use it	4/5	7/8	1/2
	Using it out of a sense of obligation rather than for a positive outcome	2/5	6/8	0/2
	Using it when feeling low	2/5	5/8	1/2
	Kept forgetting about the programme and appointments	1/5	2/8	0/2
Changes due to	Symptom improvement	5/5	6/8	2/2
the Intervention	Applying learned CBT techniques in everyday life	4/5	6/8	2/2
	Developed a knowledge of CBT treatment	3/5	3/8	2/2
	Increased awareness and/or insight	2/5	4/8	1/2
	Encouraged to get the help needed	0/5	3/8	0/2
Engagement	Useful tools and exercises	4/5	8/8	2/2
with Content	Reflecting back on completed work was beneficial	4/5	4/8	2/2
	Content relevant and relatable to concerns	3/5	4/8	2/2
	Manageable workload	2/5	4/8	1/2
	Reading and writing provided clarity	2/5	4/8	1/2
	Writing about thoughts and feelings felt therapeutic	3/5	3/8	0/2
	Felt supported by the programme content	3/5	2/8	0/2
	Information laid out clearly and concisely	1/5	3/8	0/2
	Felt like too much work	1/5	4/8	2/2
	Disliked reading and writing	1/5	4/8	1/2
	Content was too generic at times	2/5	3/8	0/2

	Did not like the personal	1/5	4/8	0/2
	stories			
	Content was boring	0/5	4/8	0/2
	Content exacerbated	0/5	4/8	0/2
	symptoms			
	Reflecting of no benefit	0/5	2/8	0/2
	Difficult to understand	0/5	1/8	0/2
	Questionnaires felt pointless	0/5	1/8	0/2
	Did not like the mood	1/5	0/8	0/2
	monitor			
	Content felt disconnected	0/5	1/8	0/2
	from one section to the next	0.0	-, -	₹, <u>—</u>
Experience	Felt supported by and	5/5	4/8	1/2
Interacting with	connected to supporter	3/3	170	1/2
Supporter Supporter	Supporter tailored treatment	4/5	5/8	0/2
Supporter	to needs	4/3	3/0	0/2
	Supporter provided a good	2/5	6/8	1/2
	introduction and explanation	2/3	0/0	1/2
	of treatment			
	Felt able to speak freely	4/5	4/8	0/2
	Supporter encouraged	3/5	3/8	2/2
	engagement	3/3	3/0	212
	Benefitted from having a	4/5	2/8	1/2
	supporter	4/3	2/0	1/2
	Supporter demonstrated a	3/5	2/8	1/2
	good level of expertise	3/3	2/0	1/2
	Supporter discussed	2/5	3/8	0/2
	treatment goals	2/3	3/0	0/2
	Supporter offered	2/5	3/8	0/2
	understanding	2/3	3/0	0/2
	Support felt scripted and	0/5	4/8	0/2
		0/3	4/0	0/2
	impersonal Had no sense of connection	0/5	2 /0	1/2
		0/3	3/8	1/2
	with supporter	1/5	1/8	1 /2
	No feedback from supporter	1/3	1/0	1/2
	on work completed or			
	messages sent	0/5	2/9	0/2
	Supporter never discussed	0/5	2/8	0/2
	treatment goals and			
	expectations  Lock of apposite and	0/5	1 /0	1 /2
	Lack of empathy and	0/5	1/8	1/2
	understanding from			
	supporter	0/5	1 /0	1 /2
	Lack of guidance from	0/5	1/8	1/2
	supporter	0/5	1 /0	0/2
	Felt like supporter did not	0/5	1/8	0/2
	care	0/5	1 /0	0/2
	Supporter never made	0/5	1/8	0/2
	contact			

	Did not feel comfortable	0/5	1/8	0/2
	talking with supporter			
Experience of	Frequency of online	4/5	5/8	1/2
Online	communication worked well			
Communication	Liked communicating	4/5	3/8	1/2
	online with supporter			
	Easier to open up online,	4/5	2/8	1/2
	feeling of disinhibition			
	Preference for face-to-face	0/5	7/8	1/2
	communication			
	Needed more contact with	1/5	4/8	1/2
	supporter			
	Communicating online was	0/5	5/8	0/2
	too formal and structured			
	Lack of instantaneous	0/5	2/8	0/2
	responding with supporter			
	Couldn't open up to a	0/5	1/8	1/2
	computer	5, 5	-, -	
	Online communication felt	0/5	1/8	0/2
	too anonymous			
Termination of	Feels able to go back to	4/5	5/8	2/2
Supported	treatment if needed	., -	2, 3	_, _
Period	Happy with how support	5/5	0/8	1/2
1 0110 0	was terminated	272	0, 0	1, 2
	Had a conversation with	2/5	1/8	0/2
	supporter about finishing	2,0	1,0	0/ <b>2</b>
	treatment			
	No longer a priority, just let	2/5	2/8	0/2
	it go	2/3	2,0	0/2
	Support stopped	0/5	1/8	1/2
	unexpectedly, felt	0/3	1/0	1/2
	abandoned			
	Felt relieved that support	0/5	1/8	0/2
	stopped as it was a negative	U/ J	1/0	0/2
	experience			

*Note*. Reported negative reasons for change in motivation to continue engaging with treatment are: not being in a receptive frame of mind, contextual obstacles and iCBT not considered to be personally fitting.

\*Only thirteen participants (five felt ready to leave treatment early and eight had negative reasons for their change in motivation) reported on the reasons for their change in motivation

# **Relationship to Technology**

Participants' reports of relationships to technology were clustered into ten categories (see Table 4). Participants' reported relationships with their use of technology in general and the technology used in the online programme were considered to have both positive and negative connotations.

All fifteen participants reported on aspects of a positive relationship with technology, in particular referring to using technology as part of their everyday lives. With regards the online platform, participants described it as being straightforward to use and navigate and easy to pick up where you had left off. Twelve participants (4/5 of the participants that felt ready to leave treatment early and 7/8 of the participants who had a negative reason for their change in motivation to continue with treatment; 1/2 participants who did not report on change in motivation) stated that they had no privacy concerns with regards the security of the online platform or the personal information they had shared, e.g. when I found that it was quite secure to sign in and to get onto the actual site... I kind of was like oh I appreciate that this actually probably is very secure and I'm not worried about anything regarding kind of like data issues (PA). Fourteen participants (5/5 and 8/8; 1/2) spoke about the increased sense of privacy and anonymity offered by an online intervention. Being able to use the online intervention from the privacy of your own home, concealing your physical identity from your supporter and avoiding face-to-face interaction were factors considered to make online treatment more anonymous and private for the user, e.g. ... and I quite like the fact that my (supporter), that she's never met me so I had no fears... I was never worried that I was gonna accidently bump into her in the supermarket and be like 'oh this is awkward' (PC); ... with the phone calls I had to make sure that there was no one else in the house and stuff when I had them and you can't always predict what everyone else is

doing... but online I could have the screen wherever I wanted it and made sure no one else could see it (PI). It was also important to participants that they were able to access the online treatment privately from personal computers or other devices, e.g. ...I could access it privately on my computer (PK).

Seven participants reported on aspects of a negative relationship with technology. In terms of participants' everyday use of technology, one participant (1/5) described themselves as having poor computer literacy skills and two participants (2/8) referenced their over-use of technology in other aspects of their life leading them to resent the online delivery of their psychological therapy, e.g. ... then with the therapy online and so I already spend too much time looking at a screen doing research for my Masters or also kind of when I'd want to relax a bit I normally do look at like TVs, watch TV or obviously contact people, like friends and family. So I resented how much time I was on computers and online (PA).

Negative experiences with the technology used on the online platform included the user dashboard not being clear enough to navigate, the programme layout being restricted to a very structured and chronological order and difficulties figuring out how to use the online programme at the start, e.g. if it's sort of a clearer menu that you could click on that said okay you've done all of this, there's this to go and then you could see maybe the titles and then you could click on what you wanted to go back to, if that was made a bit clearer (PB); ... It was almost like I felt like I was always just opening the book and starting at page 1. And I had to go, page 1, page 2, page 3, rather than being like an intuitive tool where I could bounce around and think, oh well, I feel very anxious and I think I need this tool? (PE); ... And I remember the first few times, I was thinking I wasn't quite sure what I was doing, like I didn't know if I was clicking on the right things and so I think it's the navigation of it and I mean I have Instagram, I have

Facebook, I use a computer at work and I sort of think that just the navigation of it I didn't...It probably could've been a bit clearer (PB).

Participants' reports relating to their positive and negative aspects of their relationships to technology were similar across the two groups: those who felt ready to leave treatment early and those who reported negative reasons for their change in motivation to continue engaging with treatment (see Table 4). For both groups, positive relationships to technology were more widely reported than negative relationships.

## **Motivation to Start**

All participants reported on their motivations to seek treatment and their responses were clustered into two categories: Symptoms of psychological distress and Stressful life events (Table 4). Both participants who felt ready to leave treatment early and participants who dropped out because they weren't satisfied with the treatment reported similarly on their motivations to start treatment (Table 4).

In describing their motivations for deciding to seek mental health treatment all fifteen participants related this to the severity of their symptoms at the time and a general sense of no longer being able to cope, e.g. ... It was the most severe bout of depression that I've experienced. And it scared me, like I felt like I was having thoughts and reacting to things in a way that I couldn't control (PD); ... Over the course of a few years I just recognised patterns in myself of like behaviour that wasn't good and...that I needed to change (PK); ... I was on medication but I wasn't really managing them (my symptoms) and I was just relying tablets to help me feel relaxed rather than tackling the reasons why I was feeling anxious. So I didn't really feel that I was managing it beforehand (PI).

Six participants (1/5 and 4/8; 1/2) reported that they sought treatment because of stressful life events such as being unhappy in work, the breakdown of a relationship and the pressures of life, e.g. So my husband had just left and I was panicking about like financially I didn't know what was gonna happen (PB); ... I think I wasn't really happy at work and wasn't really motivated to do anything and just literally woke up one morning thinking I have to do something because I just wasn't happy (PH); ... Well it was really just pressures of life. Because I'm a carer for my son and also one of my siblings and I was working and stuff like that and it all just got too much and then everything sort of gets out of proportion (PI).

# **Background Knowledge and Attitudes towards iCBT**

Participants' reported background knowledge and attitudes towards iCBT had positive and negative connotations and were organised into six categories (see Table 4).

All participants commented positively in relation to some aspect of background knowledge and attitudes towards iCBT. Thirteen participants (4/5 and 7/8; 2/2) believed that iCBT was a credible treatment approach and would help to manage their symptoms, e.g. So when I started the sessions, I kind of, I thought it would work really well for me because it would be like, yeah I can take my own reflective time and think through my problems (PE); ... Yeah, I think I thought that it (CBT) could change the way I think and things like that (PL). This was echoed by ten participants (4/5 and 4/8; 2/2) describing a general openness and interest in trying the novel intervention, e.g. I think it was just interesting to do something different as a trial (...) and I was just inclined to try something new because I wanted to sort of explore my options (PO); ... yeah, motivated to see how it went, yeah, to see how I could turn out, what I can use it

for, things like that (PL). Six participants (1/5 and 4/8; 1/2) reported a knowledge of CBT, this was characterised by an awareness of the treatment approach, an understanding of its principles and techniques or prior experience with treatment approach. Five participants (1/5 and 4/8) commented on the trust they had in the provider of the treatment, the NHS, in relation to their decision to engage in iCBT, e.g. the NHS I suppose I did trust that I'm not just gonna find any counsellor that... I know they would be absolutely registered (...) so NHS that was a draw card (PB).

Participants also made negative comments regarding their background knowledge and attitudes towards iCBT. Nine participants (4/5 and 4/8; 1/2) reported having no prior knowledge or awareness of CBT, e.g. Honestly, because I didn't really know what CBT was (...) to a certain extent I didn't recognise that it would be so much about my thought processes and how it works and everything else. I guess I didn't give any thought to that's what it was (PC). Six participants (3/5 and 2/8; 1/2) described a level of scepticism regarding the effectiveness of iCBT. These participants had doubts relating to how this treatment could work in an online format and low expectations for how the CBT treatment approach could change thoughts and feelings e.g. I suppose before I started I just didn't know how it was going to work with it being online (PD); ... because initially when I was told it was online, (I thought) it'll all be sort of computer interface, I'll get like emails back and everything else, I'll never talk to a person (PC); ... at the very start, I thought it was, I didn't think it was gonna work, like I was reading through the stuff and I was like this is just obvious common sense stuff, like I'm not learning anything here, this isn't meaningful (PD).

Comparing participants who felt ready to leave treatment early and participants who had negative reasons for their change in motivation, background knowledge and

attitudes towards iCBT were mixed across positive and negative dimensions, with both groups reporting similarly on this domain (see Table 4).

# **Change in Motivation**

Thirteen of the fifteen participants reported on the change in motivation to engage in the iCBT treatment that occurred to cause them to drop out (see Table 3). As discussed above, participants' reported changes in motivation were considered to have either positive reasons (felt ready to leave treatment early) or negative reasons (not being in a receptive frame of mind, contextual obstacles and considering iCBT not to be personally fitting). This distinction was used to compare the experiences of treatment had by those participants who left treatment early because they felt ready to do so and participants who had negative reasons for their change in motivation to engage with treatment (see Table 4).

Five participants related their change in motivation to feeling ready to leave treatment early. In this category, participants reported that continuing with the treatment offered them no additional benefits and that they felt they had already got what they needed from the treatment without finishing the prescribed number of sessions.

Participants also reported that they began to feel better and no longer saw the need for the treatment. The following participant quotes are examples of the findings in this category: ... I was probably ready for it (to finish) ... I'm in a much better place (PK); I think I got out of it what I needed and ... The man I was speaking to gave me the option just to carry on logging on or to kind of do it that way. And, to be honest, I'm quite comfortable with logging on (PN); ... I think it's just that point I sort of felt like I was getting better. I sort of got what I needed out of SilverCloud and ... There's only so

much that you can do with someone with quite bad anxiety and I felt like I'd got good sort of techniques off of SilverCloud. So, I do think that that's probably the reason why I sort of dropped it and I think at the time, 'cos I did go through a bad patch after that, but you sort of know that you can access SilverCloud and I just didn't think I needed that last sort of catch-up or however many it was but I know... I was feeling a bit better in my jowls and I didn't think I really needed it too much (PO).

In total, eight participants reported on changes in motivation that were considered to be negative. Four participants cited their lack of progress in terms of symptom improvement as preventing them from being receptive to treatment, e.g. *It* was more that I wasn't, probably wasn't receptive enough to it at the time, but I do think in that frame of mind of feeling so low that you're kind of not, I don't know, for months my brain didn't feel it was working very well (PB); ... But also and perhaps because I was just, my brain was just full up of loads of things going on I just wasn't in a receptive frame of mind (PI).

Three participants listed contextual obstacles as the reason for their change in motivation to engage in treatment. This was characterised by chaotic circumstances such as family crises, an overwhelming workload, relationship breakdown or a general lack of life structure, e.g. *I think over the course of the programme... I'd just finished university... and I think my days were becoming less structured and (...) I think it was just because of how I was feeling, I think I kind of just like withdrew myself from it (PL); ... I guess I was doing it when I had like the most intense two terms (PA); (my motivation to engage in treatment changed when) I think it was when probably... I started going to applying for divorce or whether it was just sort of the way the children were... And I was managing to go to work... it might've been the time my daughter just* 

suddenly... said she was gonna kill herself and...I was trying to sort her out, yeah probably was that (PB).

Seven participants reported that their change in motivation came about when they realised that the iCBT approach was not working well for them due to the fact that it did not suit them personally. These participants elaborated on this explaining that the iCBT programme was the wrong approach for their treatment needs at the time and that the layout and structure of the treatment did not suit them.

# **Usage of the Programme**

All participants reported on their usage of the online programme. This domain had positive and negative connotations and findings were described across seven categories (See Table 4). Usage of the programme among participants who felt ready to leave treatment early and participants who had negative reasons for their change in motivation were compared to identify any differences or similarities reported between the two groups (see Table 4).

All fifteen participants commented on positive aspects of programme usage and cited being able to use the online programme when and where you needed as an advantage, e.g. it is probably fitting in with a schedule that I could manage, so I could do it in my own time rather than having a set time (PE); ... I found it a lot easier because it was just at my disposal as and when I had the opportunity (PI).

Ten participants (5/5 and 4/8; 1/2) described their use of the programme as regular and productive. Regular use meant that they scheduled and organised time to use the programme. Productive use was characterised by tailoring use of the programme to times and moods that worked best for the individual, e.g. *I just, I'll see I've got the* 

mental capacity to take on board new things and I'll go to it. I try to do it as much as I can when I'm feeling relaxed and effective, rather if I'm already in panic-mode I'm not going to take it in (PI); ... Even if I can't sleep at night, I log on. So, you kind of... You kind of get things off of your chest (PN); ... I set (a reminder) up for like every day at seven o'clock or something... When I'm sitting doing nothing it just gave me a little suggestion to go and do it, I guess (PK). Considering productive and regular usage in light of Table 4, a larger proportion of participants who felt ready to leave treatment early reported more productive and regular usage practices than the participants who reported negative reasons for their change in motivation (see Table 4).

Nine participants (3/5 and 4/8; 2/2) reported using the programme for their own benefit, recognising the importance of this and being committed to trying their best to feel well again, e.g. Like I was feeling I'm doing something for myself... and I was feeling stronger and happier, actually I was proud of myself and doing something for myself (PM); ... I think at the end of the day if you know you need help, you need to make that time for it and it's not like it's taking hours and hours out of your day. Like it can take half an hour and especially if you're using SilverCloud online, you can do it for like 20 minutes (PO).

The most reported negative aspect of programme usage was a difficulty in prioritising time to use it. Twelve participants (4/5 and 7/8; 1/2) commented on the difficulty in making their treatment a priority over other aspects of their life and not scheduling the time to do it, e.g. ... I was constantly feeling like I had too many things to kick off in my own life (PA); ... Probably more committed to other aspects of my life (PJ); ... It's just the way my life is. I mean, like I said, this programme is really good if you have time, if you can have the time to sit down in peace and do it. Like when my

life is crazy, I've got a sick child and by the evening comes... I'm constantly occupied (PM).

Eight participants (2/5 and 5/8; 1/2) reported that they used the online programme when feeling low and further commented that that wasn't a good time to use it, e.g. it's more a case of the time that I was trying to do the online activities wasn't the most productive time, the whole commuting issue wasn't working for me and that was part of the reason why I wasn't getting any benefits (PE); ... I also stupidly would often do it in the evenings and then I couldn't sleep because all of the stuff was sort of coming out (PB). Using the programme when feeling low was more widely reported by participants who had negative reasons for their change in motivation to engage in treatment than by those who felt ready to leave treatment early (see Table 4).

Eight participants (2/5 and 6/8) reported using the intervention out of a sense of obligation to other people rather than for their own benefit. Participants added that using the programme felt like a chore, e.g. *It felt like obligation*. *It felt like a tick box* exercise (PF); ... At the end of it I definitely got to a point where I was just like, I'm just doing this for the sake of doing it, rather than as a positive outcome for myself (PE). Three participants (1/5 and 2/8) commented that they kept forgetting to login to the programme to engage in treatment.

### **Changes due to the Intervention**

Participants' reported changes due to the intervention were clustered into five categories (See Table 4), all of which were considered to describe positive changes. Fourteen participants reported on the positive changes they experienced due to engaging with the online programme. The reported changes due to the intervention

were further evaluated in terms of whether the participants left treatment early because they felt ready to do or whether they had negative reasons for their change in motivation to engage with treatment.

All of the positive changes experienced by participants due to the intervention were reported similarly regardless of whether they left treatment early because they felt ready to do so or of they dropped out due to a negative change in motivation (see Table 4). Thirteen participants (5/5 and 6/8; 2/2) reported improvements in symptoms. This was characterised by a general sense of improvement while using the intervention, as well as specific examples of how the intervention helped participants cope and manage their symptoms. Participants reported that using the intervention helped them to feel better and enabled them to manage and cope with their symptoms more effectively. In particular, they described changes in their thought processes and behaviours brought about by the iCBT programme. The following participant quotes are examples of the findings in this category: ... when my dad did pass away because I was aware of all this stuff that I've learned (from the intervention)... And I purposefully the following week, on the exact same day, just to make sure that it (my OCD) wasn't there, I wore the exact same outfit. To push myself...to prove a point that it's got nothing to do with what I'm wearing, like it doesn't matter, it won't change it (PC); I'm thinking now, it's seven months and I've just had summer holidays and I've completely transformed the garden. I've just dug it up and changed it completely and I've thrown out loads of things and *I've had the motivation to do that (PB).* 

In addition to this, twelve participants (4/5 and 6/8; 2/2) reported that they had applied the CBT techniques they learned on the programme to different aspects of their everyday lives, e.g. *Yes (I've continued to use the techniques). When to identify a mood.* 

When to identify a trigger. Basically, identify especially circumstances and ask yourself questions of whether I can control it a bit better (PF); I was (using the techniques) because I was trying always remember about pushing the negative thoughts and to change them for the positive thoughts... like controlling yourself (PM).

An increase in awareness and/or insight was reported by seven participants (2/5 and 4/8; 1/2). This was characterised by improvements in the capacity for self-reflection, introspection and personal insight, e.g. ... as we were talking things through about feeling anxious and everything else it became quite apparent, ah, actually I feel anxious a lot of the time but I do stuff to try and combat it and that's when it kind of came to the forefront with actually, my life is built around OCDs (PC); ... But now I can recognise (my anxieties) for what they are a bit more, rather than thinking, "Oh my goodness, I'm having a heart attack". I can think, no you're bound to feel like this because you are somebody that gets anxious but you don't need to be frightened of it (PI).

Three participants (3/8) commented that using the online intervention pushed them to get the help they needed. The participants added that although the iCBT programme may not have been the right approach for them at the time, it was a good starting point, e.g. *I think it was definitely a benefit to kind of like dip my toes in and just get a feel for the programme and get a feel for what like cognitive behaviour therapy is... it was definitely, yeah, a good starting point for me (PL).* Eight participants (3/5 and 3/8; 2/2) reported that they developed a knowledge of CBT treatment by using the intervention.

#### **Engagement with Content**

All participants reported on their engagement with content. Participants' reports in this domain were clustered into nineteen categories, which were considered to describe either positive or negative aspects of engagement (see Table 4). Experiences engaging with the programme content were compared between participants who felt ready to leave treatment early and participants who dropped out due to a negative change in motivation.

The reported positive experiences engaging with the programme content are similar for both participants who felt ready to leave treatment early and those who had negative reasons for their change in motivation (see Table 4). Nine participants (3/5 and 4/8; 2/2) reported that the programme content was relevant and relatable to their treatment needs and concerns. They commented that the content felt specific to a range of problems but at the same time specific to the individual as you could pick out the content that felt appropriate to your concerns and tailor your own treatment. Participants mentioned that the content often made them feel like they weren't the only one going through a difficult time. The following participant quotes are examples of the findings from this category: I think it had all the information that kind of I needed and if sometimes I didn't kind of understand how I was feeling about certain things, I could read things and it made me relate to it (PN); ... It felt like it was useful. I could find something that related to me, like that session, like that day. This is the thing that is annoying me or making me feel bad, so I'll see if I can find something to work through this specifically (PG); ... (The content) just sort of clarifies your thoughts and makes you realise you're not the only one in this sort of situation (PH).

Fourteen participants (4/5 and 8/8; 2/2) commented on their use of the CBT tools and exercises on the programme and how helpful they found them to be. Specific references were made towards the Thoughts, Feelings and Behaviour cycle, the Worry

Tree, the Mood Monitor, the personal stories, the journal, the Spotting and Challenging Thoughts tools and the mindfulness exercises. Four participants (1/5 and 3/8) reported that the information provided on the programme was laid out clearly and concisely, meaning it was easy to go through and understand, e.g. *it's bite size, which suits me. I can just read a little bit and go away and think about it and use techniques (PI).* 

Seven participants (2/5 and 4/8; 1/2) reported that the workload, working through the content and completing the tasks and exercises, felt manageable. Six participants (3/5 and 3/8) commented that writing about their thoughts and feelings in the tools had a therapeutic effect. When writing, participants lost themselves in the 'art of writing' and felt as if they had somewhere to put their worries, especially those who found it difficult to talk about them, e.g. Do it pen to paper and there's something about, you almost just get lost in the art of writing as much as sitting and thinking and worrying about all your problems (PE). In addition to this, seven participants (2/5 and 4/8; 1/2) reported that reading through the content and writing into the tools and exercises provided clarity and helped them to make sense of their own thoughts, feelings and behaviours, e.g. ... (writing) sort of makes it easier to see why that emotion is there, or is it just a general case of meh (PG); ... I think for me, much like the worry that I created and stuff, sometimes stuff doesn't sink in or go in until I've read it or written it down (PC); ... (writing) is good because you actually have to name the things (your problems)... You know, if you just think about it, you kind of can lose that thought (PM). Ten participants (4/5 and 4/8; 2/2) reported that being able to reflect and look back on the work you had completed and your progress so far was beneficial to them. Five participants (3/5 and 2/8) described feeling supported by the programme content, establishing a sense of alliance, e.g. ... I just kind of log on and sometimes, if I'm feeling fed up and stuff... I answer questions or I read through (content) so it makes me feel

like... it's not just me, if you know what I mean (PN); ... Just having something there that you know that you can write there or you can read something that could kind of like potentially help you, because obviously there's times when you can't hold of friends or family. And that's actually when I used SilverCloud (PA).

Negative experiences engaging with the content of the programme are reported more often by participants who describe their change in motivation as having a negative reason (see Table 4). Thirteen participants reported on negative aspects of the intervention's content. Five participants (2/5 and 3/8) reported that the content felt generic at times. They described it as generic and automated in places and a lack of relatability to the examples provided, e.g. *Really (the content) was telling me about different situations and stuff not how I'm feeling. It was more like reading a medical report than actually what I needed (PJ); ... I think the online platform is too generic to what I wanted to do (PF); ... I think it's more just I didn't see it as being relevant to me. I didn't recognise that issue maybe within myself (PK).* 

One participant disliked the mood monitor (1/5) and five participants (1/5 and 4/8) reported that they disliked the personal stories feature in the module. They felt as if the characters and their stories were made up and not very relatable, e.g. *I don't know whether it was a case of I didn't believe they were real stories or I didn't really, it sounds awful, but I didn't really care (PE); ... I think (the personal stories) nothing to do with me (PJ).* 

Seven participants (1/5 and 4/8; 2/2) reported feeling that content was too much work, it was long-winded and involved too much reading, e.g. (the content) was a bit long winded to be honest with you. There was probably too much reading. So I probably skipped bits (PJ); ... you had to read something before you could then get to

the next thing and then you'd have to like watch a video or something (...) So I just kind of always felt like I need to do those things before I can even try and get to like this task (PA).

Four participants (4/8) reported finding the content boring and monotonous. Six participants (1/5 and 4/8; 1/2) disliked having to read and write about their thoughts and feelings. This dislike for reading and writing related either to a difficulty expressing themselves in written format or the opinion that writing about your thoughts and feelings is too formal and over processed, e.g. *I find when you write it down, it feels more processed and then when you talk face-to-face it's more unprocessed and raw* (PF); ... I think I would've preferred to sort of yeah, just speak about it rather than put it down. I think I'm much better sort of verbally than I am trying to write things (PD).

Four participants (4/8) reported that the content exacerbated their symptoms at times, making them feel worse. Participants reported that completing the tasks and filling out the tools on the programme sometimes made them feel worse because of the focus on negative thoughts and feelings. Participants who hadn't done a lot on the programme became frustrated by their lack of progress and began to associate this frustration with the content. The following participant quotes are examples of the findings in this category: And maybe I was a little bit too negative about certain aspects when I was feeling particularly low and it (the exercise) was asking me to focus on why I was feeling low. I really don't want to do this (PE); ... When I was feeling down, I think at the time sometimes it (the exercises and tools) got a bit kind of daunting and scary sometimes. Oh, I need to put all of these things in place, I need to do all those things, and then that... I think that would put a lot of pressure onto me (PL).

Two participants (2/8) reported that reflecting back on completed work and module content was of no benefit to them. One participant (1/8) reported that the content was difficult to understand at times. The same participant commented that the questionnaires felt pointless. And finally, one participant (1/8) reported that the content felt disconnected from one section to the next.

The comparison of experiences engaging with content between participants who felt ready to leave treatment early and participants who dropped out because of a negative change in motivation demonstrates that a greater proportion of participants who had negative reasons for a change in motivation report on negative experiences engaging with content (see Table 4).

## **Experience Interacting with the Supporter**

Fourteen of the fifteen participants reported on their experience interacting with the supporter. Their reports described positive and negative experiences of interacting with a supporter and clustered into eighteen categories (see Table 4).

Fourteen participants described positive experiences interacting with their supporters. Ten participants (5/5 and 4/8; 1/2) reported feeling supported by and connected to their supporter while using the intervention. This category was characterised by a general sense of having someone there for you, someone who checked-in on your progress and how you were feeling. Participants felt listened to and cared for, e.g. ... it felt like the supporter person was trying to help, that they actually gave a crap (PG); ... Yeah I did (feel connected to my supporter) and she, yeah she's brilliant and I felt I sort of knew her and I didn't speak to her that often (PB); ... I think it was good to have somebody that you could share things with, I think. Obviously, I

think having that kind of human connection is really nice and kind of having that voice over the phone (PL).

Seven participants (4/5 and 2/8; 1/2) reported that they benefitted from having access to a supporter throughout their treatment. Nine participants (2/5 and 6/8; 1/2) reported that the supporter provided a good introduction and explanation of treatment, outlining the treatment rationale and getting them set up on the online programme.

Nine participants (4/5 and 5/8) reported that the supporter tailored the online treatment to their needs. Participants described how their supporters were responsive to their needs by recommending content and advising on a treatment direction based on what they had indicated on the online platform and in their messages, e.g. Anything that I wrote down in the questionnaires or anything I'd done, when I spoke to them, they would sort of say, oh, you know, I've seen this written down, have you tried this? So, they definitely were good with tailoring it to my needs (PO); ... they like added in extra modules so that I could see like other things, which was yeah, it was really helpful and that came up because of something that we'd been speaking about in one of our sessions (PD).

Eight participants (3/5 and 3/8; 2/2) reported that the supporter encouraged their engagement with the online programme. They commented that knowing someone would be checking in on their progress made them feel accountable and increased their adherence, e.g. ... (my supporter) definitely encouraged me to be more proactive with it... at the start I was reluctant, I guess, very difficult to get into making sure I did it but she was really supportive in making sure and making me see the benefits of it and that it would help (PK); ... I think (having a supporter) does make you want to do more on the thing before your next review if you like... (PH). Eight participants (4/5 and 4/8) felt

able to speak freely with their supporter, adding that they felt comfortable having a conversation with their supporter and able to ask for something else if they needed it, e.g. ... they do help you sort of really, really open up and you've got to remember, you know, they do this every single day. So, it was quite easy to open up in the first session (PO); ... I definitely felt like I could ask for (something else) if I needed it (PG).

Seven participants (3/5 and 2/8; 2/2) commented that their supporter demonstrated a good level of expertise. Participants described how their supporters delivered treatment effectively and intuitively and that they were confident in their supporter's professional ability, e.g. ... Yes, they answered me, as an individual they knew what they were talking about (PG); ... no I never questioned (my supporter's expertise). I'm quite a sceptical person so I think she must've shown a bit of true genius in the first call of whatever. I was like "Yes, she's bang on there (PC). Five participants (2/5 and 3/8) reported that their supporters were understanding of their situation; setting manageable tasks and accommodating them if they missed deadlines. Five participants (2/5 and 3/8) reported that their supporters discussed treatment goals with them. This involved having a conversation regarding what they wanted out of treatment and working together to reach those goals.

Comparing the positive experiences with support reported by both groups (see Table 4), a greater proportion of participants who felt ready to leave treatment report on positive aspects of their relationship with their supporter and the connection they established with them.

Seven participants reported on negative experiences they had while interacting with their supporter. Four participants (3/8; 1/2) reported having no sense of connection with their supporter. They described a lack of connection and inability to establish a

relationship, e.g. ... if I had felt a bit more that somebody was really listening and engaging (maybe we could have had a connection). I just don't know what it was. I just found it hard to build any sort of relationship (PI).

Four participants (4/8) reported that their interactions with their supporter felt scripted and impersonal. Participants described that at times it felt as if their supporter was reading from a transcript when responding to them and steering the conversation in a particular direction regardless of what they had said, e.g. ... (The supporter response) was very flat. Like I said it was like they were reading from a transcript, moving on to the next part (PJ); ... I did feel there was a script inside of (my supporter), regardless of what I said, I got an automatic response (PF). Three participants (1/5 and 1/8; 1/2) reported that they received no feedback from their supporter on their completed work or replies to messages they sent them on the online platform, e.g. ... I sent a few messages but I didn't really get a reply... you just feel like what is the point of having someone if you can't actually talk about the stuff you want or get the reply for the stuff you want (PM).

Two (1/8; 1/2) participants reported a lack of empathy and understanding from their supporter. This was characterised by a lack of effort to understand the individual's life and contextual obstacles, e.g. ... I would have liked them to have just chatted to me perhaps in a way that I felt like they understood and had experiences of what I was talking about. So I didn't really feel that the person I was talking to had anything like the same sort of life experiences that I had had (PI). Two participants (1/8; 1/2) reported on the lack of guidance from their supporter, describing feeling as if they were working through the online treatment on their own without any direction or tailoring of resources. Two participants (2/8) commented that the supporter never discussed treatment goals or expectations with them. One participant (1/8) reported that

throughout the online treatment they felt as if their supporter did not care about them, e.g. ... I just came away with the feeling that I don't think you care about me as much as, you know, what to help me as much as I want to help myself. So I might as well do it on my own because you're giving me nothing (PI); ... So for all they know I could be dead in a ditch (PI). One participant (1/8) reported that they were never contacted by their supporter while using the online treatment. One participant reported (1/8) not feeling comfortable talking with their supporter, e.g. And maybe go a bit further in making (me) feel comfortable rather than this is what's on offer for you. If you've got low self-esteem and low self-confidence you're much less likely to ask for something different or question things. So perhaps (my supporter) could have been a bit better in offering that opportunity (PI).

Comparing the experiences interacting with the supporter had by participants who felt ready to leave treatment early and participants who reported negative reasons for their change in motivation, Table 4 illustrates that the latter group report more negative experiences with their supporter than those who felt ready to leave treatment early. In a similar pattern, a greater proportion of those who felt ready to leave treatment early describe positive experiences interacting with their supporter than those who cited negative reasons for their change in motivation.

#### **Experience of Online Communication**

Participants' reported experiences communicating online were both positive and negative and clustered into six categories (Table 4).

Participants reported on positive experiences of online communication. Eight participants (4/5 and 3/8; 1/2) reported liking communicating online with their

supporter, with some commenting on the uses of this medium of communication and others citing a preference for communicating in this way, e.g. ... (communicating and sharing online) was useful because it meant that I didn't have to go through and explain everything that I'd been doing (PG); ... I think the online regular catch ups worked for me (PH).

Ten participants reported (4/5 and 5/8; 1/2) that the frequency of the online communication they received worked well. This category refers to the online reviews or catch-ups that were scheduled between the supporter and client. Participants reported that the review schedule allowed them enough time to complete their assigned tasks in between reviews and it was always flexible to their schedule, e.g. ... (the online reviews) were as often as I like and if I needed more, then (my supporter) would happily book me in or if I didn't... if I couldn't make one, then he would change it... he was very accommodating around what my needs were (PN).

Seven participants (4/5 and 2/8; 1/2) reported it was easier to open up online and described a feeling of disinhibition. Participants described being more honest and open with what they disclosed when communicating online because they felt more detached and anonymous, e.g. *I think I'm more likely to share online on the basis that when you're writing something down or you're listening to something, you're more honest than when you're actually speaking to someone but that's just a personal view (PO); ... this way I think it helps people because... you can kind of hide behind a computer and tell them how to kind of quantify (your feelings)... It's kind of a less personal way of doing it, even though you're getting very personal with how you feel. And some people, obviously, they're embarrassed, like I wouldn't want to sit there with a complete stranger and talk about how I feel, even if they were medically trained to do so, 'cos I'd get embarrassed, but (online) they can't see you (PN); ... It wasn't an instant* 

conversation about that you could put something down and it would just be brought up if needed...at a later point, that you could... I could write stuff and then not have an instant consequence (PK).

Some participants also reported on their negative experiences of online communication. Six participants reported (1/5 and 4/8; 1/2) needing more contact with their supporter, both in terms of frequency and duration. In particular participants highlighted the need for more informal supporter contact in between the scheduled reviews, e.g. Maybe a little longer on the phone... that's the only thing I'd change, really, yeah (PL); ... I think (the reviews)... they were needed. Actually, I probably would have gone (more often)... Especially after the initial few, maybe to close the gap up slightly (PK); ... Yeah I think for me the ideal thing... would be just an option that you could get one reply a week say if you need it (PB).

Eight participants (7/8; 1/2) reported a preference for face-to-face communication, describing a need for more human interaction. Five participants (5/8) reported that communicating online was too formal and structured, e.g. *But it didn't flow*. *It didn't feel smooth and it felt like quite a lot of effort to achieve anything (PI);* And I suppose it's all about I think like speaking on the phone or over email, always feels a bit more formal than sitting down and having a chat with somebody face-to-face (PE).

Two participants (1/8; 1/2) reported that they couldn't open up to a computer, expressing a difficulty in opening up via the online medium, e.g. When you actually sit down and talk to someone, then you can say something and then you can kind of get a device or direction. You can't really talk to the computer... like you can write to your mentor but... unless you write straightaway how you feel... there is something like

missing, if you know what I mean (PM). Two participants (2/8) reported a lack of instanteous responding with their supporter. This lack of 'in-the-moment' exchanges between supporter and client was considered a disadvantage, e.g. I think that's the limitation of any sort of online platform I suppose. There are constraints about the amount of bespoke instantaneous interaction you can offer (PE). One participant (1/8) reported that online communication felt too anonymous.

In terms of communicating online, participants who felt ready to leave treatment early described their experiences of online communication in a more positive light than those who had negative reasons for their change in motivation (see Table 4). In turn, a greater proportion of participants who cited negative reasons for their change in motivation to engage with treatment described negative aspects of online communication than those who felt ready to leave treatment early.

### **Termination of Supported Period**

Participants' reports relating to the termination of the supported period were clustered into seven categories, which were considered to have positive and negative connotations (see Table 4).

In total, fourteen participants reported on positive experiences of terminating the supported period. Three participants (2/5 and 1/8) reported that they had a conversation with their supporter about finishing treatment. Participants described having a positive and productive discussion with their therapist regarding their treatment needs and approach, e.g. *I think we recognised from one of our meetings that we needed to take a slightly different course away from the anxiety, depression platform and so it's not that* 

it became useless it was just what we were following (a different approach for my OCD) (PC).

Six participants (5/5; 1/2) reported that they were happy with how support was terminated. Some participants described feeling ready to continue using the online programme on their own without support and that the supported period had just come to a natural end, e.g. *I think I got out of it what I needed... the man I was speaking to gave me the option just to carry on logging on or to kind of do it that way. And, to be honest, I'm quite comfortable with logging on (PN).* 

Twelve participants (4/5 and 6/8; 2/2) reported that they feel able to go back to treatment if they needed to, e.g. What is really good is that it explained that if I explored a different route and it didn't work out then I was always welcome to rejoin Silver Cloud, or rejoin Talking Therapies actually, if there was a group therapy session I could join or just a different avenue. So that is really positive (PE); Obviously, if I need to talk to someone, I know I can phone up, do you know what I mean, get help (PN).

In total, seven participants reported on the negative experience of termination of the supported period. Four participants (2/5 and 2/8) reported that the online treatment and support were no longer a priority and they just let it go. This category was characterised by reports of participants giving up on the programme, stopping logging in and postponing the contacts from the supporter, e.g. ... I would keep postponing appointments with my therapist because I was like oh well I haven't really done anything so there's no point speaking to you (PK); ... Well, it was on my side really because I found it really hard to find a time slot because I just didn't know what was going to happen from one day to the next with my sister (PI).

Two participants (1/8; 1/2) reported that support stopped unexpectedly and that they felt abandoned, e.g. ... (Support) stopped. I heard nothing, done nothing (PJ); ... I missed the deadline for... the questionnaire and then I got discharged which I kind of thought like, oh, okay, great, what now, you know (PM); ... I was shocked (at how my treatment ended). Disappointed really and what's the point (PJ).

One participant (1/8) reported that they felt relieved that support ended as it had been a negative experience throughout, e.g. *I just thought actually I haven't got time for this, you're not useful enough to me. Therefore I'm not wanting to carry it on and give you my time because my time was too precious and as I say it just wasn't useful enough... (PI).* 

When the experience of termination of the supported period was compared between those who felt ready to leave treatment early and those who had negative reasons for their change in motivation to engage with treatment, both groups of participants described positive and negative experiences in similar proportions (see Table 4).

#### **Discussion**

The current study qualitatively examined the subjective experiences of dropout from the iCBT interventions 'Space from Depression' and 'Space from Anxiety' among fifteen participants with depression and anxiety. As has been discussed, for the purpose of the current study participants were determined to have dropped out in accordance with the traditional conceptualisation of dropout as leaving treatment before completing a pre-defined number of sessions or modules, which is also in line with IAPT service criteria. However, the findings presented here suggest that thinking of dropout in terms of a failure to satisfy predefined attendance or completion criteria is not entirely accurate, as two distinctive groups of dropout participants were found: those who felt ready to leave treatment early and those who had negative reasons for dropping out (see Table 3). The findings also provide an insight into the overall experiences of treatment participants who leave treatment early because they feel ready to do so and participants who drop out because of negative reasons have with an iCBT intervention, bringing to light positive and negative dimensions to the phenomenon (see Table 4). The fact that participants are reporting on both positive and negative experiences across the ten domains suggests that the concept of treatment dropout is not homogenous.

## Dropout is Best Understood in terms of a Complete Treatment Experience

Research to date has identified various reasons for dropout that are both internal and external to the individual (Karyotaki et al., 2015; Melville et al., 2010). The reasons for dropout that are documented across the literature mostly concentrate on a horizontal perspective, linking the cause (treatment feature) to the effect (drop out). Granted when research relating to this field was in its infancy, it was important to first look at

predictors of the phenomenon. More recent qualitative work has shifted its focus to understanding the subjective experiences had by individuals who drop out (Fernández-Álvarez et al., 2017; Johansson, Michel, Andersson, & Paxling, 2015). The current study built on work to date by designing a robust interview, encapsulating all existing findings relating to the phenomenon no matter how common or uncommon, that went beyond the individual reasons for dropout and delved deeper into elements of the experience of leaving treatment prematurely. This deeper exploration enabled this study to go beyond the face-value interpretation of dropout and constructed ten domains describing the experience. The findings of this study suggest that iCBT dropout is best understood across the continuum of these ten treatment experiences: Relationship with Technology, Motivation to Start, Background Knowledge and Attitudes, Change in Motivation, Usage of the Programme, Changes due to the Intervention, Engagement with Content, Experience Interacting with Supporter, Experience of Online Communication and Termination of the Supported Period (Table 4). From the evidence provided in the current study, these ten experiences present a level of diversity that is not often discussed in relation to dropout. In doing so, it brings into question the idea that dropout can be explained by one definitive reason, and instead argues that the phenomenon of online treatment dropout is much more complex and should be considered in terms of a complete experience. These experiences will now be discussed with the domain of 'Change in Motivation' receiving its own discussion afterwards.

Relationship to technology. Overall participants were comfortable using technology and felt secure online, with a few participants commenting on their dislike of particular aspects of program layout. Users commented that their everyday exposure to technology and the Internet rendered the online programme easy-to-use. They also considered the online programme to be secure and confidential and felt an increased

sense of privacy while engaging in treatment online. There were very low reports on difficulties associated with the technology of the programme, and where participants did report on negative elements of their relationship to technology it was related to the extended amount of time they already spent online or dislikes of the programme layout. These findings echo previous research that found that the digital divide, as considered in terms of access to and skills in using technology, is becoming less problematic for the technologisation of mental health treatment as access to the Internet and new technologies becomes more widespread (Ennis et al., 2012; Ofcom, 2018). The participants' reported ease-of-use of the programme alongside the low reporting on usage difficulties most likely reflects the fact that the online delivery of psychological interventions is no longer in its infancy(Riley & Veale, 1999; Selmi et al., 1990) and so design and technical flaws have most likely been rectified over time.

In previous research, computer and internet experiences have been identified as important factors for consideration in the study of dropout from online interventions (Beatty et al., 2017; Fernández-Álvarez et al., 2017; Melville et al., 2010; Stangeland-Lie et al., 2017). However, the participants of this study overwhelmingly report having a good relationship with technology and positive experiences with the technological aspects of the online programme. It could be the case that participants' technical literacy and ability to use online resources were assessed by the IAPT service prior to beginning iCBT treatment to ensure suitability and so there is a possibility that the reports on relationship to technology in this study are more biased towards a positive experience. However, the exploratory nature of the interview used ensured that all aspects of the technical experience were probed in depth to ensure the participants reflected on their own experience as well as potential difficulties that may have been encountered by others who were less comfortable online. Taking all of this into

account, findings suggest that the participant's relationship to technology may no longer be as influential to the decision to drop out of an online treatment as it has been in the past. Perhaps as digital therapeutics is advancing to a point where the individual's responsibility for their own mental healthcare increases, it is the ability to appraise and apply online-delivered health information that becomes more pertinent than tech literacy (Neter & Brainin, 2012; Norman & Skinner, 2006). These findings build on prior work by recognising that although negative relationships to technology are typically associated with the phenomenon of dropout, the experience an individual who drops out of treatment has with technology is not exclusively negative, in this case it was more positive.

Motivation to start. All participants reported symptoms of psychological distress as their motivation to begin treatment. Also, some participants reported stressful life events as an additional motivation to seek treatment. Citing symptoms of psychological distress as the motivation to engage in treatment was characterised by a level of awareness and realisation among users that symptom severity was a problem that needed to be addressed. Similarly, stressful life events were described as a trigger for seeking treatment as users acknowledged difficulties coping and sought help with this. When studying dropout it is important to understand why these participants sought treatment in the first place. These findings reflect previous research in the field of treatment dropout that reported salience to current health condition and psychological distress as motivators to enrol in treatment (Barrett et al., 2008; Todkill & Powell, 2013).

To supplement these findings moving forward, it might be helpful to also evaluate participants' readiness for change before they begin the intervention (Prochaska & DiClemente, 1983). Previous research has outlined the significance of

individuals being in a stage of change that facilitates treatment adherence and positive treatment outcomes (Dozois et al., 2004; Lewis et al., 2009). Drieschner, Lammers and van der Staak (2004) have previously pointed out the importance of assessing an individual's initial motivation for seeking treatment in order to later understand the implication it may have on dropout. In the future, participants' readiness for change should be measured prior to beginning iCBT treatment to account for this potential variable in the study of dropout. This will help to assess patient suitability for iCBT treatment and in doing so, it may begin to establish characteristics as to the 'type' of person who drops out of an online intervention.

Background knowledge and attitudes towards iCBT. Participants were mostly accepting of the use of technology in the delivery of their mental healthcare. Users believed iCBT could help them manage and/or overcome their difficulties and trusted the provider of the online treatment, in this case the UK's IAPT service within the NHS. Participants' reported knowledge and understanding of CBT prior to beginning treatment was mixed. There was some scepticism in relation to the novelty of the treatment but a general willingness to try it. User acceptance and credibility of the online-delivery of a psychological treatment such as iCBT have previously been identified as important factors in reducing treatment dropout (Alfonsson et al., 2016; Schröder et al., 2015). In this study, participants' background knowledge and attitudes were mixed and so these positive and negative dimensions support the diversity of experience of dropout proposed by this research.

The findings of the current qualitative analysis are reflective of the existing public discourse regarding internet interventions which is largely characterised by ambivalent attitudes (Schröder et al., 2015). However, while they echo this sentiment, they are for the most part positive attitudes. This could be due to the fact that the iCBT

intervention used by participants in the current study is utilised as part of routine care with the healthcare provider in question, reflecting that the study has good ecological validity (Clark, 2011; NICE, 2009, 2011; Richards et al., 2018). In this way, the routine care setting where iCBT is offered as a reliable treatment alternative may have acted as a buffer against non-acceptance of and negative attitudes towards internet interventions (Díaz-García et al., 2017; González-Robles et al., 2015; Schröder et al., 2017). This could suggest that at this stage of the usage of technology in the delivery of healthcare and especially in ecologically valid settings, the impact of the patient's background knowledge and attitudes may be less influential in the decision to drop out than in the past. It should be noted that there is a potential bias in this reporting as the participants who were interviewed may have had more positive attitudes towards iCBT in the first place in order to be referred to the online programme.

Usage of the programme. Participants reported usage practices were twodimensional, both positive and negative. While there were reports describing productive
and regular usage practices and using the online programme for their own benefit,
equally there were those who had difficulties prioritising their programme usage and
ending up using the programme when they were feeling low or out of a sense of
obligation. In the past, symptomology has been listed as a barrier to optimum
programme usage, with the duration and severity of the target psychological problem
acting as a predictor of treatment dropout (Melville et al., 2010). The symptoms and
consequences associated with depression and anxiety, such as fatigue, diminished
motivation, pessimism, difficulties with concentration, memory and effortful cognition
(Wright et al., 2019), are sometimes used to account for suboptimal usage practices
among this population which can lead to dropout. Reports of positive usage practices
such as the ones reported in this study are not commonly discussed in the dropout

literature. Their existence in the current study supports the case being made for dropout to be understood as a complete experience, noting the diversity of experience which departs from the construct being conceptualised as wholly negative and homogenous.

These mixed reports in relation to usage practices could be suggestive of the effects that the changing landscape of psychological treatment in the form of digital therapeutics has on the degree to which a patient engages with or uses an intervention (Hilty et al., 2017). There is a shift in responsibility from the healthcare provider to the patient when treatment is delivered online, with the patient becoming more actively involved in their treatment, engaging in specific practices at certain times (Hilty et al., 2017; Lupton, 2013; Townsend et al., 2015). Negative usage practices, such as the ones reported in the current study, could be indicative of patient difficulties in accepting this increased responsibility for their own symptom management and treatment. In the future, it could be useful to examine the role of responsibility for treatment adopted by the individuals themselves in dropout. However, these assumptions in relation to patient responsibility for treatment and dropout are tentative without further investigation.

Changes due to the intervention. In support of the idea that dropout is not exclusively a negative reflection but instead representative of a diverse treatment experience, only positive changes due to the intervention were reported by participants. The most commonly reported change was symptom improvement. Other positives noted by participants included developing a knowledge of CBT and implementing these practices in their daily lives and becoming more aware and insightful. Even among those who were stepped up to alternative treatments, they reflected on the iCBT programme as inducing a positive change in their lives, encouraging them to get the help they needed. While the self-reported positive changes described by these participants may not correspond to statistically significant clinical outcomes, if they are

considered in terms of the therapeutic objectives of CBT (Beck, 1995), the treatment has produced positive outcomes.

Looking at symptom improvement, the existing literature has pinpointed it as motivation to adhere to treatment (Todkill & Powell, 2013) and has linked treatment completion rates with outcomes (Wright et al., 2019). The findings presented in the current study questions the exclusivity of symptom improvement, at least in terms of the subjective experience of the patient, to treatment completion. Furthermore, the findings of the current study align with evidence presented by Waller and Gilbody (2009) demonstrating that individuals do not need to complete all of the treatment program to benefit clinically. These findings reverberate Eysenbach's (2005) call for deeper consideration to be given to patient discretion when it comes to leaving treatment prematurely. It has been argued that some patients drop out of treatment because they feel as if they have got what they needed from the treatment and have made adequate progress sooner than the prescribed amount of sessions (Hynan, 1990; Vandereycken & Devidt, 2010). For example, sometimes individuals just need something specific in order to build on their existing resourcefulness and psychological mindedness to overcome their difficulties (Cameron, 2007). Once they have achieved this, they may decide to leave treatment prematurely but equipped with the skills to achieve the positive change they want and need. Continuing to conceptualise online treatment dropout in terms of treatment proportions and cut-off points (Melville et al., 2010) fails to capture the therapeutic changes that are important to the patient.

Participants' reports in relation to changes due to the intervention demonstrate how online treatment dropout can sometimes be a consequence of a positive treatment experience. The lack of negative reports in respect of changes due to the intervention challenges the conceptualisation of dropout as a measure of treatment failure, echoing

previous research hinting towards its reconsideration (Eysenbach, 2005; Proudfoot, 2004). Turning attentions to the diversity and heterogeneity of online treatment dropout and looking at the overall experience enables the research to take account of self-reported symptom improvements, providing the insight, that dropout participants still experience positive change. In order to reflect the real-life experiences of individuals engaging with iCBT treatment, a change in how dropout is conceptualised may be necessary.

**Engagement with content.** Participants' opinions of the programme content demonstrate the duality of experience that has been noted throughout this investigation of dropout. Some felt it was relatable and relevant to their concerns and they felt good working through it, while others felt the content was generic in places, did not find the interactive elements helpful or interesting and sometimes felt worse after working through the content. Throughout the literature a positive relationship to and interaction with content has been linked to treatment adherence (Beatty et al., 2017; Berger, 2015; Carlbring et al., 2011; Fernández-Álvarez et al., 2017; Mathieu et al., 2012; Stangeland-Lie et al., 2017; Todkill & Powell, 2013) relationship may be even more important in the absence of a face-to-face interaction, as the individual's evaluation of their treatment may be entirely based off their experience of the content. On the other hand, there is an assumption that dropout is directly linked to a negative relationship with content (Beatty et al., 2017; Berger, 2015; Carlbring et al., 2011; Fernández-Álvarez et al., 2017; Stangeland-Lie et al., 2017; Todkill & Powell, 2013). The evidence presented in this study demonstrates that dropout participants' experiences with content are diverse and again it cannot be stipulated that dropout status constitutes a wholly negative treatment experience.

Johansson et al (2015) provided the literature with a working model theory for dropout, stating that the decision to dropout comes from the incompatible relationship between a treatment feature such as workload, relatability or presentation of information and a personal prerequisite or individual capability. If this model is applied to the findings of the current study, the reported negative experiences of content could be as a result of poor quality content or patient preferences and suitability for certain aspects and presentation of content. Support for the potential role played by patient preferences/suitability in the decision to drop out (Johansson et al., 2015) could come from the fact that the delivery of iCBT follows evidence-based best-practice guidelines, leaving little room for error (Andersson et al., 2009; Andersson & Cuijpers, 2009; Andrews et al., 2018; Johansson & Andersson, 2012; Richards et al., 2019; Richards & Richardson, 2012; Wright et al., 2019). In this way, one must not only look to the quality of the content when examining online treatment dropout, but also user suitability and preferences for the type of content being delivered.

Experience interacting with supporter. Interactions with the supporter further demonstrated a diversity of experience in this study. Negative reports described an impersonal and unhelpful relationship with the supporter and a lack of connection, guidance and understanding. However, for the most part interacting with the supporter was considered to be a positive experience, with participants feeling connected and commenting that their supporter facilitated treatment making it easier to engage with the online programme and to speak openly about their concerns. Considering the importance of therapeutic alliance to treatment success (Bordin, 1979), one would assume that dropout, traditionally conceptualised as a treatment failure, would be linked to more negative relationships with the supporter. The findings of the current study do

not align with this idea, with participants more widely reporting a positive relationship with their supporters.

The high number of positive reports in relation to the patient-clinician relationship supports evidence that the therapeutic alliance can be established online (Berger, 2015; Bordin, 1979). Dropout participants report that their supporter tailored treatment to their needs, demonstrated a level of expertise and was understanding and easy to talk to, painting a more nuanced picture of online dropout experience and that therapeutic alliance is even possible in a dropout population. The dynamics of the patient-clinician relationship changes when it is moved online (Berger, 2015; Proudfoot, 2004). Dropout participants describing positive relationships with their supporter is indicative of the adoption of practices to overcome distance and asynchronousity barriers (Proudfoot, 2004; Sucala et al., 2013). Reiterating again, that dropout participants are neither having a universal experience with treatment nor a wholly negative one.

Turning to the negative reports relating to the patient-clinician relationship despite them being far fewer in comparison to the positive, it is important to adequately weight these negative supporter experiences because for these participants the negative experience they had with their supporter was potentially an influential factor on their decision to drop out. Moving the therapeutic alliance online alters the dynamics of this relationship (Proudfoot, 2004), with the distance and asynchronousity of online support presenting obstacles (Sucala et al., 2013). However as observed with the positive reports described previously, these difficulties can be overcome with positive therapist behaviours. Negative reports regarding the supporter experience in this study could be due to a combination of an individual's dislike for the altered dynamics and/or a failure of the supporter to appropriately buffer this change.

101

**Experience of online communication.** The findings of the current study relating to participants' experiences of online communication demonstrate that it can be either a positive or a negative experience. Some participants liked communicating online and felt it worked well for them, while others outlined a preference for face-toface communication, disliking specific aspects of online communication such as it being too formal, the lack of instantaneous responding and 'difficulty opening up to a computer'. These mixed reports relating to online communication echo the literature stipulating that despite the comparable efficacy of online communication with a supporter, an overwhelming number of patients just prefer face-to-face (Mohr et al., 2010; Wallin et al., 2016). If the support or communication type is not compatible with the patient's preferences or expectations, the patient may decide to drop out of treatment (Johansson et al., 2015; Rogers, 2003). These preferences may be due to the technologisation threat whereby the patient believes that they are more likely to stay motivated, understand therapeutic concepts and learn skills to better cope and manage in person than online (Schröder et al., 2015). Thus highlighting the need to consider patient preferences further. It is evident in the current study that participants' experiences of and opinions on online communication are mixed. It is also possible that the positive appraisals participants have could sometimes be overshadowed by preferences for alternative treatment approaches.

Online communication also has implications for how dropout is conceptualised. By writing to their supporters, participants could be feeling the therapeutic (Pennebaker, 1997) and disinhibiting effects (Suler, 2004) of this practice. In doing so, they may be arriving at their therapeutic objectives sooner than the prescribed number of sessions and no longer feel the need to continue with treatment (Richards, 2009;

Vandereycken & Devidt, 2010). This raises more questions as to the accuracy of the current conceptualisation of dropout.

Termination of supported period. The termination of the supported period in the current study represents the moment at which participants were considered to have dropped out by their supporters. There were participants who were happy with how it ended and there were participants who described their treatment termination as abrupt and negative. As has been demonstrated throughout the preceding domains of investigation, participants who are considered to have dropped out of treatment, in line with the traditional conceptualisation of module completion or session attendance, have wide ranging experiences of treatment that are neither exclusively negative nor positive. The termination of the supported period is no different, with reports of positive experiences as well as negative circumstances surrounding the termination.

Furthermore, the fact that so many participants reported that they felt able to go back to the treatment provider in the future indicates that their general iCBT treatment experience was not overly negative. This is an important finding as it challenges the existing conceptualisation of online treatment dropout.

Moving away from dropout as a homogeneous construct. As has been discussed, the findings in relation to iCBT dropout in this study are best described as diverse. Not only is the phenomenon explained across ten domains, but it is also understood in terms of positive and negative experiences within each of these domains (Table 4). This duality and diversity of experience suggests that online treatment dropout is not a homogenous construct, reflective of an exclusively negative treatment experience. The evidence presented in this study supports the arguments laid out by Eysenbach (2005) and Proudfoot (2004) who contradicted the assumption that non-adherence and dropout reflect negative experiences with online interventions. The very

fact that the participants of this study described positive experiences across the domains as well as negative, and in some cases exclusively positive reports such as 'Changes due to the Intervention', challenges the current conceptualisation of dropout.

In light of these diverse and complex findings, it seems important to continue to delve deeper beyond the individual reasons for dropout and capture the complete subjective treatment experience, which is necessary to understand the combination of events both positive, and negative that lead to dropout. From an investigative point of view, the current study has begun to distinguish relevant and non-relevant attributes of iCBT treatment to the phenomenon of dropout. For example, technology and the acceptance of its use in the provision of mental healthcare may no longer be as pertinent to the decision to drop out with the majority of people now using technology as part of their daily lives (Ofcom, 2017, 2018). Factors that seem to remain relevant to dropout include usage practices, changes due to the intervention, experiences with content, support and online communication. While these findings offer important insights into where the study of dropout should go now, they are limited by the fact that they are representative of only fifteen participants. Further quantitative research using these findings as a guide may be able to provide the validation needed.

# Change in Motivation and the Emergence of Different Types of Clients who Drop Out

Reported change in motivation was thought to be directly related to participants' decision to drop out of treatment, rendering it one of the most relevant domains of this study. It is important to explore what changed in participants' motivations for engaging in treatment, from the time they began to when they ultimately made the decision to leave. Looking more closely at 'Change in Motivation', two distinctive groups of

dropout participants emerged, distinguished by their reasons for their change in motivation to engage with the iCBT treatment (see Table 3).

The first group of participants were characterised by attributing their change in motivation as being due to the fact that they achieved what they wanted and felt ready to leave treatment early (positive reason). Distinctively different from these participants are those who reported negative reasons for their change in motivation to engage with treatment, which they said ultimately led to them dropping out. These negative reasons were characterised by reports of participants not being in a receptive frame of mind to engage with treatment, contextual obstacles in their life making it difficult to continue with treatment and a sense that the iCBT treatment was not a good fit for them. This emerging data questions the current conceptualisation of dropout. As previously discussed, it is considered a failure to complete a pre-defined number of sessions or modules (Melville et al., 2010) and meeting this criteria is thought to be a negative outcome or consequential of a negative treatment experience (Bados et al., 2007; Proudfoot, 2004). However, if contemplation is given to the two distinctive 'dropout' groups found in this study in light of this homogenous definition, it appears to overlook important differences in experiences and reasons for leaving treatment early. This sentiment is echoed by Högdahl et al (2016) who pointed out that there are implications for conceptualising dropout in terms of treatment proportions.

Feeling ready to leave treatment early. The emergence of a group of participants who met dropout criteria but who also reported feeling ready to leave treatment early because they were happy with their progress and got what they needed is not entirely novel within the existing literature. These types of clients who drop out have been hinted at, with researchers pointing at the need to consider patient discretion alongside clinician perspectives and treatment outcomes when looking at dropout

(Eysenbach, 2005; Hynan, 1990; Waller & Gilbody, 2009; Wright et al., 2019). According to these participants, their treatment needs were met in fewer sessions than pre-defined by both the IAPT service criteria and the criteria of the main RCT study and they no longer saw the need to continue with active treatment. There is evidence within the existing research that supports these claims.

This phenomenon of feeling ready to leave treatment early and the reasons for it has begun to be documented. Previous research has observed immediate small to moderate reductions in depressive symptoms among users of an iCBT program (Christensen et al., 2006). Applying this finding to the current study, participants who left treatment early because they felt they had made sufficient progress could be availing of these effects. This sentiment is echoed by Cameron (2007) who states that some patients just need less, i.e. advice, reframing a problem or normalising difficulties is all the psychological support that may be required. Building on this research Enrique-Roig et al (2019) found evidence to suggest that in general iCBT programme usage is higher during the first half of treatment, meaning for some individuals that they may have finished the intervention before the end of the 'treatment period' as defined by the creators. These findings could help explain dropout participants' claims that they had made sufficient progress and no longer wanted to continue with treatment. It also suggests that one must look at how participants are using internet interventions and not just for how long (Wright et al., 2019). If patients are utilising positive usage practices, it is possible that they may experience clinical changes or reductions in symptoms sooner than the pre-defined number of sessions or modules and want to leave treatment early. This begs the question of whether these participants are encapsulated by the current conceptualisation of 'dropout' or if they should be considered something else entirely.

Furthermore, the very nature of internet interventions introduces an additional aspect to the traditional treatment experience: written expression. While working through the iCBT intervention, participants were required to read and write about their thoughts, feelings and behaviours. They also communicated with their supporter through an online text-based exchange. It is thought that some individuals engaging in written expression during therapy are influenced by the 'single-session counselling' phenomenon (Richards, 2009). Online this could mean that individuals are influenced by the therapeutic effects of writing (Pennebaker, 1997) and/or the online disinhibition effect (Suler, 2004) which trigger them to make personal and relevant disclosures earlier in treatment (Richards, 2009; Suler, 2004). Some of these effects could explain the sufficient progress referred to by the participants of the current study who felt ready to leave treatment early. Based on the evidence presented in the current study, it could be suggested that these participants do not conform to the parameters of the current conceptualisation of dropout; they are indicative of an entirely different treatment experience. The role played by patient discretion when evaluating dropout status and the importance of considering it in research is becoming evident as supported by the findings of this study.

Between group differences. As has been established, there are two distinctive groups of dropout participants in this study: those who felt ready to leave treatment early and those who had negative reasons for their change in motivation. The overall treatment experiences had by both groups were compared across the remaining nine domains (Table 4). For the most part, both groups reported similarly, further strengthening the argument that dropout is best understood in terms of the subjective experience. The dropout population is not homogeneous and it is difficult to describe an average treatment experience. Even so, there were between group differences in terms

of motivation to start treatment, programme usage practices, experiences engaging with content, experiences interacting with the supporter and the experience of online communication. These between group differences serve to pinpoint elements of online treatment experience that remain influential in the decision to drop out and that distinguish participants who conform to the traditional conceptualisation of dropout from those who do not fit this typology. It is important to note that any comparison made between the two participant groups should be considered tentatively due to the nature of qualitative research and the fact that no statistical tests were carried out.

In terms of the motivation to start treatment, participants reported symptoms of psychological distress and stressful life events. When these reports were compared between groups, all participants from both groups described their symptoms of psychological distress as a motivator for seeking treatment. However, when it comes to stressful life events, proportionately more participants who had negative reasons for their change in motivation attribute this as a motivator for seeking treatment than those who felt ready to leave early. The fact that this group is more likely to have sought treatment due to life stressors is not surprising as one of the main characteristics of this group is not continuing with treatment due to contextual obstacles (Table 3).

The influence external factors have on an individual's ability to continue with treatment has been documented in the literature (Barrett et al., 2008; Christensen, Griffiths, & Farrer, 2009; Johansson et al., 2015; Waller & Gilbody, 2009). Johansson et al (2015) conceptualises their effect on dropout as an incompatible relationship between the demands of the treatment and life factors such as work, relationships and commitments. However, these treatment demands will only lead to drop out if viewed as an obstacle to daily life by the individual (Johansson et al., 2015), highlighting once again the subjectivity of the experience of dropout. In summary factors of iCBT

interventions that are generally associated with increasing adherence are sometimes the same factors that contribute to the decision to not complete treatment, helping some individuals, but hampering others (Kelders et al., 2012). The fact that proportionately more participants who had negative reasons for their change in motivation reported stressful life factors before beginning treatment than those who felt ready to leave early strengthens the suggestion to carefully consider patient suitability and their life circumstances prior to administering iCBT treatment.

Proportionately more clients who dropped out who felt ready to leave treatment early reported positive usage practices in comparison to those who had negative reasons for their change in motivation. Reports of productive and regular use constituted positive usage practices. Engaging in these positive usage practices ensures exposure to the psychological treatment, making it more likely for the individual's needs to be satisfied. Furthermore, they would enable the individual to work through the iCBT strategies and techniques on the online programme faster than someone who did not organise or regulate their usage. These positive usage practices could be related to higher usage in the first few weeks of treatment as reported by Enrique Roig et al (2019). In this light, it makes sense that positive usage practices are more common to those who felt ready to leave treatment early as it could serve as the mechanism for how they achieved their therapeutic goals in fewer sessions than the pre-defined cut-off point.

This between group difference, even though it is observed within a dropout population, could advance our understanding of the type of individual that iCBT works well for. The fact that positive usage practices were more likely to be reported by those who felt ready to leave treatment early than those who had negative reasons for their change in motivation, suggests the importance of looking at how individuals are using

iCBT programmes not only when it comes to determining dropout but also when assessing patient suitability for this type of treatment. As the responsibility for treatment adherence and engagement is being handed over to the patient (Hilty et al., 2017; Lupton, 2013; Townsend et al., 2015), it may be the case that in this increasingly modernised mental healthcare system, it is the patients who engage in more productive and regular usage practices who will be more successful with treatment. This assumption is tentative, but examining it may help to establish specific patient characteristics that determine suitability for iCBT and in turn begin tackling the problem of dropout.

Negative experiences engaging with content were reported by proportionately more participants who had negative reasons for their change in motivation than by those who felt ready to leave treatment early. This finding serves to reiterate how important the patient's perception and experience with programme content is to the treatment's overall success (Alfonsson et al., 2016). When treatment content is presented online as self-help texts with interactive elements, it is effectively self-administered and so the extent to which the individual finds it interesting, relatable and easy to work through becomes even more integral to engagement (Andersson et al., 2013; Carlbring et al., 2011). As the field of internet interventions is no longer in its infancy and so the programme content is evidence-based (Andersson et al., 2009; Johansson & Andersson, 2012; NICE, 2009, 2011) and most design flaws have been rectified (Riley & Veale, 1999; Selmi et al., 1990), it is probable that the negative experiences engaging with content described more often by those who report negative reasons for their change in motivation is due to personal preferences (Andersson et al., 2013; Berger, 2015; Carlbring et al., 2011).

As Rogers (2003) stipulated, patients may decide to dropout if they are dissatisfied with certain aspects of the treatment such as content. Such is the case with the participants of the current study who had negative reasons for their change in motivation (Table 3). Those who reported contextual obstacles may have perceived the content to be too much work to fit into their daily lives (Johansson et al., 2015) and those who described iCBT as not being a good personal fit could have been influenced by their personal preferences (Berger, 2015; Carlbring et al., 2011). Considering that the reported negative experiences engaging with content could be related to personal preferences and that they were reported by proportionately more participants who had negative reasons for their change in motivation, it is possible that dropout can be reflective of patient suitability and not strictly treatment failure (Eysenbach, 2005; Proudfoot, 2004) and this should be explored.

Between group differences were also observed in relation to experiences interacting with the supporter. Proportionately more participants who felt ready to leave treatment early reported positively in respect of this domain, while proportionately more participants who had negative reasons for their change in motivation reported more negatively. First of all, this restates the significance of therapeutic alliance for treatment success and outcomes (Bordin, 1979, 1994), insofar that the establishment of a strong bond may have been the vessel for accelerated subjective positive outcomes among those who felt ready to leave treatment early. The negative experiences with the supporter, which were more likely among those who had negative reasons for their change in motivation, could be due to poor quality support. However, considering that the IAPT service implements best-practice support procedures (Clark, 2011; NICE, 2009, 2011; Richards et al., 2018), there could possibly be other explanations for these subjective negative experiences. Potential roles played by patient suitability and

preferences in these between group differences are worth considering. For example, it may not be the fault of the supporter for the failure of the establishment of a good therapeutic relationship; it could be due to the inability of the patient to communicate effectively online with their supporter.

Finally, proportionately more participants who felt ready to leave treatment early reported positive experiences with online communication, while proportionately more participants who had negative reasons for their change in motivation reported negative experiences with the same. As has been stated in the existing literature, regardless of the efficacy and prevalence of iCBT programmes, the majority of people still prefer face-to-face therapies (Berger, 2015; Schröder et al., 2015), thus highlighting the integral role of personal preferences in treatment experience. For those who had negative reasons for their change in motivation, perhaps their personal preference for face-to-face therapies was enough to prevent them from completing iCBT treatment. In the case of the participants who felt ready to leave treatment early, their preferable appraisals of the supporter interaction could be due to the fact that they are generally more personable individuals, establishing connections online easier and better. As a result, their reported efficiency and preference for online communication could result in them benefitting greater from the therapeutic effects of writing (Pennebaker, 1997) and the online disinhibition effect (Suler, 2004), potentially explaining how they arrived at their therapeutic goals sooner and felt ready to leave treatment earlier.

From these findings and the direction in which they could take the research, it appears imperative to account for patient preferences for online versus face-to-face support and their suitability for online communication. Even with the most efficient iCBT treatments and ecologically valid treatment settings, if a patient ultimately does not like the medium of treatment and support provision, then it is not a suitable

treatment approach. As is the case with programme content, online support needs to move to a hyper-tailored form in terms of the level and type of contact the patient receives from their supporter.

Should these clients really be considered to have dropped out? The findings discussed in relation to participants' change in motivation highlights the heterogeneity of the dropout population. Here, it has been established that there are two distinct groups of people who meet dropout criteria in the current study, who have distinctively different treatment experiences, thus presenting a more nuanced picture of the phenomenon. Conceptualising dropout in terms of treatment proportions (the inclusion criteria for the main RCT and IAPT service criteria) does not encapsulate those who feel ready to leave treatment early and whose treatment needs have been met. These types of clients who drop out are currently being captured in our negative appraisals of iCBT treatments. The literature is pushing for more consideration to be given to patient discretion when exploring treatment dropout (Eysenbach, 2005) and the move away from conceptualising dropout in terms of treatment proportions (Högdahl et al., 2016; Wright et al., 2019). For the most part, both groups of participants report similarly across the domains of investigation, however there are differences in terms of their motivation to start treatment, usage practices, experiences with content, support and online communication. The between group differences reported in this study may help to establish an idea of the type of individual who leaves treatment prematurely for positive reasons and it is hoped that this can be built upon and utilised in future work.

# **Strengths of the Current Study**

The existing literature pertaining to online treatment dropout has been largely informed by quantitative research on dropout and adherence to online treatments. More

recently, efforts have been made to qualitatively examine dropout from online treatments. This body of work has provided useful information in relation to predictors of dropout and has identified various reasons for doing so. Up until now, dropout has been conceptualised as a homogenous concept and a consequence of a wholly negative experience. That being said, there was an opportunity to move beyond the existing evidence base and understanding of online treatment dropout and delve deeper into the subjective experience in an ecologically valid setting. The current study was informed by preliminary reports relating to the reasons for dropout from participants from the main RCT investigating the effectiveness and cost-effectiveness of internet-delivered interventions (Richards et al., 2018). It also built on the existing literature and integrated research from other areas relating to online treatment dropout to develop a robust semi-structured interview that facilitated a more in depth analysis of the experiences of individuals who dropped out of iCBT treatment.

Turning the focus to the overall experience rather than individual reasons for dropout, demonstrated a more complete overview of the phenomenon. By exploring each element of the participant's treatment experience prior to dropout, explanations that reveal very little about their decision to leave treatment prematurely are avoided, such as 'I kept forgetting to use the programme', 'I didn't like the online programme' or 'I didn't have time'. Instead, by giving the participant the opportunity to explore every element of their treatment experience, from their use of technology to the connection with their supporter, they are empowered to assess and report on the experience subjectively. The future of digital healthcare depends on the increased understanding of such phenomenon, so that psychological interventions can continue to increase in accessibility while increasing specificity for the patient.

However, not only does this in depth analysis of treatment dropout provide a more robust view of the subjective experience, it also suggests a more nuanced conceptualisation of dropout. The ten domains of investigation, as described above, bring to light a positive dimension to online treatment dropout. In doing so, it introduces heterogeneity to the conceptualisation of treatment dropout, bringing into question the current conceptualisation as being wholly reflective of a negative experience with treatment. Literature to date conceptualises treatment dropout in terms of modules completed or sessions attended, with little acknowledgement of personal or clinical relevance (Högdahl et al., 2016; Hynan, 1990) and this conceptualisation is in line with IAPT service criteria and the inclusion criteria for dropout of the main RCT. In fact dropout rates are sometimes taken as a measure of treatment failure (Kazdin, Mazurick, & Siegel, 1994; Lopes et al., 2017). Taking a closer look at the findings of the current study, in particular participant reports relating to change in motivation, two distinctive groups of dropout participants emerged. This further brings into question the current conceptualisation of dropout and enabled a tentative comparison to be made between the two groups to determine whether overall treatment experiences differed.

The current study addresses other gaps in the research field of online treatment dropout. For example, it was carried out within an ecological valid treatment setting. As has been established a large body of the research relating to online treatment dropout is developed from our knowledge of face-to-face treatments, treatment adherence and more recent qualitative research examining dropout from online interventions. Although important strides have been made to specifically explore dropout from online interventions (Fernández-Álvarez et al., 2017; Johansson et al., 2015), some studies examining online treatment dropout have done so in a healthcare setting where the online delivery of psychological interventions is neither commonplace or expected by

patients (Díaz-García et al., 2017; González-Robles et al., 2015). In doing so, patient and clinician acceptability and attitudes may act as barriers to treatment adherence and contribute to dropout. The present study addresses this difficulty by studying online treatment dropout within a routine care setting, the UK's Improving Access to Psychological Therapies programme (Clark, 2011; NICE, 2009; Richards et al., 2018). Investigating the subjective experience of online treatment dropout within a healthcare system that routinely offers iCBT as an alternative treatment approach for step 2, low-intensity treatment is a valid and accurate measure of the construct.

#### Limitations

While every effort was made in the current study to ensure a representative sample of all those who dropped out of online treatment, recruitment encountered some obstacles to this. First, participants' suitability for iCBT treatment may have been assessed prior to beginning treatment by their IAPT service. If this was the case, their subjective experiences may be positively biased. Secondly, participants for the qualitative interviews were recruited from the main RCT sample and invited to participate by telephone at six month and nine month follow-up time points. Therefore, recruitment to the present study was dependent on participant responses to the research calls. As with any research trial, there were participants who had dropped out of treatment and never engaged with the research team or who had dropped out of treatment and withdrew from the research trial altogether. The qualitative interviews failed to capture and represent the subjective experiences of these dropout participants. Additionally, participants were organised into two groups according to their reports relating to their change in motivation and these groups were then used to compare treatment experiences. Two participants did not report on their change in motivation, so they were not represented in this comparison. It is also important to keep in mind that

any between group differences reported from these comparisons are not statistically significant as they are based on qualitative data and not quantitative and any conclusions made as a result are tentative.

As already stated, the interviews were carried out via telephone by two interviewers (KL and CE). This may have had implications for the consistency of the data gathered from the interviews. There may have been distortions in participant responding as a result of differential reactions to the two interviewers' style and personality or their presentation of particular questions. Despite the fixed-wording of the semi-structured interview schedule and the pre-defined prompts, the two interviewers may have deviated from these to a certain extent. Furthermore, it must also be acknowledged that the primary researcher acted as an interviewer. While utilising the descriptive and interpretive qualitative research method (Elliott & Timulak, 2005) serves to acknowledge the researcher's influence on the data, positing that one's work is guided by uninformed rather than informed expectations, as is human nature, it may still have had an impact on the data gathered.

There is also a potential social desirability bias among participants. It is possible that participants withheld honest criticism and reasons for dropping out as they associated the researcher who was interviewing them with the provision of mental health services and out of fear of jeopardising future access to treatment. As the qualitative interviews were conducted at six and nine months post-treatment, historical reporting may have caused difficulties for participants remembering their treatment experience accurately and the circumstances surrounding their dropout. Finally, although strategies were employed to maintain rigour and ensure credibility of the data analysis, it is important to acknowledge that there are always subjective elements present in qualitative research.

## **Reflexivity statement**

My biggest learning from carrying out this research project, and it may be echoed by those reading it, was that treatment dropout does not translate to treatment failure or inadequacy. Going into the interviews, I expected to hear really negative accounts of the iCBT treatment experience reflecting a dislike for this medium of treatment delivery, poor support and difficulty using such technologies. After the first few interviews, it became apparent that the clients who had dropped out had had many positive experiences using the iCBT treatment and on reflection found it difficult to attribute their drop out to a specific negative appraisal. At first, the picture my data was beginning to paint disappointed me. I felt as if I was failing to capture accurately the treatment dropout experience. However, after discussing my preliminary data with colleagues and setting aside my own expectations and beliefs, I realised that in fact I was uncovering that the phenomenon of drop out is a far more nuanced one than I had previously thought. Those who drop out of treatments, in accordance with pre-defined number of sessions or modules, have a wide range of treatment experiences, positive and negative, and oftentimes their decision to leave treatment prematurely is as a result of treatment success personal to them.

Acknowledging the role that my own expectations and assumptions played at the beginning of this research project, I chose to utilise the descriptive and interpretive qualitative research method (Elliott & Timulak, 2005). I liked the concept beyond this analysis method, in that it recognises and accounts for the researcher's influence on the data, regarding them lightly. After all, it is inevitable that the researcher is going to influence the data in some way, especially in the case of qualitative interviews. I also really liked how it offers a degree of flexibility to the analysis while also being structured enough for the process to be audited. However, it was not without its

challenges. I found it difficult to organise and make sense of the vast amount of qualitative data I had gathered during the interviews. Eventually when I had divided my data up into meaning units and organised them into categories and domains, upon discussion with my colleagues who were acting as auditors of the data analysis process, it was decided that I needed to rethink my allocation and grouping of meaning units. I would probably describe this as the most frustrated stage of the research project. It felt as if I was never going to arrive at the end of the data analysis. I also found it difficult to revisit the data from a different viewpoint the second time. However, the descriptive and interpretive method requires the researcher to be open to reassessment and constructive criticism and so, I revisited my data with a fresh perspective and finally arrived at a set of domains and categories that I believed to be representative of my interviewees' experiences and that I agreed upon with my auditors. Perseverance was key during the data analysis phase of this research project.

My final reflection is in relation to participant recruitment within a nested study. From the outset, I felt very lucky to have access to both the resources and the population of the main RCT. It definitely made the recruitment process easier. First of all, the characteristics of the participants were already known to me. In this way, I could utilise purposive sampling, inviting participants based on their age and gender, ensuring I was covering a broad range in both. This enabled me to conduct my study within a gender-balanced sample, which is not often seen in this type of qualitative research. Secondly, the recruitment process was more straight forward due to the fact that I was inviting individuals from a population that were already willing to part take in research. However on reflection, I am not totally satisfied with the population (N=15) I recruited for this study. As stated, I recruited my participants from those who had dropped out of iCBT treatment from the main RCT. However, this recruitment process was limited by

the fact that I could not recruit participants who had both dropped out of treatment and disengaged with the main RCT. I believe that these individuals may have had more negative experiences with iCBT treatment than those who I interviewed. I would have loved to have had the opportunity to have heard their experiences. I can only assume that they would have added some variation to my findings. When I reflect on the two categories of clients who dropped out of treatment that I established, those who feel ready to leave treatment early and those who had a negative reason for their change in motivation , I wonder if the individuals I was missing from my interviews would have added a third category characterised by negative appraisals or failings of the treatment.

#### **Conclusion**

The data provided from the qualitative interviews provided insight into the subjective experiences of participants who dropped out from an iCBT treatment for depression and anxiety in a routine care setting. In doing so, it moved beyond the understanding of treatment dropout in terms of individual reasons and looked instead at the complete experience. The findings of the current study bring to light a more nuanced picture of treatment dropout as demonstrated by dropout participants describing their treatment experiences as having both negative and positive dimensions alongside the establishment of two distinctive types of 'dropout'. The experience of treatment leading to drop out was covered in terms of ten domains: Relationship to Technology, Motivation to Start, Background Knowledge and Attitudes towards iCBT, Change in Motivation, Usage of the Programme, Changes due to the Intervention, Engagement with Content, Experience Interacting with the Supporter, Experience of Online Communication and Termination of the Supported Period. Participants' experiences of online treatment prior to dropout vary widely and are representative of a heterogeneous concept.

Questions have been raised previously regarding the parameters of the current conceptualisation of treatment dropout (Eysenbach, 2005; Högdahl et al., 2016; Hynan, 1990; Proudfoot, 2004; Waller & Gilbody, 2009; Wright et al., 2019). The conceptualisation of treatment dropout in its current form suggests a one-dimensional construct measuring the negative experience of treatment and representative of a homogeneous population. The findings of this study do not align with this viewpoint and instead highlight the subjective experience and importance of patient discretion in evaluating the phenomenon and hint at a potential role played by patient preferences and suitability. Dropout participants can be distinguished in terms of their change in

motivation: those who felt ready to leave treatment early and those who had negative reasons for dropping out. Attributes that were once relevant to the decision to drop out, such as the individual's relationship to technology and their attitudes towards the use of technology in the provision of healthcare, may no longer be as relevant to the phenomenon. Between group differences across treatment experiences outlined attributes that seem to remain particularly relevant to dropout such as motivation to start treatment, usage practices, experience of content, support and online communication. These between group differences also serve to help explain how those who felt ready to leave treatment early achieved their therapeutic goals without completing the predefined number of sessions.

Viewing treatment dropout as a homogenous construct does not apply to or represent the subjective experiences of online dropout participants and does not encapsulate those who feel ready to leave treatment before the pre-defined number of sessions. The current conceptualisation may need to be re-examined. In light of this, research citing treatment dropout as a problem in face-to-face/online therapy (Cuijpers et al., 2010; Kaltenthaler et al., 2008; Karyotaki et al., 2015; Piper et al., 1999; Proudfoot, 2004; Richards & Richardson, 2012; Wallin et al., 2016) could be considered misleading depending on their conceptualisation of dropout. After all, clients who dropped out from the current study are benefitting from the intervention and having positive experiences along the way.

The data discussed in the current study suggests that change may be needed. It has provided evidence to question the current conceptualisation of online treatment dropout, but further work, either quantitative or exploratory, is needed to validate this. This study alludes to the need to establish 'types' of dropout participants based on between group differences in treatment experiences that may relate to patient suitability

for iCBT treatments and preferences for treatment type. Future work is needed to comprehensively develop a typology of dropout participants and potentially reconceptualise the phenomenon in this rapidly changing digital healthcare setting.

### References

- Alfonsson, S., Olsson, E., & Hursti, T. (2016). Motivation and treatment credibility predicts dropout, treatment adherence, and clinical outcomes in an internet-based cognitive behavioral relaxation program: a randomized controlled trial. *Journal of Medical Internet Research*, 18(3), e52. https://doi.org/10.2196/JMIR.5352
- Andersen, R. M. (1968). A behavioral model of families' use of health services.

  Chicago: Center for Health Administration Studies, University of Chicago.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: does it matter? *Journal of Health and Social Behavior*, *36*(1), 1–10. https://doi.org/10.2307/2137284
- Andersson, G., Carlbring, P., Berger, T., Almlöv, J., & Cuijpers, P. (2009). What makes internet therapy work? *Cognitive Behaviour Therapy*, *38*(1), 55–60. https://doi.org/10.1080/16506070902916400
- Andersson, G., & Cuijpers, P. (2009). Internet-based and other computerized psychological treatments for adult depression: A meta-analysis. *Cognitive Behaviour Therapy*, *38*(4), 196–205. https://doi.org/10.1080/16506070903318960
- Andersson, G., Cuijpers, P., Carlbring, P., Riper, H., & Hedman, E. (2014). Guided Internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: a systematic review and meta-analysis. *World Psychiatry*, *13*(3), 288–295. https://doi.org/10.1002/wps.20151
- Andersson, G., Estling, F., Jakobsson, E., Cuijpers, P., & Carlbring, P. (2011). Can the patient decide which modules to endorse? An open trial of tailored internet treatment of anxiety disorders. *Cognitive Behaviour Therapy*, 40(1), 57–64.

- https://doi.org/10.1080/16506073.2010.529457
- Andersson, G., Carlbring, P., Ljótsson, B., & Hedman, E. (2013). Guided internet-based CBT for common mental disorders. *Journal of Contemporary Psychotherapy*, 43(4), 223-233. https://doi.org/10.1007/s10879-013-9237-9
- Andersson, G., & Titov, N. (2014). Advantages and limitations of internet-based interventions for common mental disorders. *World Psychiatry*, *13*(1), 4–11. https://doi.org/10.1002/wps.20083
- Andrews, G., Basu, A., Cuijpers, P., Craske, M. G., McEvoy, P., English, C. L., & Newby, J. M. (2018). Computer therapy for the anxiety and depression disorders is effective, acceptable and practical health care: An updated meta-analysis. *Journal of Anxiety Disorders*, 55, 70–78. https://doi.org/10.1016/j.janxdis.2018.01.001
- Angst, C., & Agarwal, R. (2009). Adoption of electronic health records in the presence of privacy concerns: The elaboration likelihood model and individual persuasion.

  \*Management Information Systems Quarterly, 33(2), 339-370.

  https://doi.org/10.2307/20650295
- Bados, A., Balaguer, G., & Saldaña, C. (2007). The efficacy of cognitive—behavioral therapy and the problem of drop-out. *Journal of Clinical Psychology*, 63(6), 585–592. https://doi.org/10.1002/jclp.20368
- Barak, A., & Bloch, N. (2006). Factors related to perceived helpfulness in supporting highly distressed individuals through an online support hact. *CyberPsychology & Behavior*, 9(1), 60–68. https://doi.org/10.1089/cpb.2006.9.60
- Barrett, M. S., Chua, W.-J., Crits-Christoph, P., Gibbons, M. B., Casiano, D., & Thompson, D. (2008). Early withdrawal from mental health treatment:

- implications for psychotherapy practice. *Psychotherapy (Chicago, Ill.)*, 45(2), 247–267. https://doi.org/10.1037/0033-3204.45.2.247
- Beatty, L., Binnion, C., Kemp, E., & Koczwara, B. (2017). A qualitative exploration of barriers and facilitators to adherence to an online self-help intervention for cancer-related distress. *Supportive Care in Cancer*, 25(8), 2539-2548. https://doi.org/10.1007/s00520-017-3663-2
- Beck, J. S. (1995). Cognitive therapy: Basics and beyond. New York: Guilford Press.
- Beitman, B. D., Beck, N. C., Deuser, W. E., Carter, C. S., Davidson, J. R., & Maddock,
  R. J. (1994). Patient stage of change predicts outcome in a panic disorder
  medication trial. *Anxiety*, 1(2), 64–69. https://doi.org/10.1002/anxi.3070010205
- Berger, T. (2015). The therapeutic alliance in internet interventions: A narrative review and suggestions for future research. *Psychotherapy Research* 27(5), 1-14., https://doi.org/10.1080/10503307.2015.1119908
- Berger, T., Boettcher, J., & Caspar, F. (2014). Internet-based guided self-help for several anxiety disorders: A randomized controlled trial comparing a tailored with a standardized disorder-specific approach. *Psychotherapy*, *51*(2), 207–219. https://doi.org/10.1037/a0032527
- Blaszczynski, A., Steel, Z., & McConaghy, N. (1997). Impulsivity in pathological gambling: the antisocial impulsivist. *Addiction (Abingdon, England)*, 92(1), 75–87. https://doi.org/10.1046/j.1360-0443.1998.93689511.x
- Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice*, *16*(3), 252–260. https://doi.org/10.1037/h0085885

- Bordin, E. S. (1994). Theory and research on the therapeutic working alliance: New directions. In A. Horvath & L. Greenberg (Eds.), *The working alliance: Theory, research, and practice.* (pp. 13-37) New York: John Wiley & Sons.
- Cameron, C. L. (2007). Single session and walk-in psychotherapy: A descriptive account of the literature. *Counselling and Psychotherapy Research*, 7(4), 245–249. https://doi.org/10.1080/14733140701728403
- Carlbring, P., Maurin, L., Törngren, C., Linna, E., Eriksson, T., Sparthan, E., Strååt, M., Marquez von Hage, C., Bergman-Nordgren, L., & Andersson, G. (2011).
  Individually-tailored, internet-based treatment for anxiety disorders: A randomized controlled trial. *Behaviour Research and Therapy*, 49(1), 18–24.
  https://doi.org/10.1016/j.brat.2010.10.002
- Carper, M. M., McHugh, R. K., & Barlow, D. H. (2013). The dissemination of computer-based psychological treatment: A preliminary analysis of patient and clinician perceptions. *Administration and Policy in Mental Health and Mental Health Services Research*, 40(2), 87–95. https://doi.org/10.1007/s10488-011-0377-5
- Cavanagh, K. (2010). Turn on, tune in and (don't) drop out: engagement, adherence, attrition, and alliance with internet-based interventions. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths, D. J. Kavanaugh, B. Klein, M. A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams (Eds.), *Oxford guides in cognitive behavioural therapy. Oxford guide to low intensity CBT interventions* (p. 227–233). *Oxford University Press*.
- Cavanagh, K., Shapiro, D. A., Van Den Berg, S., Swain, S., Barkham, M., & Proudfoot, J. (2009). The acceptability of computer-aided cognitive behavioural therapy: A

- pragmatic study. *Cognitive Behaviour Therapy*, *38*(4), 235–246. https://doi.org/10.1080/16506070802561256
- Chen, H.-T., & Chen, W. (2015). Couldn't or wouldn't? The influence of privacy concerns and self-efficacy in privacy management on privacy protection.

  \*Cyberpsychology, Behavior, and Social Networking, 18(1), 13–19.

  https://doi.org/10.1089/cyber.2014.0456
- Childress, C. A. (2000). Ethical issues in providing online psychotherapeutic interventions. *Journal of Medical Internet Research*, 2(1), E5. https://doi.org/10.2196/jmir.2.1.e5
- Christensen, H., Griffiths, K. M., & Farrer, L. (2009). Adherence in internet interventions for anxiety and depression. *Journal of Medical Internet Research*, 11(2), E13. https://doi.org/10.2196/jmir.1194
- Christensen, H., Griffiths, K. M., Mackinnon, A., & Brittliffe, K. (2006). Online randomized controlled trial of brief and full cognitive behaviour therapy for depression. *Psychological Medicine*, *36*, 1737–1746. https://doi.org/10.1017/S0033291706008695
- Clark, D. M. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: the IAPT experience. *International Review of Psychiatry (Abingdon, England)*, 23(4), 318–327. https://doi.org/10.3109/09540261.2011.606803
- Constantino, M. J., Arnkoff, D. B., Glass, C. R., Ametrano, R. M., & Smith, J. Z. (2011). Expectations. *Journal of Clinical Psychology*, 67(2), 184–192. https://doi.org/10.1002/jclp.20754

- Cook, J. E., & Doyle, C. (2002). Working alliance in online therapy as compared to face-to-face therapy: Preliminary results. *CyberPsychology & Behavior*, *5*(2), 95–105. https://doi.org/10.1089/109493102753770480
- Creswell, J. W., Shope, R., Plano Clark, V. L., & Green, D. O. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools*, 13(1), 1–11.
- Cuijpers, P, Donker, T., Van Straten, A., Li, J., & Andersson, G. (2010). Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A systematic review and meta-analysis of comparative outcome studies. 

  \*Psychological Medicine\*, 40(12), 1943-1957.\*

  https://doi.org/10.1017/S0033291710000772
- Cuijpers, Pim, & Riper, H. (2014). Internet interventions for depressive disorders: an overview, *Revista de Psicopatalogia y Psicologia Clinica*, 19(3), 209–216. https://doi.org/10.5944/rppc.vol.19.num.3.2014.13902
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319. https://doi.org/10.2307/249008
- Devilly, G. J., & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*, *31*(2), 73–86. https://doi.org/10.1016/S0005-7916(00)00012-4
- Díaz-García, A., González-Robles, A., Fernández-Álvarez, J., García-Palacios, A., Baños, R. M., & Botella, C. (2017). Efficacy of a transdiagnostic internet-based treatment for emotional disorders with a specific component to address positive

- affect: Study protocol for a randomized controlled trial. *BMC Psychiatry*, *17*(1), 145. https://doi.org/10.1186/s12888-017-1297-z
- Donkin, L., & Glozier, N. (2012). Motivators and motivations to persist with online psychological interventions: A qualitative study of treatment completers. *Journal of Medical Internet Research*, *14*(3), e91. https://doi.org/10.2196/jmir.2100
- Dozois, D. J. A., Westra, H. A., Collins, K. A., Fung, T. S., & Garry, J. K. F. (2004).

  Stages of change in anxiety: psychometric properties of the University of Rhode

  Island Change Assessment (URICA) scale. *Behaviour Research and Therapy*, 42,

  711–729. https://doi.org/10.1016/S0005-7967(03)00193-1
- Drieschner, K. H., Lammers, S. M. ., & van der Staak, C. P. (2004). Treatment motivation: An attempt for clarification of an ambiguous concept. *Clinical Psychology Review*, *23*(8), 1115–1137. https://doi.org/10.1016/J.CPR.2003.09.003
- Ebert, D. D., Berking, M., Cuijpers, P., Lehr, D., Pörtner, M., & Baumeister, H. (2015). Increasing the acceptance of internet-based mental health interventions in primary care patients with depressive symptoms. A randomized controlled trial. *Journal of Affective Disorders*, 176, 9–17. https://doi.org/10.1016/j.jad.2015.01.056
- Elliott, R., & Timulak, L. (2005). Descriptive and interpretive approaches to qualitative research. In J. Miles & P. Gilbert (Eds.), *A handbook of research methods for clinical and health psychology* (pp. 147–159). Oxford University Press.
- Ennis, L., Rose, D., Denis, M., Pandit, N., & Wykes, T. (2012). Can't surf, won't surf: the digital divide in mental health. *Journal of Mental Health (Abingdon, England)*, 21(4), 395–403. https://doi.org/10.3109/09638237.2012.689437
- Enrique Roig, A., Palacios, J., Ryan, H., & Richards, D. (2019). The association

- between usage and outcomes of an online intervention for depression: how optimal dosage can help establish adherence (Preprint). *Journal of Medical Internet*\*Research\*, 21(8), e12775. https://doi.org/10.2196/12775
- Eysenbach, G. (2005). The law of attrition. *Journal of Medical Internet Research*, 7(1), e11. https://doi.org/10.2196/jmir.7.1.e11
- Fernández-Álvarez, J., Díaz-García, A., González-Robles, A., Baños, R., García-Palacios, A., & Botella, C. (2017). Dropping out of a transdiagnostic online intervention: A qualitative analysis of client's experiences. *Internet Interventions*, 10(August), 29–38. https://doi.org/10.1016/j.invent.2017.09.001
- Goldfried, M. R. (1980). Toward the delineation of therapeutic change principles.

  \*American Psychologist\*, 35(11), 991–999. https://doi.org/10.1037/0003-066X.35.11.991
- González-Robles, A., García-Palacios, A., Baños, R., Riera, A., Llorca, G., Traver, F., Haro, G., Palop, V., Lera, G., Romeu, J. E., & Botella, C. (2015). Effectiveness of a transdiagnostic internet-based protocol for the treatment of emotional disorders versus treatment as usual in specialized care: study protocol for a randomized controlled trial. *Trials*, *16*, 488. https://doi.org/10.1186/s13063-015-1024-3
- Greist, J. H., Laughren, T. P., Gustafson, D. H., Stauss, F. F., Rowse, G. L., & Chiles, J. A. (1973). A computer interview for suicide-risk prediction. *American Journal of Psychiatry*, *130*(12), 1327–1332. https://doi.org/10.1176/ajp.130.12.1327
- Griffiths, F., Lindenmeyer, A., Powell, J., Lowe, P., & Thorogood, M. (2006). Why are health care interventions delivered over the internet? A systematic review of the published literature. *Journal of Medical Internet Research*, 8(2), e10. https://doi.org/10.2196/jmir.8.2.e10

- Guo, X., Zhang, X., & Sun, Y. (2016). The privacy–personalization paradox in mHealth services acceptance of different age groups. *Electronic Commerce Research and Applications*, 16, 55–65. https://doi.org/10.1016/J.ELERAP.2015.11.001
- Hilty, D. M., Chan, S., Hwang, T., Wong, A., & Bauer, A. M. (2017). Advances in mobile mental health: opportunities and implications for the spectrum of e-mental health services. *MHealth*, 3, 34–34. https://doi.org/10.21037/mhealth.2017.06.02
- Högdahl, L., Levallius, J., Björck, C., Norring, C., & Birgegård, A. (2016). Personality predicts drop-out from therapist-guided internet-based cognitive behavioural therapy for eating disorders. Results from a randomized controlled trial. *Internet Interventions*, *5*, 44–50. https://doi.org/10.1016/J.INVENT.2016.07.002
- Holst, A., Nejati, S., Björkelund, C., Eriksson, M. C. M., Hange, D., Kivi, M., Wikberg,
  C., & Petersson, E. L. (2017). Patients' experiences of a computerised self-help
  program for treating depression—a qualitative study of Internet mediated cognitive
  behavioural therapy in primary care. *Scandinavian Journal of Primary Health Care*, 35(1), 46–53. https://doi.org/10.1080/02813432.2017.1288813
- Horvath, A. O., Del Re, A. C., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy*, 48(1), 9–16. https://doi.org/10.1037/a0022186
- Hynan, D. J. (1990). Client reasons and experiences in treatment that influence termination of psychotherapy. *Journal of Clinical Psychology*, 46(6), 891–895. https://doi.org/10.1002/1097-4679(199011)46:6<891::AID-JCLP2270460631>3.0.CO;2-8
- Johansson, O., Michel, T., Andersson, G., & Paxling, B. (2015). Experiences of non-adherence to internet-delivered cognitive behavior therapy: A qualitative study.

- Internet Interventions, 2(2), 137–142. https://doi.org/10.1016/j.invent.2015.02.006
- Johansson, R., & Andersson, G. (2012). Internet-based psychological treatments for depression. *Expert Review of Neurotherapeutics*, 12(7), 861–870. https://doi.org/10.1586/ern.12.63
- Joinson, A. (1998). Causes and implications of disinhibited behavior on the Internet. In J. Gackenbach (Ed.), *Psychology and the internet: Intrapersonal, interpersonal, and transpersonal implications* (pp. 43–60). San Diego, CA, US: Academic Press.
- Kaltenthaler, E., Sutcliffe, P., Parry, G., Beverley, C., Rees, A., & Ferriter, M. (2008).
  The acceptability to patients of computerized cognitive behaviour therapy for depression: a systematic review. *Psychological Medicine*, 38(11), 1521 1530.
  https://doi.org/10.1017/S0033291707002607
- Karyotaki, E., Kleiboer, A., Smit, F., Turner, D. T., Pastor, A. M., Andersson, G.,
  Berger, T., Botella, C., Breton, J. M., Carlbring, P., Christensen, H., de Graaf, E.,
  Griffiths, K., Donker, T., Farrer, L., Huibers, M. J., Lenndin, J., Mackinnon, A.,
  Meyer, B., Moritz, ... Cuijpers, P. (2015). Predictors of treatment dropout in self-guided web-based interventions for depression: an 'individual patient data' meta-analysis. *Psychological Medicine*, 45(13), 2717–2726.
  https://doi.org/10.1017/S0033291715000665
- Kazdin, A. E., Mazurick, J. L., & Siegel, T. C. (1994). Treatment outcome among children with externalizing disorder who terminate prematurely versus those who complete psychotherapy. *Journal of the American Academy of Child & Adolescent Psychiatry*, *33*(4), 549–557. https://doi.org/10.1097/00004583-199405000-00013
- Kelders, S. M., Kok, R. N., Ossebaard, H. C., & Van Gemert-Pijnen, J. E. (2012).

  Persuasive system design does matter: a systematic review of adherence to web-

- based Interventions. *Journal of Medical Internet Research*, *14*(6), e152. https://doi.org/10.2196/jmir.2104
- Kontos, E., Blake, K. D., Chou, W.-Y. S., & Prestin, A. (2014). Predictors of eHealth usage: insights on the digital divide from the Health Information National Trends Survey 2012. *Journal of Medical Internet Research*, 16(7), e172. https://doi.org/10.2196/jmir.3117
- Krause, M. S. (1966). A cognitive theory of motivation for treatment. *The Journal of General Psychology*, 75(1), 9–19. https://doi.org/10.1080/00221309.1966.9710345
- Kroenke, K., Spitzer, R. & Williams, J. (2001). The PHQ-9 validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(19), 606 613. https://doi.org/10.1046//j.1525-1497.2001.016009606.x
- Lewis, C. C., Simons, A. D., Silva, S. G., Rohde, P., Small, D. M., Murakami, J. L., High, R. R., & March, J. S. (2009). The role of readiness to change in response to treatment of adolescent depression. *Journal of Consulting and Clinical Psychology*, 77(3), 422–428. https://doi.org/10.1037/a0014154
- Littell, J. H., & Girvin, H. (2002). Stages of change: A critique. *Behaviour Modification*, 26(2), 223-273. https://doi.org/10.1177/0145445502026002006
- Lopes, R. T., Gonçalves, M. M., Sinai, D., & Machado, P. P. (2017). Clinical outcomes of psychotherapy dropouts: does dropping out of psychotherapy necessarily mean failure? *Revista Brasileira de Psiquiatria*, 40(2), 123–127. https://doi.org/10.1590/1516-4446-2017-2267
- Lupton, D. (2013). The digitally engaged patient: Self-monitoring and self-care in the digital health era. *Social Theory and Health*, 11(3), 256–270.

- https://doi.org/10.1057/sth.2013.10
- Malhotra, Y., & Galletta, D. F. (1999, January). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation.
   Paper presented at the 32<sup>nd</sup> Annual Hawaii International Conference on Systems
   Sciences. https://doi.org/10.1109/HICSS.1999.772658
- Manicavasagar, V., Parker, G., Gillis, I., Proudfoot, J., Nicholas, J., Smith, M., &
  Burckhardt, R. (2010). The ins and outs of an online bipolar education program: A
  study of program attrition. *Journal of Medical Internet Research*, 12(5), e57.
  https://doi.org/10.2196/jmir.1450
- Mathieu, E., Barratt, A., Carter, S. M., & Jamtvedt, G. (2012). Internet trials: participant experiences and perspectives. *BMC Medical Research Methodology*, *12*(1), 162. https://doi.org/10.1186/1471-2288-12-162
- McElvaney, J., & Timulak, L. (2013). Clients' experience of therapy and its outcomes in 'good' and 'poor' outcome psychological therapy in a primary care setting: An exploratory study. *Counselling and Psychotherapy Research*, *13*(4), 246–253. https://doi.org/10.1080/14733145.2012.761258
- McIvor, R., Ek, E., & Carson, J. (2004). Non-attendance rates among patients attending different grades of psychiatrist and a clinical psychologist within a community mental health clinic. *Psychiatric Bulletin*, 28(01), 5–7. https://doi.org/10.1192/pb.28.1.5
- Melville, K. M., Casey, L. M., & Kavanagh, D. J. (2010). Dropout from internet-based treatment for psychological disorders. *British Journal of Clinical Psychology*, 49(4), 455–471. https://doi.org/10.1348/014466509X472138

- Mohr, D. C., Cuijpers, P., & Lehman, K. (2011). Supportive accountability: A model for providing human support to enhance adherence to eHealth interventions.
  Journal of Medical Internet Research, 13(1), e30.
  https://doi.org/10.2196/jmir.1602
- Mohr, D. C., Ho, J., Duffecy, J., Baron, K. G., Lehman, K. A., Jin, L., & Reifler, D. (2010). Perceived barriers to psychological treatments and their relationship to depression. *Journal of Clinical Psychology*, 66(4), 394–409. https://doi.org/10.1002/jclp.20659
- Møller, J. E. (2010). Lack of motivation as suffering. *Tidsskrift for Forskning i Sygdom Og Samfund*, 7(13). https://doi.org/10.7146/tfss.v7i13.4151
- Monaghan, S. C., Cattie, J. E., Mathes, B. M., Shorser-Gentile, L. I., Crosby, J. M., & Elias, J. A. (2015). Stages of change and the treatment of OCD. *Journal of Obsessive-Compulsive and Related Disorders*, 5, 1–7. https://doi.org/10.1016/j.jocrd.2014.12.005
- Musiat, P., Goldstone, P., & Tarrier, N. (2014). Understanding the acceptability of emental health attitudes and expectations towards computerised self-help treatments for mental health problems. *BMC Psychiatry*, 14(1), 109. https://doi.org/10.1186/1471-244X-14-109
- Neter, E., & Brainin, E. (2012). eHealth literacy: extending the digital divide to the realm of health information. *Journal of Medical Internet Research*, *14*(1), e19. https://doi.org/10.2196/jmir.1619
- Newman, M. G., Consoli, A., & Taylor, C. B. (1997). Computers in assessment and cognitive behavioral treatment of clinical disorders: Anxiety as a case in point.

  \*Behavior Therapy\*, 28(2), 211–235. https://doi.org/10.1016/S0005-7894(97)80044-

- NICE. (2009). Depression in adults: Recognition and management (Clinicial guideline 90). National Institute for Health and Clinical Excellence, London, p. 2009.

  Retrieved from https://www.nice.org.uk/guidance/cg90/chapter/1Guidance#stepped-care
- NICE. (2011). Generalised anxiety disorder and panic disorder in adults: management (Clinical guideline 113). National Institute for Health and Clinical Excellence, London, p. 2011. Retrieved from https://www.nice.org.uk/guidance/cg113
- Norman, C. D., & Skinner, H. A. (2006). eHealth Literacy: Essential skills for consumer health in a networked world. *Journal of Medical Internet Research*, 8(2), e9. https://doi.org/10.2196/jmir.8.2.e9
- Ofcom. (2017). *Internet use and attitudes Metrics bulletin*. UK. Retrieved from https://www.ofcom.org.uk/research-and-data/data/statistics/stats17
- Ofcom. (2018). *Adults' media use and attitudes report*. UK. Retrieved from https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0011/113222/Adults-Media-Use-and-Attitudes-Report-2018.pdf
- Owens, P. L., Hoagwood, K., Horwitz, S. M., Leaf, P. J., Poduska, J. M., Kellam, S. G., & Ialongo, N. S. (2002). Barriers to children's mental health services. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(6), 731–738. https://doi.org/10.1097/00004583-200206000-00013
- Paxling, B., Lundgren, S., Norman, A., Almlöv, J., Carlbring, P., Cuijpers, P., & Andersson, G. (2013). Therapist behaviours in internet-delivered cognitive behaviour therapy: Analyses of email correspondence in the treatment of

- generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy*, 41(03), 280–289. https://doi.org/10.1017/S1352465812000240
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8(3), 162-166. https://doi.org/10.1111/j.1467-9280.1997.tb00403.x
- Piper, W. E., Joyce, A. S., Rose, J. S., Ogrodniczuk, J. S., Mccallum, M., O'Kelly, J.
  G., & Steinberg, P. I. (1999). Prediction of dropping out in time-limited,
  interpretive: individual psychotherapy. *Psychotherapy Theory Research and Practice*, 36(2), 114-122. https://doi.org/10.1037/h0087787
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, *51*(3), 390–395. https://doi.org/10.1037/0022-006X.51.3.390
- Proudfoot, J. G. (2004). Computer-based treatment for anxiety and depression: is it feasible? Is it effective? *Neuroscience & Biobehavioral Reviews*, 28(3), 353–363. https://doi.org/10.1016/J.NEUBIOREV.2004.03.008
- Proudfoot, J., Ryden, C., Everitt, B., Shapiro, D. A., Goldberg, D., Mann, A., Tylee, A., Marks, I., & Gray, J. A. (2004). Clinical efficacy of computerised cognitive-behavioural therapy for anxiety and depression in primary care: randomised controlled trial. *The British Journal of Psychiatry: The Journal of Mental Science*, 185, 46–54. https://doi.org/10.1192/bpj.185.1.46
- Reynolds, D. J., Stiles, W. B., & Grohol, J. M. (2006). An investigation of session impact and alliance in internet based psychotherapy: Preliminary results.

  \*Counselling and Psychotherapy Research\*, 6(3), 164–168.

  https://doi.org/10.1080/14733140600853617

- Richards, D., Timulak, L., O'Brien, E., Hayes, C., Vigano, N., Sharry, J., & Doherty, G. (2015). A randomized controlled trial of an internet-delivered treatment: Its potential as a low-intensity community intervention for adults with symptoms of depression. *Behaviour Research and Therapy*, 75, 20–31. https://doi.org/10.1016/j.brat.2015.10.005
- Richards, D. (2009). Features and benefits of online counselling: Trinity college online mental health community. *British Journal of Guidance & Counselling*, *37*(3), 231-242. https://doi.org/10.1080/03069880902956975
- Richards, D., Duffy, D., Blackburn, B., Earley, C., Enrique, A., Palacios, J., Franklin, M., Clarke, G., Sollesse, S., Connell, S., & Timulak, L. (2018). Digital IAPT: the effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety disorders in the Improving Access to Psychological Therapies programme: study protocol for a randomised control trial. *BMC Psychiatry*, *18*(1), 59. https://doi.org/10.1186/s12888-018-1639-5
- Richards, D., Enrique, A., & Palacios, J. (2019). Internet-delivered cognitive behaviour therapy. In S. Parry (Ed.), *The handbook of brief therapies: A practical guide* (p. 248). London: SAGE.
- Richards, D., Murphy, T., Viganó, N., Timulak, L., Doherty, G., Sharry, J., & Hayes, C.
  (2016). Acceptability, satisfaction and perceived efficacy of 'Space from
  Depression' an internet-delivered treatment for depression. *Internet Interventions*,
  28(5), 12-22. https://doi.org/10.1016/j.invent.2016.06.007
- Richards, D., & Richardson, T. (2012). Computer-based psychological treatments for depression: A systematic review and meta-analysis. *Clinical Psychology Review*, 32(4), 329–342. https://doi.org/10.1016/J.CPR.2012.02.004

- Richards, D., & Timulak, L. (2012). Satisfaction with therapist-delivered vs. self-administered online cognitive behavioural treatments for depression symptoms in college students. *British Journal of Guidance & Counselling*, 41(2), 193-207. https://doi.org/10.1080/03069885.2012.726347
- Richardson, R., Richards, D. A., & Barkham, M. (2010). Self-help books for people with depression: the role of the therapeutic relationship. *Behavioural and Cognitive Psychotherapy*, 38(01), 67. https://doi.org/10.1017/S1352465809990452
- Riley, S., & Veale, D. (1999). The internet and its relevance to cognitive behavioural psychotherapists. *Behavioural and Cognitive Psychotherapy*, 27, 37-46.
- Rogers, C. P. (1951). Client-centered therapy. Boston: Houghton-Mifflin.
- Rogers, E. M. (2003). Diffusion of Innovations (5th ed.). New York: Free Press.
- Ryan, R. M., & Deci, E. L. (1985). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being self-determination theory. *American Psychologist*, 55(1), 68-78.https://doi.org/10.1037//0003-066X.55.1.68
- Ryan, R. M., Plant, R. W., & O'Malley, S. (1995). Initial motivations for alcohol treatment: Relations with patient characteristics, treatment involvement, and dropout. *Addictive Behaviors*, 20(3), 279–297. https://doi.org/10.1016/0306-4603(94)00072-7
- Schröder, J., Berger, T., Meyer, B., Lutz, W., Hautzinger, M., Späth, C., Eichenberg,
  C., Klein, J. P., & Moritz, S. (2017). Attitudes towards internet interventions
  among psychotherapists and individuals with mild to moderate depression
  symptoms. *Cognitive Therapy and Research*, 41(5), 745–756.
  https://doi.org/10.1007/s10608-017-9850-0

- Schröder, J., Sautier, L., Kriston, L., Berger, T., Meyer, B., Späth, C., Köther, U., Nestoriuc, Y., Klein, J. P. & Moritz, S. (2015). Development of a questionnaire measuring Attitudes towards Psychological Online Interventions-the APOI. *Journal of Affective Disorders*, 187, 136-141. https://doi.org/10.1016/j.jad.2015.08.044
- Schulte, D. (2008). Patients' outcome expectancies and their impression of suitability as predictors of treatment outcome. *Psychotherapy Research*, *18*(4), 481–494. https://doi.org/10.1080/10503300801932505
- Selmi, P. M., Klein, M. H., Greist, J. H., Sorrell, S. P., & Erdman, H. P. (1990).
  Computer-administered cognitive-behavioral therapy for depression. *American Journal of Psychiatry*, 147(1), 51–56. https://doi.org/10.1176/ajp.147.1.51
- Sheehan, D., Lecrubier, Y., Sheehan, K., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker R. & Dunbar, G. C. (1998). The mini-international neuropsychiatric interview (M.I.N.I.): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, 59(20), 22-33.
- Silverman, D. (2001). *Interpreting qualitative data* (2nd Ed). Thousand Oaks, CA: SAGE Publications.
- Spitzer, R. L., Kroenke, K., Williams, J. W. & Löwe, B. (2006). A brief measure for assessing generalised anxiety disorder: the GAD-7. *Archives of Internal Medicine*, *166*(10), 1092-1097. https://doi.org/10.1001/archinte.166.10.1092
- Stangeland-Lie, S., Karlsen, B., Oord, E. R., Graue, M., & Oftedal, B. (2017). Dropout from an ehealth intervention for adults with type 2 diabetes: A qualitative study.

  \*\*Journal of Medical Internet Research\*, 19(5), e187.

- https://doi.org/10.2196/jmir.7479
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: SAGE.
- Sucala, M., Schnur, J. B., Brackman, E. H., Constantino, M. J., & Montgomery, G. H. (2013). Clinicians' attitudes toward therapeutic alliance in e-therapy. *The Journal of General Psychology*, 140(4), 282–293. https://doi.org/10.1080/00221309.2013.830590
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behaviour*, 7(3), 321-326.
- Tierney, D. W., & McCabe, M. P. (2001). The validity of the trans-theoretical model of behaviour change to investigate motivation to change among child molesters. *Clinical Psychology & Psychotherapy*, 8(3), 176–190. https://doi.org/10.1002/cpp.285
- Titov, N., Andrews, G., Robinson, E., Schwencke, G., Johnston, L., Solley, K., & Choi, I. (2009). Clinician-assisted internet-based treatment is effective for generalized anxiety disorder: Randomized controlled trial. *Australian & New Zealand Journal of Psychiatry*, *43*(10), 905–912. https://doi.org/10.1080/00048670903179269
- Todkill, D., & Powell, J. (2013). Participant experiences of an internet-based intervention and randomised control trial: Interview study. *BMC Public Health*, 13(1). https://doi.org/10.1186/1471-2458-13-1017
- Townsend, A., Leese, J., Adam, P., McDonald, M., Li, L. C., Kerr, S., & Backman, C. L. (2015). eHealth, participatory medicine, and ethical care: A focus group study of patients' and health care providers' use of health-related internet information.

- Journal of Medical Internet Research, 17(6), e155. https://doi.org/10.2196/jmir.3792
- Vandereycken, W., & Devidt, K. (2010). Dropping out from a specialized inpatient treatment for eating disorders: The perception of patients and staff. *Eating Disorders*, 18(2), 140–147. https://doi.org/10.1080/10640260903585557
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425. https://doi.org/10.2307/30036540
- Waller, R., & Gilbody, S. (2009). Barriers to the uptake of computerized cognitive behavioural therapy: a systematic review of the quantitative and qualitative evidence. *Psychological Medicine*, *39*(05), 705. https://doi.org/10.1017/S0033291708004224
- Wallin, E. E. K., Mattsson, S., & Olsson, E. M. G. (2016). The preference for internet-based psychological interventions by individuals without past or current use of mental health treatment delivered online: A survey study with mixed-methods analysis. *JMIR Mental Health*, *3*(2), e25. https://doi.org/10.2196/mental.5324
- Ward, R. (2013). The application of technology acceptance and diffusion of innovation models in healthcare informatics. *Health Policy and Technology*, 2(4), 222–228. https://doi.org/10.1016/J.HLPT.2013.07.002
- Ware, P., Bartlett, S. J., Paré, G., Symeonidis, I., Tannenbaum, C., Bartlett, G., Poissant, L. & Ahmed, S. (2017). Using ehealth technologies: Interests, preferences, and concerns of older adults. *Interactive Journal of Medical Research*, 6(1), e3. https://doi.org/10.2196/ijmr.4447

- Wilhelmsen, M., Lillevoll, K., Risør, M. B., Høifødt, R., Johansen, M.-L., Waterloo, K., Eisemann, M. & Kolstrup, N. (2013). Motivation to persist with internet-based cognitive behavioural treatment using blended care: a qualitative study. *BMC Psychiatry*, *13*(1), 296. https://doi.org/10.1186/1471-244X-13-296
- Wright, J. H., Owen, J. J., Richards, D., Eells, T. D., Richardson, T., Brown, G. K., Barrett, M., Rasku, M. A., Polser, G. & Thase, M. E. (2019). Computer-assisted cognitive-behavior therapy for depression. *The Journal of Clinical Psychiatry*, 80(2). https://doi.org/10.4088/JCP.18r12188
- Young, K. S. (2005). An empirical examination of client attitudes towards online counseling. *Cyberpsychology & Behavior : The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society*, 8(2), 172–177. https://doi.org/10.1089/cpb.2005.8.172

## **Appendices**

Appendix A: Ethical Approval for Main RCT Investigating Effectiveness and Costeffectiveness of internet-delivered Interventions



North West - Haydock Research Ethics Committee

3rd Floor - Bartow House 4 Ministral Street Manchoster M1 3DZ

Telephone: 0207 104 8012

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

16 May 2017

Dr Derek Richards Director of Clinical Research & Innovation SilverCloud Health The Priory, John's Street West Dublin 6, Ireland.

Dear Dr Richards

Study title: Digital IAPT: The effectiveness & cost-effectiveness of

Internet-delivered interventions for depression and anxiety disorders in the improving Access to

Psychological Therapies programme.

REC reference: 17/NW/0211 IRA 8 project ID: 214889

The Research Ethics Committee reviewed the above application at the meeting held on 09 May 2017. Thank you for attending with Daniel Duffy and Brid Blackburn to discuss the application.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to deter, or require further information, please contact <a href="https://doi.org/10.1001/journal.org/10.1001/jour

#### Favourable opinion

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

#### Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

- 1. Please make the following changes to the Participant Information Sheet:
  - Advise participants how long it will take to complete the questionnaires during the second appointment.
  - The first time PWP appears in the document, change it to "Psychological Wellbeing Practitioner (PWP)".
  - in the "Will I be paid to participate?" section, change "awarded" to "reimbursed".

You should notify the REC once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Revised documents should be submitted to the REC electronically from IRAS. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which you can make available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA Approval (England)/ NHS permission for research is available in the Integrated Research Application System, at <a href="http://www.rdforum.nhs.uk">www.hra.nhs.uk</a> or at <a href="http://www.rdforum.nhs.uk">http://www.rdforum.nhs.uk</a>.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations.

# Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database. This should be before the first participant is recruited but no later than 6 weeks after recruitment of the first participant. There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact <a href="https://doi.org/10.1001/journal.org/10.1

It is the responsibility of the sponsor to ensure that all the conditions are compiled with before the start of the study or its initiation at a particular site (as applicable).

#### Ethical review of research sites

#### NHS Stee

The favourable opinion applies to all NHS sites taking part in the study taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable coinion" below).

#### Non NHS sites

The Committee has not yet completed any site-specific assessment(s) (SSA) for the non-NHS research site(s) taking part in this study. The favourable opinion does not therefore apply to any non-NHS site at present. I will write to you again as soon as an SSA application(s) has been reviewed. In the meantime no study procedures should be initiated at non-NHS sites.

## Summary of discussion at the meeting

#### Social or scientific value: scientific design and conduct of the study

The Committee agreed that there was a strong justification for this study with growing concern about the provision of mental health services.

The Committee was unable to determine the reason for comparing immediate online Cognitive Behavioural Therapy (iCBT) with iCBT after an eight week wait rather than comparing it to traditional face to face CBT.

> The researchers explained that level 2 of the Improving Access to Psychological Therapies (IAPT) programme was ICBT and not face to face. Therefore it would not be appropriate to compare the two types of CBT.

The Committee asked what the relationship was between SilverCloud Health and the Berkshire Healthcare NHS Foundation Trust.

> The researchers said that they currently provided the online mental health services for the trust. Additionally the trust acted as a flagship regarding the suitability of SilverCloud's content and delivery. The company worked closely with clinicians and service staff on the ground to ensure that what SilverCloud provided met the needs of the service.

# Care and proteotion of research participants; respect for potential and enrolled participants' welfare and dignity

The Committee was concerned about the eight week wait, questioning whether it could be

considered ethical to delay treatment. A big area of concern was whether participants would deteriorate in that time and if they might be at risk of self harm or suicide.

The researchers assured the Committee that a serious deterioration was unlikely. Each person was screened very carefully for suitability for level 2 and for their ability to stay safe during a waiting period. Further, while on the waiting period participants would be monitored with two check ins. The study was designed to match routine clinical care wherever possible and this meant that if escalation was necessary then it would happen.

The Committee asked if it was possible that participants, especially those on the wait list, would undertake activities that might confound the results.

The researchers agreed that was possible as anyone could undertake selfhelp activities. However, to mitigate the problems this might cause to the study all participants would be asked if they had accessed any other forms of help or done any activities that would affect their mental health.

The Committee was concerned about participants who were not at risk of suicide or self harm at the start of the study but who became at risk during the study and asked what mechanism was in place to deal with that.

The researchers said that every session included a wellbeing assessment. The system was designed to ask more questions anytime a problem was noted. Participants would see a list of crisis contacts, such as the Samaritans, and their clinician would be notified. The clinician would then instigate the standard protocol for at risk patients. The researchers also said that if someone on the wait list logged on to the system they would also see the list of crisis contacts.

The Committee asked what process there would be for safeguarding participants during the follow up period as this was not part of routine clinical care.

The researchers said they had agreed a risk protocol with Berkshire. The PI would be contacted within 24 hours of a risk being discovered and the PI would then take the appropriate actions.

The Committee asked what follow up there would be for anyone who had consented to take part in the study but stopped logging into the system, or did not complete the measures.

The researchers said that if someone had minimal usage of the system, or missed an appointment, then the process would match the standard process. A clinician would attempt to contact them, first online and then by phone. If that did not work then a request to contact letter would be sent out. If the patient still did not respond then they would be discharged from the IAPT and the standard discharge protocol would be followed.

The Committee was reassured about the safety of the participants as the research was closely following routine clinical care which had all the necessary safeguards. Further, where the research stepped away from standard care, in the follow up period, there was still a safeguarding protocol in place.

# Informed consent process and the adequacy and completeness of participant information

The Committee reviewed the information sheets and were of the opinion that parts 1 and 2 could easily be combined into one part in both sheets, making them much easier to read. However, the Committee did not make this a condition of the opinion.

Regarding the patient Participant Information Sheet the Committee requested the following changes:

- It should advise participants how long it would take to complete the questionnaires during the second appointment.
- Where PWP appeared for the first time it should be written as "Psychological Wellbeing Practitioner (PWP)".
- In the "Will I be paid to participate?" section, "awarded" needed to be changed to "reimbursed".

# Other ethical issues were raised and resolved in preliminary discussion before your attendance at the meeting.

Please contact the REC Manager if you feel that the above summary is not an accurate reflection of the discussion at the meeting.

#### Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Covering letter on headed paper [Cover Letter]	1	18 April 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Insurance]		
IRAS Application Form [IRAS_Form_25042017]		25 April 2017
Letter from sponsor [Sponsor Letter]	N/A	
Letters of invitation to participant (Phone Invite)	1.5	13 April 2017
Non-validated questionnaire [Patient Experience Questionnaire]		
Non-validated questionnaire [Semi-Structured Interview]	V: 1.1	03 January 2017
Non-validated questionnaire [Treatment Fidelity Checklist]	V: 1.0	05 December 2016
Non-validated questionnaire [Dropout Guestionnaire]	V: 1.0	13 April 2017
Non-validated questionnaire [Expectancy/Credibility Questionnaire]	V: 1.0	13 April 2017
Other [Clinician Information Sheet]	1.2	18 April 2017
Other [Clinician Consent Form]	1.0	22 December 2016
Other (Case Manager Information Sheet)	1	05 December 2016
Other [Case Manager Consent]	1	05 December 2016
Other [Costings Letter]		
Other (Academic Protocol)	1.6	18 April 2017
Other [Legal Representative Letter]		

Other [Application clarification]		
Participant consent form [Patient Consent]	1.1	13 April 2017
Participant information sheet (PIS) [Patient IS]	2.6	13 April 2017
Research protocol or project proposal [SOP]	2.7	18 April 2017
Summary CV for Chief Investigator (CI) (CV CI)		
Summary, synopsis or diagram (flowchart) of protocol in non technical language (Synopsis)	1	18 April 2017
Validated questionnaire [MINI international neuropsychiatric interview]		
Validated questionnaire [Minimum Data Set (PHQ-9, GAD-7, WSAS, IAPT Phobia, IAPT Employment]		
Validated questionnaire [Health Anxiety Inventory]		
Validated questionnaire (Social Phobia Inventory)		
Validated questionnaire [Penn State Worry Questionnaire]		
Validated questionnaire [Panic Disorder Severity Scale]		
Validated questionnaire [Frequency of Actions and Thoughts Scale]		
Validated questionnaire (Positive beliefs about depressive rumination - adapted version)		
Validated questionnaire [STAR P & C]		
Validated questionnaire [EQ-5D]		
Validated questionnaire [Client Services Receipt Inventory]		

#### Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and compiles fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

#### After ethical review

#### Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The HRA website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

#### User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: <a href="http://www.hra.nhs.uk/about-the-hra/governance/guality-assurance/">http://www.hra.nhs.uk/about-the-hra/governance/guality-assurance/</a>

#### **HRA Training**

We are pleased to welcome researchers and R&D staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

17/NW/0311

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project.

Yours sincerely

Dr Tim 8 Sprosen

Chair

E-mail: nrescommittee.northwest-haydock@nhs.net

Enclosures: List of names and professions of members who were present at the

meeting and those who submitted written comments

"After ethical review - guidance for researchers"

Copy to: Mr Daniel Duffy, SilverCloud Health

Mr Stephen Zingwe, Berkshire Healthcare NHS Foundation Trust

# Appendix B: Ethical Approval of Amendment to Include Qualitative Interviews



## North West - Haydock Research Ethics Committee

3rd Floor - Barlow House 4 Minshall Street Manchester M1 3DZ

Twi 0207 104 8004

06 August 2018

Mr Daniel Duffy Clinical Trials Associate SilverCloud Health The Priory John Street West Dublin, Ireland Dublin 8

Dear Mr Duffy

Study title: Digital IAPT: The effectiveness & post-effectiveness of

Internet-delivered interventions for depression and anxiety

disorders in the improving Access to Psychological

Theraples programme.

REC reference: 17/NW/0311

Amendment number: Substantial Amendment 3

Amendment date: 15 June 2018

IRA3 project ID: 214669

The above amendment was reviewed by the Sub-Committee in correspondence.

#### Favourable opinion

This amendment consisted of revisions to the dropout questionnaire and the questionnaire being administered a second time at the 6-month follow up.

No material ethical issues were raised.

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

#### Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date	
Non-validated questionnaire [Dropout questionnaire]	1	24 July 2018	
Notice of Substantial Amendment (non-CTIMP)	Substantial	15 June 2018	

	Amendment 3	
Participant consent form	1	24 July 2018
Participant Information sheet (PIS)	1	24 July 2018
Research protocol or project proposal	2.9	15 June 2018

#### Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

#### Working with NH3 Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms detailed in the categorisation email issued by the lead nation for the study.

#### Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

We are pleased to welcome researchers and R & D staff at our Research Ethics Committee members' training days – see details at <a href="http://www.hra.nhs.uk/hra-training/">http://www.hra.nhs.uk/hra-training/</a>

17/NW/0311: Please quote this number on all correspondence

Yours sincerely

PP Dr Tim 8 Sprosen

Chair

E-mail: nrescommittee.northwest-haydock@nhs.net

Enclosures: List of names and professions of members who took part in the

review

Copy to: Mr Stephen Zingwe, Berkshire Healthcare NHS Foundation Trust

Dr Derek Richards, SilverCloud Health

# Appendix C: Participant Information Sheet





#### PATIENT INFORMATION SHEET

The effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety disorders in the Improving Access to Psychological Therapies programme

#### Invitation to take part in a questionnaire regarding dropout

As you have provided consent to participate in the above named study and have completed less than 6 online reviews with Talking Therapies IAPT Service, you are being invited to take part in a questionnaire relating to treatment dropout and internet-delivered interventions.

Information about the larger study is available in the information sheet that you were administered when you consented to take part in the study. A copy of this original information sheet can also be provided to you via e-mail on request

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

#### What is the purpose of the study?

The purpose of administering this questionnaire is to inform reasons for dropout from an internetdelivered intervention. Internet-delivered treatments are a new way of providing treatment to clients of health services, which means that reasons for drop-out may be different to those of face-to-face treatments.

#### Do I have to take part?

No, it is entirely up to you to decide whether or not to take part. If you decide to take part, you are also free to withdraw from the study at any time and do not have to give a reason.

#### What will happen to me if I take part?

- During your scheduled 6 or 9-month follow-up call, the researcher conducting this call will invite
  you to take part in the questionnaire, which will take approximately 15-20 minutes to complete.
- A separate call will be scheduled with you at your earliest convenience, and the researcher will
  call you back at the date and time.
- After reading this information sheet and agreeing to its terms on the consent form, you will be required to send this back to the research team at SilverCloud via e-mail to berkshiretrial@silvercloudhealth.com

#### Will I be paid to participate?

The research team would like to reimburse each participant for their participation in research activities throughout the trial. For participating in this section of the study, £20 will be added to the value of the voucher you will receive on completion of your 12-momnth follow-up measures.

#### How will I be paid to participate?

Payments will be made via one-for-all vouchers, and will be posted to the address you provided to Berkshire Healthcare NHS Foundation Trust on the time periods stated above.

#### What are the possible benefits of taking part?

There may be no direct benefit to you for participating in this study. However, investigating reasons for drop-out in internet-delivered treatments may allow for treatments to be further tailored to better suit individual needs and circumstances.

#### What are the possible disadvantages or risks of taking part?

It is unlikely that you will be put at risk by participating in this section of the study, and no risks are currently known to researchers.

#### Will my taking part in the study be kept confidential?

The clinical staff performing the study and researchers from SilverCloud Health will have access to the data collected. The data may also be looked at by representatives of regulatory authorities to check that the study is being carried out correctly. Outside the NHS Trust however, you will only be identified by your initials and a study number.

All those viewing the data collected will have a duty of confidentiality to you as a research participant and nothing that could reveal your identity will be disclosed outside the research site.

#### How do I make a formal complaint?

Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be taken very seriously.

If you have a concern about any aspect of this study, you should ask to speak with Dr Derek Richards who will do his best to address your concerns.

Tel: 353 1 554 9767

e-mail: derek.richards@silvercloudhealth.com

If you remain unhappy and wish to complain formally you can do this by contacting:

Patient Advice & Liaison Service (PALS)
Berkshire Healthcare NHS Foundation Trust
Prospect Park Hospital
Building 1 Room 1.1.13
Honey End Lane
Tilehurst
Reading

Freepost: RLYE-TKEY-UYKS

TEL: 0118 960 5027

RG30 4E

This completes the Information Sheet for this section of the study.

If this has interested you and you are considering participation, please indicate your consent on the form accompanying this.

Should you require further information about the larger study that this is a part of, please consult the information sheet administered to you at the start of the trial, or alternatively request a copy by e-mailing berkshiretrial@silvercloudhealth.com

# Appendix D: Participant Consent Form

# Consent Form

The effectiveness and cost-effectiveness of internet-delivered interventions for depression and anxiety disorders in the Improving Access to Psychological Therapies programme

and anxiety disorders in the improving Access to Esychological Therapies programme
Before you complete
Note: This is an interactive PDF and is best viewed using a PDF viewer like Adobe Acrobat, which is available on Windows, Apple OS, iOS and Android.
If you are having issues completing this form, please contact a member of the research team (berkshiretrial@silvercloudhealth.com) who will facilitate any of your queries.
Please tick the box below to indicate your agreement with the following:
1. I confirm that I have read the information sheet dated: (Version 1.0 $\&$ 24/07/2018) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
<ol><li>I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.</li></ol>
<ol> <li>I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers.</li> </ol>
<ol> <li>I agree to be contacted by the research team via e-mail, telephone and post for the purpose of research data collection.</li> </ol>
<ol><li>I agree with all of the above and to take part in the study.</li></ol>

Please check the box to indicate your agreement.

## Appendix E: Qualitative Interview Schedule

#### **Interview layout**

- 1. Intro
- 2. Inform of interview duration, purpose and format.
- 3. Ask prepared questions probe
- 4. Closing questions; risk; trial; summarise main issues agree, add/subtract
- 5. Explain next steps; Payment & next batch of main trial questionnaires
- 6. Thank you.
- 7. Send debriefing sheet & payment

_								
ν	'n	n	n	Δ	scr	٠,	n	t
ı	11	v	11	·	361	_	v	ι

Hello, can I speak to	please?
· •	and I'm calling from the SilverCloud research team. Before I confirm your date of birth?
And your address is still _ interview is sent to the co	? We just want to make sure that your payment for this rect address.

Before I go on to the interview itself, I just want to make you aware that while calls are confidential, there are exceptions to this, such as if I were to feel that you or someone else were at risk in any way then I may have to tell someone to make sure whoever is at risk is safe.

This interview will be exploring your experience of an online intervention. It will take about 30 minutes to an hour and the open-ended questions will provide you with plenty of opportunity to give feedback. For the questions we would ask that you don't think too long on your answers but go with what comes to mind first. There are no right or wrong answers and we would ask that you answer as honestly as possible.

I may interrupt you from time to time to ensure we cover all the questions today and keep to time. Is that okay with you?

The interview is divided into 4 sections and I will let you know as we progress from one stage to the next. The interview is being recorded for transcription purposes and will be held confidentially as outlined in the information sheet you received previously.

This first section is based on technological aspects of the intervention. Let's begin...

Computer literacy $\square$	The first section is based on the online platform. Let's begin
	T1. Do you make use of technology much in your daily life?
Fatigue  Attitudes  Perceived credibility  Familiarity with content  Beliefs/perceptions  Past experience  Preferences  Scepticism	T2. Did you welcome the intervention being online, considering that you do/don't use much technology?
Memorability/picking back up □ Learnability □ Error recovery □ Trust in the brand □	How did you find navigating around the platform? $\Box$
Frustration/irritability/tiredness  Concentration  Side effects from platform	Tech or symptom related difficulties?
Privacy on the platform   Stigma   Anxiety around privacy issues   (Paranoia – where info. going)   Trust in the brand	T3. So, we talked a little there about the technical aspects of the platform. With the intervention being online, did you find it to be more private or was there privacy issues that were concerning to you?
Perceived anonymity/distance   Disinhibition effect	Could you always access a computer privately?
Privacy in usage □  Access □  Social support □	Did you feel supported in your decision to engage in the programme? $\square$

Motivation □ Personal factors □	So, now we are going to just talk a little about your own use of the programme		
Psychological mindedness $\square$	M1. Can you tell me a little bit about what motivated you to use the		
	intervention in the first place? $\Box$		
Depth of learning in modules done			
Why was what done, enough $\hfill\Box$			
Any different if F2F $\square$			
Effort □	[If unmentioned] We note that you completed x sessions and x modules, what changed in this		
Priorities	motivation?		
Needed low mood/distress $\square$			
Exacerbated symptoms			
Side effects □			
Preferences □			
Not needed/improved – how/why			
Not needed/not improved –			
how/why [	M2. Do you think you were improving by using the intervention or not		
Exacerbated symptoms	improving?		
Side effects □			
	M3. When did you typically use SilverCloud?		
Weekly/sparse □			
Forgetting/reminders □	11 1: 1		
Using when low/distress □	How did you organise your using it?		
Commitment/discipline □	Was it for yourself or did you feel like you had to? (Example F2F CBT)		
Commitment □			
Priorities	M4 Co year ways committed to using the array 200		
Procrastination □	M4. So, you were committed to using the programme? OR you were more committed to X and Y?		
Side effects e.g. overwhelm □	Committee to A and 1:		
Access/logistics □	You made it fit into your day?		
Preferences			

Usage since dropout □ Why □ What □ How □	M5. Have you continued to make use of the techniques or content since stopping treatment? $\Box$
	Now, we are going to talk a little about you, your symptoms and the content in the programme
Locus of control/sense of responsibility □  Symptom length/severity □  Perceived credibility □	C1. BEFORE you began the intervention did you feel that your symptoms were manageable at all? $\Box$
	C2. When you STARTED the intervention did you feel that you would be able to manage your symptoms better by using the programme?
Psychological mindedness □ Prior experience □ Stigma □ Perceived credibility □	C3. As you know, the programme is based on Cognitive Behavioural Therapy, what was your understanding of CBT at the time? $\Box$
Identification with CBT □ Agreed upon goals □ Support □ Familiarity □	Did you feel that CBT could help you?
Prior experience with an intervention $\square$	C4. Had you engaged in any other psychological treatments before SilverCloud?

Preference □  Perceived credibility □  Stigma □  II or therapy in general □  Preference for f2f why □  What expect from F2F □	C5. Would you have any preference on treatment approach? $\square$
Relevance  Symptom length/severity  Comorbidity  Familiarity with content  Preference	C6. And did you feel like the content in the programme was relevant to you? Why? $\square$
	How did it feel to work through?
Tailoring   Expectations   Side effects e.g. discomfort with issues raised/overwhelm   Psychological mindedness   Rationale for treatment   Mind-set changed	So, you felt/didn't feel like a lot of it addressed <b>your</b> concerns? Could you tell me a little bit more about that
Difficulty applying strategies, why Tailoring   Alternative better   Using when low/distressed	C7. Did you feel like you could apply or follow the strategies in your daily life?
Locus of control/sense of responsibility □	C8. Throughout the programme, did you feel that it met your expectations? $\hfill\Box$
Content □	With regards the level of weatherest had to met in 2
Support □	With regards the level of work you had to put in?
Alternatives better, how $\square$	

Mechanisms	C9. So, we have talked about the content, how did it feel to read content and	
Operational [	type or write about your thoughts, feelings and behaviours? $\Box$	
Preferences □  Reading/writing capabilities □		
Expectations around F2F CBT	D 1 6112	
Side effects □	Do much of it?	
Psychological mindedness $\square$		
	More opportunity for reflection?	
	Look back on/future use?	
Anonymity/distance □	Pros & Cons?	
Privacy □	rios & Colls:	
Connectedness □	S1. As you know, everything that you do on the platform you have the option to	
Responsiveness	share with your supporter, I wonder how did it feel to communicate in this	
Alliance 🗆	way?	
Support quality	C2. How did you find the contacts /reviews?	
Responsiveness	S2. How did you find the contacts/reviews?	
Supporter expertise □		
Tailoring	What would you have liked it to be like? Or how could it	
Preference	have been better?	
Cancellations/rupture □	H. Jel. C. Lil C. Cil 2Dilli.	
Could tell supporter	How did you find the frequency of the reviews? Did this	
Rigid/flexible □	work with your schedule?	
	Vou falt like vour aum outer had the game goals in mind	
Common understanding of aims $\square$	You felt like your supporter had the same goals in mind	
Treatment rationale □	for you/had different ideas as to why you signed up?	
Therapist expertise □		
Alliance/sense of connectedness $\square$	Did you feel connected to him/her?	
Tailoring 🗆		
Sense of obligation/for self □		

Encouraged adherence □	S3. [In light of the above – reflect] – did this affect your use of the platform and
Applicability to life $\square$	content?
Discipline/commitment □	
Psychological mindedness $\square$	
Alliance □	
	S4. The end of the supported period
Alliance	How was that reached?
Access □	
Felt let down □	
Felt ready to go/empowered □	How did <b>you feel</b> about that? Did you get what you needed?
	Did you feel like you would be able to ask for something different if you wanted to?
Disappointing – Self/service/self □ How □	Feel able to go back for further support if you need to?
Why □	Were you able to ask for what you needed? (remember distinction between disappointment between service/SCH/self
	What would have helped?
Expectations	
Perceptions	SE So in light of how it want and anded was this in line with how the
Introduction to treatment $\square$	S5. So, in light of how it went and ended, was this in line with how the programme was introduced at the beginning and were your expectations met?
Willingness to engage $\square$	
Attitude	

Delay in TS1 □ Introduction to programme □ Perceptions □	S6. Did you start treatment immediately?
Perceived credibility	How did this affect your use of the platform? $\Box$
Introduction □  Therapist expertise □	Was the first session helpful in getting you started? Did
	you feel confident and hopeful in your supporter?
Agreed rationale $\square$	
Comorbidity $\square$	
Symptom severity/length $\square$	Did you feel that the approach was right for you at the
Introduction to programme $\square$	time?
Expectations	
Barriers □	Did you find that this treatment removed barriers to
Stigma □	treatment that you would have met otherwise?
Mind-set changed $\square$	
Trial	Did participating in the research trial affect your engagement with the
	treatment?

Summary	We have come to the end of the interview. To summarise, you have mentioned (See 4 sections above).
	Would you agree with all of this?
	Is there anything you would like to add/subtract?
	What would have helped?
	what would have helped.
	Do you have any questions for me before we go?
	Thanks again for taking the time to do this interview. As a token of our appreciation we will be sending you a One4All voucher, which you should receive shortly.
	Your participation in the main trial will soon be over also. You have batches of questionnaires yet to complete. The next ones will be available to you around and you can complete these online. This will add value to another One4All voucher. Thanks again. Bye.

Appendix F: Preliminary Literature Review – Summary of Relevant Readings

Study	Results	Suggestions	What's missing
Stangeland Lie	Overall Theme – Losing	No suggestions for	Lack of clear
et al., 2017	motivation for intervention	future research into	definition of drop-
(Qualitative)	participation 1. Frustrating	drop-out given	out – just says
	Technology (difficulties		'dropped out of
	navigating the site due to		treatment'
	errors, time-consuming and		Time between
	tiring, tech difficulties,		treatment and
	layout) 2. Perceiving content		interview
	as		Small sample study
	irrelevant/incomprehensible		More men than
	(didn't feel content was		women included -
	tailored, lost interest,		experiences might
	couldn't familiarize with		be reflected
	content, didn't understand		differently
	intervention) 3. Choosing		Interviewing staff
	other activities and		members as well as
	perspectives (other		participants
	priorities, uncomfortable		Clients/therapists'
	with issues raised in		feedback /
	intervention) 4. Lacking face-		perceptions/
	to-face encounters (personal		opinions /rationales
	preference, verbal responses		for treatment
	are easier, combination		
	approach)		
Barrett et al.,	Six broad categories of	Focus on <b>early</b>	Look at time-points
2008	influence: Patient	disengagement	of drop-out as well
(Review)	characteristics, Enabling	from therapy	as early
	factors or barriers (difficulty	independent of	disengagement
	accessing services, distance	attrition occurring	Focused on
	travelled, placement on WL,	during treatment	overarching themes
	wait to TS1, referral source,	New and innovative	and forgetting the
	logistics), Need factors	ways to think about	possible trivia
	(diagnosis, psychological	and research attrition are needed	reasons - like simply
	mindedness, distress,		forgetting to do it Wasn't focused on
	symptom improvement), Environmental factors (staff	Greater consideration and	online drop out
	attitudes, therapists'	use of qualitative	7
	perceptions of	research methods	specifically
	treatment/outcome, clinic	are needed to	
	setting, facilities,	explore the	
	refurbishments, access to	influences of	
	care, treatment type),	culture,	
	Perceptions of mental	socialization, and	
	health and mental illness	illness models on	
	(socialization, self-	patient perceptions	
	(SSSIGNIZACION, SCII	patient perceptions	l

Beatty et al.,	understanding, stigma), Beliefs and assumptions about mental health treatment (what happens when treatment is sought, perceptions of therapist expertise, expectations for length of treatment, agreement on goals, therapist relationship) 19 individual adherence	of mental health and mental health treatment Quantitative studies should focus on assessing needs, perceptions, expectations of patients  Best timing in	Males weren't
2017 (Qualitative)	BARRIERS were identified: Illness-related factors (side effects), Intervention factors (timing and dissatisfaction, module length, unguided format, feeling better), Computer factors (access, technical difficulties, ease, convenience), Psychological factors (avoid content/thoughts, feeling overwhelmed, feeling they don't need intervention, expectations, motivation), Personal factors (time and access) FACILITATORS: Intervention-related factors (satisfaction, content relevance, ease of use, motivation, self-pace, self-help, timing, reassuring) Psychological factors (altruism, social support, awareness, expectations, control, focus on WB) Computer factors (convenient, accessible, motivating) Personal factors (time)	commencing an intervention – too early vs too late Purposely choose a sample with lowadherers Examine how best to address the vicious cycle of targeted symptoms becoming the barriers preventing engagement (due to treatment / illness side effects) Should include a larger MIXED-gender sample of ethinically and socioeconomically diverse backgrounds	represented in the sample Lack of definition for drop-out No real recommendations for future research into drop-out Doesn't detail time from treatment to interview barriers discussed were of participants with high adherence rates - limiting generalizability Limited by demographics of sample (white, English-speaking, highly educated) Small sample size
Fernández- Álvarez et al., 2017 (Qualitative)	Domains, categories and cores ideas according to CRQ 1.Past Experiences with Psychotherapy (positive, negative, ambivalent) 2. Reasons given for dropout (insufficiently addressing concerns, logistic reasons, low levels of supportiveness, ineffectiveness of treatment) 3. Expectations before	Look at how therapists manage expectations Much more research should be conducted to better elucidate the relationship between therapeutic alliance and the outcome in	Too many themes Lack of definition for drop-out 8 women and 2 men – probably reflective of recruitment also Retrospective qualitative analysis - subjecting to strong bias

	•	LDT	T
Johansson et al., 2015 (Qualitative)	receiving an online treatment (negative, positive, ambivalent) 4. Facilitators of online therapy (specific elements, flexibility, dissemination) 5. Barriers to Online Therapy (lack of individualization, feedback from the therapist, technical aspects, lack of supportiveness, feedback from the online treatment) 6. Strategies to Improve Online Therapy (individualization of treatment, technical aspects, flexibility in the delivery approach, specific elements) Analysis generated a working model theory consisting of 2 core categories containing groups of underlying concepts (particularly relevant to non-adherence) - 1. Perception of the Treatment (extensive content, fixed treatment arrangement, demands on	IBT Examine the experiences of clients who finished the whole treatment It is also important to take into account therapists' experiences at different care levels  Look at relationship between access to prior information and its relationship to non-adherence and experiences during treatment Explore potential disadvantages of adherence-	Time from treatment to interview — retrospective account of analysis Fear that participants might withhold honest criticism or reasons for drop-out as they
	information) 2. Patients' situation (Life factors, individual capability, psychological vulnerabilities, need for face-to-face, awareness about treatment) - theory indicates that 2 categories need to be compatible for adherence to	Investigate why so many of the non-completers experienced a limitation in their own ability related to the demands of treatment	jeopardise their future access to services Participants – 6 women and 1 man – gender as a predictor??? Need to look at time point at which drop-
Karyotaki et al.,	A number of predictors of	Future studies may	out occurs Therapists feedback / expectations / opinions /experiences Participants were
2015 (Meta-analysis)	drop-out identified – Male gender, Low-educational background, presence of comorbid anxiety symptoms, CBT-based interventions,	need to be tailored to the particular needs of Individuals with comorbid anxiety	mostly female – not balanced – especially if there are gender differences Didn't look at length

younger age
Potential predictors that did
not reach statistical
significance – severity of
depression, relationship
status, number of modules,
employment status

symptoms, male gender, with a low educational background and young age. Explore the different features of online interventions – find out what works best for each person Examine drop-out at different time points different processes could be at play Personality styles, motivation and preferences should be included in future studies to inform tailoring

of each intervention CBT programs usually longer than psychotherapy or IPT drop-out increases with increasing length of intervention - so, drop-out could be otherwise explained Could not provide rationale for why comorbid anxiety or depression decreases adherence rate - potentially side effects of illness? (did not take into account of depression symptoms being the barrier to adherence?) No findings re: therapist /therapeutic alliance / therapist and client interaction and feedback; client & therapist perceptions and expectation

Melville, Casey & Kavanagh, 2010 (Review) Three broad categories of predictors were identified: sociodemographic and contextual variables (age younger, gender - male, socio-economic variables, relationship status), psychological problems (duration/severity of target psychological problem, comorbid depression/anxiety - mixed results, personality variables), and treatmentrelated variables (treatment credibility - beliefs and expectations, computer/internet experience - skills and

familiarity, motivation to

Evidence to date regarding specific variables that may make an individual more likely to drop out is limited -So..... Clearer and more consistent definitions of dropout Important to consider the point of treatment at which drop-out occurs Consideration of outcome after drop-A guiding theoretical

Exclusion of programmes involving face-toface therapist contact beyond a clinical interview, ongoing exchanges beyond emails, discussion forums, or scheduled telephone calls prevented exploration of the impact of therapist contact within this review - need to look at amount/type of contact

	participate, other treatment variable such as working alliance and contact)	model to explore dropout. Most studies did not examine dropout within the context of a cohesive model of dropout. (for internet interventions)	Therapists feedback / expectations / opinions /experiences
Todkil & Powell, 2013 (Qualitative)	Themes emerged relating to participation, motivation and experiences—1. Trust in the Brand (content, secure storage, legitimacy) 2.  Motivations to Enrol (altruism, substitute for offline help, salience to current health condition) 3.  Continuing: feeling benefit from intervention 4.  Negative experiences (language of the tool, didn't feel it was tailored)	Follow-up those who chose to dropout and capture views and explore reasons Explore reasons for non-enrolment in potential participants Compare findings with non-internet research Comparison with offline research could also compare the importance of 'branding' in online and offline environments and whether this is of greater significance for internet interventions, where the issue of trust may be of more concern to participants Differentiate differences between the motivation to use the intervention, and the motivation to change behaviour	Interviews did not take place until 8 weeks after intervention – this allowed a 'cooling off' period but also created difficulties for participants remembering details – noted as a limitation – could be addressed Look at understanding of CBT Look solely at participants who dropped-out of treatment – this study looked more so at motivational factors for participating in an online study – majority of participants completed treatment Male views remain largely unrepresented as most participants were female Missing mostly reasons why people drop out - as article mainly focused on the positive experiences as they had continued to use intervention

Appendix G: Summary of Additional Readings

Study	Results	Suggestions	What's Missing?
The Ins and Outs	Key themes emerged –	Further research is	The nature of the
of an Online	1.Discontinuation because	needed to	sample (people
Bipolar Education	of illness itself 2. Did not	methodologically	with severe mental
Program: A Study	want to think about the	investigate	illness) and the
of Program	illness 3. Online Program	nonadherence and	type of online
Attrition	4. Feeling Well 5. Time	attrition using	intervention
(Nicholas et al.,	Pressures and Competing	comprehensive	(psycho-education
2010)	Demands	interviews and	rather than
		prediction models to	treatment) limits
		assess whether any	the generalizability
		systematic differences	of results from the
		exist between those	quantitative study
		who complete	to other online
		interventions and	interventions for
		those who do not and	high prevalence
		between those who	conditions.
		drop out early in an	
		intervention versus	
		those who drop out	
	_	later	
"A computer isn't	5 key themes for	Future qualitative	Look at potential
gonna judge you":	adherence: 1. Reasons for	studies of iCBT	participants and
A qualitative	choosing this form of	approaches should	why they chose not
study of users'	treatment 2. Experiences	seek to include people	to participate
views of an	of Treatment	dropping out in the	
internet-based	(confidentiality/privacy,	early stages of use and	
cognitive	flexibility, ease-of-use,	males.	
behavioural	feeling supported,		
guided self-care	content of program) 3.		
treatment	Impact of Treatment		
package for	(expectations,		
bulimia nervosa	effectiveness, tools for		
and related	coping in future, 4.		
disorders	Comparison with other		
(Sanchez-Ortiz et	treatments 5. Feedback –		
al., 2011)	technical aspects, broader		
	range of examples,		

confidence

Patients'	Qualita	ative interviews	More heterogeneous	Not necessarily
experiences of a	about	experiences with	samples – gender, age,	looking at dropout
computerised	iCBT:	·	sociodemographics	– more so of
self-help program	-	Need for face-to-	Avoid retrospective	patient experience
for treating		face meetings	responding as much as	
depression - a		with therapist	possible	
qualitative study	-	Need for a	Further studies should	
of Internet		therapist who	investigate iCBT	
mediated		supported the	delivered via other	
cognitive		intervention	forms of technology,	
behavioural	-	Idea the	such as tablet	
therapy in primary		responsibility of	computers and smart	
care		intervention lies	phones	
(Holst et al., 2017)		with patient –		
		some were		
		uncomfortable		
		with this, while		
		others felt more		
		secure		
	-	Feelings of privacy		
		and freedom		
	-	Feelings of risk		
		and lack of		

173

Appendix H: Analysis of Findings and Questions in Existing Literature

Manipusium Parame	20	S
Motivation - effort		1
Losing motivation	Could you tell me a little bit about what motivated you to use the intervention in the first place?	<ol> <li>What motivated you to start using the intervention? (motivation) (personal factors) (psychological mindedness)</li> </ol>
Time consuming/tiring	And as you continued did this change? (modicalion/leffort/pointhes)	What do you think changed that stopped you from continuing with the intervention? (motivation) (preferences)
Sense of duty to oneself v to programme	You made it fit into your day? You found you couldn't fit it in? (priorites)	Were you able to find time to work the program into your day? (motivation) (interest) (preferences)(priortising) (access)(logistics)
	Did you need to set a reminder for yourself or how did you go about using the programme? (Rogestaing/seminders) (Using when low only)	Did you need to set a reminder for yourself or how did you go about using the programme?(motivation)(interest) in personal factors) (avoidance)(acess)(logistics)
	( T	Why did you log on to the program?(Did you log on to the program because of a sense of obligation or was it because
	so would you say you aid it for yourself or because you jeit a duty to do nomework????	you jeir ri would better-equip you to nandle your problems? ([motivation) (interest, [access] (logistics)
Total	Answel waited: What motivated the person to use and their stop using the intervention:	
Tech difficulties	Do vou use technology much in your daily life? ((()) accord)	2. What are vour attitudes towards computers? (tech lekills)
	Did you welcome the intervention being online? Considering the above (you use a lot/don't use much	What is your opinion on receiving psychological treatment online? (tech) (familiarity) (perceptions/beliefs) (past
וברוווסוספא ופנולספ	Were there technological aspects of the programme itself that you found difficult? (Nesthalfficulties)	experiences, presented was flatterinatives). How did you find navigating around the online platform? (tech)(layout)
		Did you experience any technical difficulties while using the program? (tech)
	Answer wanted: Was dropout to do with tech literacy, difficulties or fatique?	
Content		
Irrelevant	When you began the intervention, did you believe that you may be able to manage your symptoms? (bouts so'connollvesponsibility/Jenikude towards resement)	4. When you began, did you see the program as a tool to aid your ongoing symptom management or did you view it as an and solution? (content) (locus of control) (perceptions, beliefs) (attitudes towards treatment) (motivation)
Untailored - not addressing concerns	So, you felt you would be able to stop them with the right tools?/So you jelt they would (bosics of connollesponnability)	How did you feel about the responsibility placed on you for your own recorvery? (content) (locus of control) (personal factors) (responsibility) (intervention) (responsibility)
Lost interest	So, you felt it wouldn't work out anyway/there was nothing you can do about it? Moous of connoblesponsibility	Had you previous experience with psychological treatment or CBT? (perceptions/beliefs) (past experience) (content) (understanding)
Didn't understand intervention	Were you familiar with CBT before you started using the intervention? (osyochologica/mindednessi/anior expension)	So, what is your understanding of CBT? (personal factors) (not understanding CBT)
Needed psychological mindedness	So, vou enagged in x before, how was that? (anix expension)	So, do you think it was an appropriate intervention for your needs? (content) (perceiving as irrelevant) (support) (legreed goals)
		(intervention) (unguided)
	How did you find it relating to your supporter in that way (prefer verbal/23)	Did you feel like your own problems were tackled by the modules in the program? (content) (couldn't familiarise)
Module leneth - extensive content	So did the content in the programme feel relevant to void. Jouenday, expenses to the content of the new content of the content	If yes, were you able to apply what you learned when you were feeling down, depressed or anxious? (content) (necessed as irrelevant) languages.
0	(So you did (didn't feel like it addressed your concerns fould you tell man little more about that?)	
Demands on reading/writing	So, you analysian cyen like it dadressed your contents, coold you tell file a little filore about that?  (kalbaring)	How did you relate to the content of the program? (content) (tailored)
Limited information	Did you feel like you could practice some of the strategies in your life? (Difficulty applying to everyday life,	Did you fell like you could practice some of the strategies in your life? 10 Missukn applying to averyaday Mey   so, you didn't feel as if it was a tailored experience/you felt as if the program was generic? (content) (tailored)
Workingalliance	So you could/couldn't see them work for you? (lack of identification with CBT)	Intervention
Renetitive	You were familiar with it already/You were unsure how to apply them because they were new to you? A cost inversor because they were new to you?	5. How did you find communicating with your supporter through a medium? (intervention) (12f) (preferences) (alternative treatments (werhal resonndine)
Difficulty applying programme to real life (no approp.		How did you'feel about the scheduled reviews you received from your supporter? Internantion (Revisitive Angelegence (Alternatives (Removed Instruction of supporter)
Lack of identification with and applicabilty of CCBT		Acress
Opportunity for reflection - application to life		6. How did you organise your usage? (access)(logistics)(motivation) (reminders)
		Were you always able to have access to a computer privately to access the program? (intervention) (privacy/freedom) (access) (logistics) (tech) (access)
Choosing alternative		
Other priorities - competing demands	See motivation section	See motivation section
Seeing programme as another burden	See motivation section	
Forgetting about programme	See motivation section	

Preferences	25	עד
Lacking F2F	See content section	See intervention section
Personal preference	See content section	See intervention and motivation section
Verbal easier	See content section	See intervention section
New considerations		
Wait to TS1 [seen as an enabling factor here but we	Did you find that this intervention removed barriers to treatment that you would have had otherwise?  Gamess	See other sections
Flexibillity - in approach/fixed treatment arrangement	You jelydidn't jeel that this treat this treatment approach was right for you at the time? <i>(Agreed on cationale)</i>	
	So your supporter seemed/did not seem to have confidence in it? <i>(supporter amkudes).</i> Did you feel confident in your supporter?	,
	You started treatment immediately? (Delayvin 751)	
	Did you find your TS1 helpful in getting you into the programme? (Impodwoed to the programme)	
	You felt/did not feel like you and your supporter had the same goals in mind for you? (Common understanding of aims of re-aiment)	
	So did you feel like you had different ideas around why you were signed up this intervention?  Understood the casionale;	
	How did you find the reviews thereafter? //awiaw contant//ailoning/	
	You feltfuld not feel connected to your supporter? (alkanos)//leading alone)/impersonal/leading on reviews)	
	Did you find them flexible? Neviews approach fived!  And so does this affect flow you used the content? You found it too fixed/did not have much guidance? I lead or doesnote/Ungaried(linatons).	
	You found/didn't find that it encouraged you to keep going with it? (smoowaged adherence)dboopine in use)	
Symptomology		
Needed distress	Under motivation	8. When you typically used the program, was it during particular situations or moods? [illness-related](sallence) (comorbidities)(personal factors) [avoidance)
Comorbid dropout more	Under motivation	So, would you say you avoided the program because it made you focus on your feelings and issues when you didn't want to? (illness-related)(salience)(personal factors) (discomfort/avoidance)
Symptom length a predictor	Under motivation	Did the modules have an impact on your problems and symptoms? (illness-related) (symptom improvement)
Symptom severity	Under motivation	So, when you were feeling better you stopped using the program? (illness-related) (symptom improvement) (salience)
Finding it hard to concentrate (tech fatique)	Under motivation	And did you continue to use the techniques and advice in the modules to keep up your mood? (illness-related)
Low mood - low motivation - rather focus on other tasks/procrastinate	Under motivation	So, you stopped using the program because you saw no changes in your symptoms? (lithess-related) (no improvement) (perceptions/beliefs) (ineffective treatment) (motivation) (don't need it)
		Did you experience any side-effects while engaging in the treatment? (illness-related) (side-effects)
Support/Staff		7. How long of a wait was it until your TS1, and how did this impact on your treatment experience? (access) (wait to
Staff attitudes/perceptions	See new considerations	TS1)(support) (contact)
Staffattitudes	See new considerations	And how was this treatment option introduced to you? (access) (referral) (perceptions/bellefs) (expectations) (support) (agreed goals)(could ask here Q about research trial?)
Unguided format	See new considerations	rreatment? (motivation) self (personal factors)(intervention)   pace (support)  alliance) agreed goals) supporter attitudes)
Low levels of support	See new considerations	What were your expectations for the program? And do you feel as if these expectations were met?[perceptions/bellefs] [expectations]
		Did you feel supported in your decision to engage in this treatment? (support) (supporter attitudes) (motivation)
Impersonal	See new considerations	(social support) Were those around you in your personal life aware that you had mental health difficulties and were engaging in
Waiting on therapist response	See new considerations	treatment? (motivation) (social support) (support) (perceptions/beliefs) (stigma)
Not feeling alone	See new considerations	What impact do you think this had on your engagement with the program?

Therapeutic alliance (can tailor when problem beyond		
scope of treatment	See new considerations	What attitude did your supporter have towards the program? (support) (supporter attitudes)
Common understanding of aims of treatment	See new considerations	How would you describe your relationship with your supporter? (support) (alliance) (feeling supported)
Determining work pace on own can be an issue	See new considerations	(access)(contact)
Support to encourage discipline, personal contact &		
more in-depth feedback	See new considerations	

Perceptions		
Stigma		See Support, Content, Tech
Of therapist expertise		
Of length of treatment		
On goal agreement		
On relationship with therapist		
Trust in the brand; content; security		
Fear of accessing it in a public place (who would see/using in library) - Privacy		
Fear around contact with unknown person over internet		
Not being taken seriously		
Of responsibility (some discomfort/others secure)		
Feeling more at risk		
Feeling acknowledged/understood		
Scepticism regarding applying insights to real life		
Sceptical about CBT/ICBT		
Side effects		
Uncomfortable with issues raised in the intervention		See Support, Content, Tech
Avoid content/thoughts		
Faaline overwhelmed	Did you find that the content in the programme raised issues or feelings that you would have preferred to avoid a under content.	
Stress & frustration (in relation to interface/format)		
Obstacles unable to manage alone => sadness/distress under support	undersupport	
Feeling worse than before (personal char./self-ful. Proph)		
Emotionally demanding		
Improvement		
Improved - Improvement needed		See symptomology
Don't need intervention	Under motivation	
Improvement seeing lack of motivation to continue	Under motivation	
Personal factors		
Expectations		3. How did you find expressing yourself in written form? (personal factors) (reading/writing capabilities)
Altruism		What did you think of the workload required for the program? (personal factors) (individual capabilities)
Control		
Focus on well-being		
Past experiences with psychotherapy		
Awareness about treatment		
Treatment credibility		
Beliefs		
Computer literacy		
Trouble understanding treatment rationale		
Low commitment		
Difficulty applying programme to real life		
Demographics		
Gender		
Low SES		
Youngerage		
NEW QUESTION/additional questions at the end		
Do you think you would have continued had you not	Were there any other reasons why you would have avoided the programme/logging on? Because you	
enrolled in the research trial	were feeling low/because meeting research measures.	

#### Answer looking for:

Were aspects of technology related to the dropout?

 whether that be tech fatigue, other side effects computer literacy, privacy concerns, symptoms, tech issues, or scepticism.

# Appendix I: Potential Qualitative Questions Relating to Experience of Technology

Do you make use of technology much in your daily life?

(Computer literacy)

Did you welcome the intervention being online...considering that you do/don't use much technology?

(Fatique) (Attitudes) (Perceived credibility) (familiarity with content) (beliefs/perceptions) (past experience) (preferences)

Did you feel that it was more private being online or were there concerns for you around this? Were you always able to access a computer privately to use the programme?

(privacy in platform/in usage) (Stigma) Do you feel like this was related to the interface/format/tech or more related to the symptoms of x that you were experiencing? In what ways?

(Frustration)(Concentration) (Symptom or tech) (Side effects)Think again

So you were sceptical about it at the beginning? About how it would be useful/how you would be able to apply it or make use of it in your life?

So, you believed it would be useful and that you would be able to apply it in your own life?

(Perceived credibility)

What could have helped with this?

How did you find navigating around the platform itself?

(tech) (layout)

Were there
technological aspects
of the programme itself
that you found
difficult?

(tech difficulties)

# Appendix J: Potential Qualitative Questions Relating to Motivations to Engage in Treatment

Can you tell me a little bit about what motivated you to use the intervention in the first place?

(motivation) (personal factors) (psych mindedness)

And as you continued did/this change?

(As you continued this effected your motivation to use the intervention?)

(Motivation) (effort) (priorities) (needed low/distress) (feeling worse as used it) (preferences) So you improved/did not improve?

(Not needed anymore/wasn't improving) (Exacerbated symptoms) (Side effects)

What spurred you to log in when you did, was it during partcular situations or moods? Sense of obligation or did it for yourself?)

(self/duty/responsibility ) (interest) (logistics) (access) (avoidance/side effects)

So you were committed to using the programme?/So you say that you were more committed to x & y, than finding time to use the programme?

(Commitment)

How did you organise your usage or how did you go about using the programme/working it into your day?

(Forgetting)
(Reminders) (Using when low - distress)
(commitment)
(discipline)

You made it fit into your day/you couldn't fit it in?

(priorities)
(procrastinate)
(overwhelmed)
(access) (logistics)
(preferences)

Have you continued to use any of the techniques or content since dropping out?

(Usage since)

Answer looking for:

What **motivated** the client to use and then stop using the intervention?

Whether that be related to their psychological mindedness, forgetting, using when low/ distressed, commitment/discipline, other priorities, procrastination, access – logistics, preferences, self-duty/responsibility – locus of control, improvement/not improving, exacerbated symptoms, other side effects – frustration/overwhelm

Appendix K: Potential Qualitative Questions Relating to Experience of Intervention's Content

Answer wanted: Was dropping out related to the content of the programme and its applicability in the users' life?

This may related to the content's relevance, their identification with CBT, locus of control, symptom length/severity, comorbidity, preferences, perceived credibility, stigma, psychological mindedness, agreed goals, prior experience, side effects (discomfort/overwhelm), reading/writing capabilities, using when distressed.

When you began the intervention did you feel that your symptoms were manageable at all?

Did you see the programme as a tool to aid your ongoing symptom management or did you view it as a solution?

(Locus of control/responsibilit y) (Symptom length/severity)

So, you felt that there was much (nothing) you could do about it/managing your symptoms?

(Have you felt this way for a long time?)

(Locus of control/sense of responsibility/symp tom length/severity)

Would you have any preference on treatment approach? (Preference) (perceived credibility) (stigma) Were you familiar with CBT before you started using the intervention?

(psychological mindedness) (prior experience with an intervention) (Stigma) You felt/didn't feel that CBT could help you?

(Identification with CBT) (agreed goals) (support) So, you engaged in x before, how was that?

(Prior experience with a psych intervention)

So, what is your understanding of it/CBT?

(psychological mindedness/ratio nale for treatment)

And did you feel like the content in the programme was relevant to you?

How did it feel to work through?

(Relevance/Irrelev ance) (symptom length/severity) (comorbidity) (familiar) (interest) So, you felt/didn't feel like a lot of it addressed *your* concerns? Could you tell me a little more about that?

(Tailoring)
(Expectations)
(uncomfortable/avo
id issues raised)
(side effects overwhelm/frustrati
on)

How did you feel about the responsibility placed on you for your own recovery?

What did you think of the requirements/workl oad for the programme/for this treatment?

(Responsibility) (content) (locus of control) How did you feel to read and write about your thoughts and feelings?

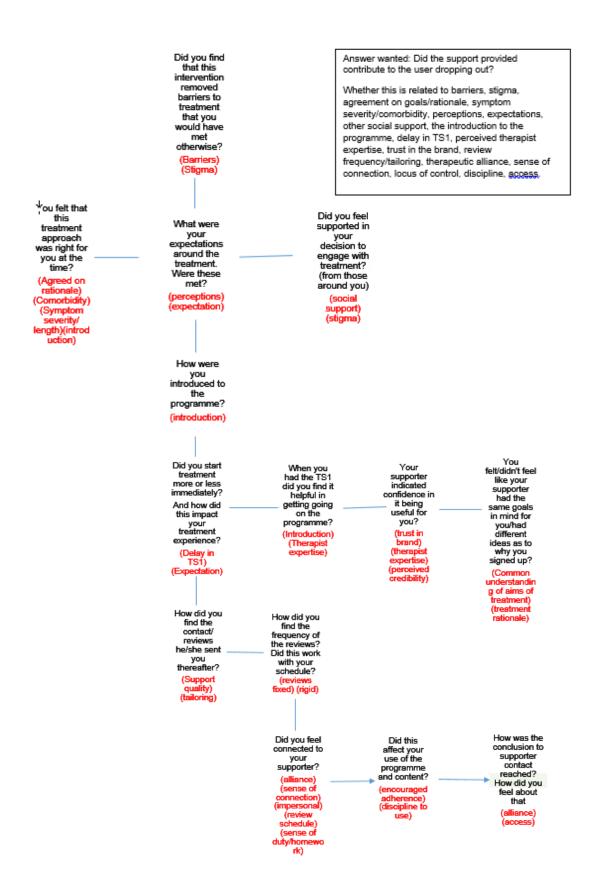
And to communicate to your supporter through this medium

(Preferences verbalreading/writing capabilities/prefer f2f) (side effects)

Did you feel like you could apply or follow the strategies in your daily life? In general and when you were down, depressed or anxious?

(Difficulty applying) (tailoring) (using when low only)

Appendix L: Potential Qualitative Questions Relating to Experience of Support



# Appendix M: Categorisation of Meaning Units

Relationship with technology 15/15 (I=118)

Positive 15/15 (P: A-O) (I=104)

Being familiar with technology 15/15 (P: A-O) (I=18)
PO1
PH1
PC1
PL1
PN1
PA1
PA2
PE1
PB1
PB2
PD1
PF1
PG1
PI1
PJ1
PM1
PE2
PK1

Good memorability 13/15 (P: A-D, F-G, I-O) (I=15)	
navigation/memorability	
memorability good	
good memorability	
memorability good	
easy to pick up where left off	
memorability good	
ticked off where I had read	
markers were useful finding where left off	
easy to pick up where left off	
easy to pick up where left off	
memorability good	
made use of	
bookmarking/memorability	
use of shortcuts function/memorability	
memorability good	
memorability good	

Easy-to-use online platform 12/15 (P: A, C-D, F-J, L-O) (I=20)

PO5	Easy
PA8	easy
PF10	easy
PA9	layout
PC12	easy/navigation
PA10	easy
PN4	navigation
PC25	easy to use on phone
РЈ3	easy
PN6	easy
PF7	easy
PH6	easy
PC9	navigation fine
PL5	easy navigating
PM6	navigation fine
PD3	easy navigation
PG5	well laid out
PD5	easy
PH71	easy
PI5	straight-forward

# Trusted the platform 12/15 (P: A-H, J, L, N-O) (I=16)

(* * * * * * * * * * * * * * * * * * *
PO8
PL7
PA14
PA17
PB30
PE23
PC17
PD8
PG95
PG9
PJ7
PF10
PF11
PH7
PE24
PN12

Sense of privacy and anonymity online 14/15 (P: A-G, I-O) (I=35)	
PO37	online you can share wherever you are and not fear someone overhearing etc
PK7	more private than f2f
PK32	picked online because didn't want therapy group f2f
PG11	happier to communicate not in person

PG59	feel less judged online because don't know them
PG13	felt more anonymous online
PA18	I knew anything I said would be kept anonymous
PG12	shy person
PG13	felt more anonymous online
PC5	liked that supporter had never seen her
PJ8	felt more private online
	could use whenever and never feared
PI11	anyone knowing
PK34	off-putting talking in front of people
PA20	online felt private
PA19	online felt private
	online very private - avoiding
PG4	interacting with others
PA25	private access at home
PA24	private access at home
PL10	private computer access
PG20	personal computer
PF12	private computer access
PO10	personal computer
PD11	private access at home
PK10	personal computer
PJ12	personal computer
PM11	private phone access
PN13	always had private access
PB31	private access at home
	liked not having to interact in person -
PE3	non-judgemental
PM9	felt as private online as f2f
PO40	can see what other people have to say without facing them in person
F040	liked the lack of interaction with people
PE40	that was offered by this treatment
PG2	liked not having to interact in person
	good for people who don't want to go
PN40	and talk to someone in person
PB11	can get upset I privacy of own home
Negative 7/15 (P: A-C, E-F, K-L) (I=14)	

Poor computer literacy 1/15 (P: C) (I=1)

PC2

Spends too much time online 2/15 (P: A, L) (I=2)

PA6	tech fatigue	
PL2	tech fatigue	

User dashboard not clear enough 2/15 (P:B, F) (I=4)

PF52	needs clearer dashboard
PF89	dashboard modified
PB18	clearer dashboard
PF53	clearer dashboard

#### Layout too structured 2/15 (P: E-F) (I= 4)

PE11	too structured	
PF88	too structured	
PE16	too structured	
PE12	too structured	

#### Difficulty figuring out how to use it 2/15 (P: B, K) (I=3)

PB15	difficulties figuring it out
PK4	memorability difficult
PB105	more straight-forward navigation

#### Motivation to start 15/15 (I=38)

#### Positive 15/15 (P: A-O) (I=38)

#### Stressful life events 6/15 (P: A-C, H-J) (I= 7)

PH14	unhappy in work	
PC27	relationship/OCD	
PA41	stressful life/feeling low	
PJ19	going through difficult time in work	
PI26	pressures of life/carer for son	
PB4	was feeling really bad - a lot going on in life - relationship breakdown	
PB22	relationship/husband left/stress	
Sympto	oms of psychological distress 15/15 (P: A-O) (I=31)	
PD49	symptoms/most severe bout of depression/scared	
PA61	went to the doctor about low mood	
PA43	had so much on my plate and couldn't handle it emotionally	
PG21	in a bad place	
PD21	in a really bad place/ first time realised needed help	
PF39	felt like didn't have control	
PG65	constant worry of letting people down/paranoia	
PI27	wasn't coping/really anxious	
PE75	Needed help coping with negative thoughts and pessimistic perspective	
PN18	symptoms/just kept getting down	
PM17	wants to be the positive person they once were	
PM16	negative person/life circumstances can't be changed but needed to learn to deal with them	
PK12	recognised patterns in behaviour that needed to be changed	
PL12	symptoms of low mood and anxiety	
PO26	looking for a way to deal with worry	
PG22	meds weren't working/needed something else	
PL30	sometimes manageable, but sought treatment because felt mostly unmanageable	
PC29	couldn't deal with it on my own	

PB63	couldn't cope - desperate for help
PG46	symptoms didn't seem manageable
PJ39	symptoms didn't seem manageable
PI58	on meds and didn't feel like I was managing
PE78	symptoms didn't seem manageable
PB61	symptoms weren't manageable
PA43	couldn't handle emotionally
PK13	had awareness of difficulties but didn't know how to cope/manage
PO25	symptoms didn't feel manageable
PC57	looking for something to help me fix it
PN34	got to the point that I needed help
PK30	sometimes seemed manageable
PH30	just needed lots of help managing symptoms

Background knowledge and attitudes towards iCBT 15/15 (P: A-O) (I=98)

Positive 15/15 (P: A-O) (I=62)

## Had an understanding of CBT 6/15 (P: A-B, E, H-I, K) (I=10)

	4	
PB4	had some idea of CBT	
PH35	aware of it but no experience of it	
PA67	CBT tries to combat behaviours/challenge how you're feeling	
PH34	everyone has their own views and you can train yourself to think differently	
PK35	understood CBT was about confronting behaviours not so much talking about past event	
PE70	very good understanding of CBT	
PE69	CBT helps you train your mind to think about things/situations differently	
PI61	had some experience with it, daughter engaged in CBT	
PB65	had some CBT treatment before, so knew how it worked	
PI62	had used CBT techniques in past to overcome dog phobia	
Willing	Willingness to try it 10/15 (P: A-D, H, J-M, O) (I=20)	
PA65	didn't know much but was willing to try it	
PB76	online was what they offered me and I was just grateful	
PD96	desperation - not going to make me worse, so I'll try	
PH2	welcomed online	
PD2	welcomed online	
PA4	interested in online	
PB3	welcomed online	
PO2	online is way forward for treatment	
PM2	welcomed online	
PA42	welcomed online	
PJ2	welcomed online	
PM3	openness to trying	
PC62	open to learning about CBT	
PO13	open to trying something new	
PK3	unsure of online but willing to try	
PA35	open to trying	

PL13	motivated to see how it would turn out
PA66	willing to try anything
PH32	open-minded to the intervention
PK31	hopeful and open to trying
PD23	desperation - would have taken anything
Belief t	hat iCBT could help 13/15 (P: B-C, E-O) (I=27)
PK39	CBT felt like the thing that I needed
PK37	identified with the CBT approach and thought it would help
PL33	thought it could change the way I think
PL66	thought the approach was right for me at the time
PK39	thought CBT could help
PB64	thought treatment could help me
PE7	thought it would work really well for me and allow me to think through my problems
PM31	expected to learn some techniques and explanations
PE71	expecting that the treatment would be able to help me
PI60	credible treatment approach
PI59	credible treatment approach
PL37	credible treatment approach
PM30	confident it would be able to help, positive approach to treatment
PF84	confident it would be able to help
PC56	hoped it would supply with tools to understand myself
PE79	optimistic about treatment
PH31	felt it was good that I was referred to this treatment
PF57	thought intervention would help manage symptoms
PN35	felt the intervention would be able to help me
PN38	thought CBT would be able to help me
PG47	intervention would give me a way to manage myself
PL31	thought the intervention would be able help manage symptoms
PJ40	expected that treatment would help me
PO27	thought intervention would help manage symptoms
PI61	had seen it work successfully with daughter, thought it was a viable option
PJ15	had confidence in the intervention
PI62	thought iCBT was viable treatment option
Trusted	provider of online treatment 5/15 (P: A-C, F, J) (I=5)
PJ36	supporter advised that SCH was best treatment and I trusted that and went with it
PF61	NHS backing
PB24	NHS backing
PA16	NHS backing
PC16	NHS backing
Negativ	e 11/15 (P: B-G, J, L-O) (I=36)
No prio	r knowledge or awareness of CBT 8/15 (P: C-D, F-G, J, L, N-O) (I=13)
PJ43	has no idea what CBT is
PN36	didn't understand what CBT was
PG49	had no clue as to the CBT side of things
PC64	didn't know what CBT was and didn't know it would be so much to do with my thoughts

PC58	didn't have any knowledge of what it was at the beginning
PO28	didn't understand it very well
PF60	no knowledge of CBT
PD53	didn't know what CBT was
PD40	had no understanding of what it was before starting
PJ41	had never heard of it
PL32	had some level of understanding of CBT, but a level of naivety too
Sceptic	al of treatment approach 6/15 (P: B-E, M, O) (I=23)
PO29	scepticism regarding treatment for MH
PD9	didn't know how it was going to work online
PD53	didn't think it would be more effective than TT
PO28	seemed like a bit of a waste of time
PM33	didn't see how reading was going to help me at first
PB54	had low expectations for the treatment due to how desperate the circumstances were
PO39	didn't see how writing stuff down was going to help me
PO31	sceptical of treatment at start
PD42	can't change the way you think/feel very much
PD41	sceptical of treatment at start
PD50	didn't think CBT could help
PD57	really didn't think it was going to work
PE19	don't think you can ever get instant tailored responding in online treatment
PE18	online treatment can't be tailored and supportive
PM29	felt like the way you feel can't be controlled
PC67	sceptical of treatment at start
PE114	felt like supporter wasn't going to be able to change anything
PC7	sceptical of online treatment
PB62	wouldn't manage just with iCBT, need meds
PD52	assumption that therapy is lying down on the couch talking about trauma, scepticism over anything else offered?
PD51	assumption that it was f2f that was needed
PD55	would have picked f2f if I'd had the option at the start
PD52	assumption that MH treatment was f2f

# Change in motivation 13/15 (P: A-G, I-L, N-O) (I= 50)

## Positive 5/15 (P: C-D, K, N-O) (I=9)

Felt rea	Felt ready to leave treatment early 5/15 (P: C-D, K, N-O) (I=9)	
PC11	realised my anxiety was actually linked to OCD - changed treatment	
PC32	when I realised it was my OCD, I was no longer logging in as much	
PC36	dropped out in order to focus on OCD	
PD37	started to feel better - summer months	
PN22	got out of it what I needed and wanted to continue with self-guided use	
PK17	easier doing it on my own once I had read it and taken it all in	
PK16	I was ready to finish with it - got out of it what I needed	
PK19	didn't feel the need to keep logging in after I'd got out of it what I needed	

PO15	felt like I was getting better - got out of it what I needed
	ve 8/15 (P: A-B, E-G, I-J, L) (I=41)
	a receptive frame of mine 4/15 (P: A-B, G, I) (I=8)
PI36	not in the right frame of mind
PI29	not in a receptive frame of mind
PB48	I was feeling so low and the reminders were coming in and I couldn't cope - exacerbation
~ ^ 27	my lack of progress frustrated me and then I had to do more to progress and it was not a good time
PA37	exacerbation forgetting to use it and then logging on and seeing I hadn't done anything made me feel worse
PA84	forgetting to use it and then logging on and seeing I hadn't done anything made me feel worse - exacerbation
PB108	not in right frame of mind - symptomology
PB6	not in the right frame of mind
PG25	started to feel bad in self - symptomology
	tual obstacles 3/15 (P: A-B, L) (I=10)
PB31	going through a tough time - life circumstances
PB35	just couldn't face loggin on anymore
PB40	it was when I needed to look after my daughter
PA58	stressful time of life - breaking point while doing Masters - anti-depressants
PA30	using it at the most intense period of my life that year
PA31	trying to juggle too many things at the one time
PB38	I was going through a divorce and then my daughter said she was going to kill herself
PB36	felt so desperate about what had happened - wasn't bothered anymore
PL14	life unstructured at the time and wasn't feeling up to using it
PL17	think I was in a bit of a lull in my life - needed some space
	ot considered to be personally fitting 7/15 (P: A-B, E-F, I-J, L) (I=23)
PB7	just didn't feel like I was getting enough out of it
PE12	scatty with my mind so chronological layout wasn't conducive
PE72	was no longer getting any benefit from the treatment
PE43	just going through the motions and no longer getting any benefit
PL16	at the time I wasn't ready
PE56	didn't suit his personality, too creative
PE95	just didn't understand what I was supposed to be doing
PF47	plateaued and no more benefit being got
PE47	wrong approach - getting nothing out of it
PF3	online didn't work very well
PE46	wrong approach - didn't meet my needs
PE29	wrong approach for me but I managed to convince myself and supporter that it would work
PA38	wrong approach - knew it was a negative thought but instead of challenging it like advised, I indulge
PF25	stopped using it because it became pointless
PF64	wrong approach for me but a great treatment in general
PE77	wrong approach - didn't meet my needs
PE115	had an issue with how structured the treatment was, didn't suit me
PA11	the actual concept of online treatment just didn't suit my life
PA32	approach was wrong for me at the time
PA87	should have taken a different approach

PI53	busy in terms of a lot going on inside my head so found it hard to focus
PJ25	wasn't improving by using the intervention
PI30	wasn't useful enough for me and my time was precious

## Usage of the programme 15/15 (P:A-O) (I=146)

Positive 15/15 (P: A-O) (I=67)

POSITIVE	Positive 15/15 (P: A-O) (I=67)	
Produc	ive and regular use 10/15 (P: A, C-D, F, H-I, K-L, N-O) (I=23)	
PI52	set reminders to prompt myself to use it and learn more skills and strategies for coping	
PD68	tailored usage of platform - read through and then focus	
PH19	tailored my usage of the platform - read through and then focus	
PI69	focused on working through the programme as it was intended to build knowledge and understanding	
PL22	used to set reminders on the app	
PN9	sometimes I'd do it when I can't sleep and it would get stuff off my chest	
PN28	used it when having a meltdown and it was nice to have a back up there	
PK23	go through more indepth stuff when feeling lower and that worked	
PF14	using it when lower worked well for me	
PO17	used it in the evenings	
PK20	had a reminder on my phone every evening and when I had free time I'd login	
PC31	doing it daily	
PK22	set reminders for the same time each evening for when I'm sitting doing nothing to log on	
PA24	would use it at home after university	
PA26	would use it at home after university	
PC26	would use it when could dedicate my total attention to it	
PL19	was more productive when I used it while feeling good	
PL18	when feeling well I would think I need to do something about my low moods	
PO18	tried to use it more when I was feeling well	
PC45	I felt everything I did was for myself - but can see how some people feel obligated	
PK24	when feeling well I'd make sure I was keeping on top of everything	
PI49	tried to use it as much as possible when feeling relaxed and effective	
PI50	it makes sense to make time for it more so when I'm feeling well and thinking rationally	
Could u	se it wherever and whenever needed 15/15 (P: A-O) (I= 26)	
PH3	liked having access to treatment on my phone on the go	
PF2	intervention available to me when I needed it	
PD26	liked freedom of self-paced usage	
PB111	removes cost and time barriers	
PA3	online better for me because I was short on time	
PE39	can do in my own time and fit it to my schedule	
PN17	more likely to do it because easier to fit	
PM61	makes accessing treatment easier and more streamlined	
PN20	physically going to see someone would have been hard work	
PE4	fit into my schedule	
PL67	online fit into my schedule both time-wise and travel-wise	
PL3	ease of access from where I was great	
PC4	quite liked self-paced nature of this intervention	

I	
PN43	use it when you want but have support too
PD25	it offers individual support and self-paced usage
PO36	can use it when I need to
PJ17	online is easier than going to an appointment
PG91	not very mobile, so online access was great
PB25	self-paced was really beneficial
PB112	can go on and use treatment whenever I need it
PK33	felt like it was tailored to me
PK2	online is self-paced and didn't have to go anywhere
PI2	at my disposal, as and when I needed it
PO3	easier to fit online in to time schedule
PL4	couldn't travel far at the time, so it was great
PA22	online better than f2f due to time limits etc
Using tl	ne programme for own benefit 9/15 (P: B-C, G-I, L-O) (I=18)
PO20	using it for myself
PI51	using it for myself - improve my life - it was my resource
PC30	committed at the start - needed to be full in to get better
PL23	using it for myself in the beginning
PG32	definitely wanted it to work so gave it a good try
PC46	recognised very early on that I needed to do this for myself
PN30	never felt obligated to use it - felt like my own personal diary
PB58	using it for me
PM27	proud of myself, felt like I was doing something for myself
PN27	as committed as I needed to be
PH53	it was important to me to use the intervention
PO52	up to the individual themselves, had to do things in order to help myself
PH62	if you want help bad enough, you'll use it
PH27	realised the programme was going to help me, using it for myself
PG39	using it because I needed to
PC90	was working through the modules and the content
PO63	you need to make the time for the programme, it's not a big ask only a few minutes out of the day
PN10	using it when I wanted to and not just because I had an appointment
Negativ	e 14/15 (P: A-G, I-O) (I=80)
Using it	when feeling low 8/15 (P: A-B, D-G, M-N) (I=15)
PE117	using the program at an unproductive time during my commute
PF45	using it whenever things were getting worse in my head
PA78	logged on to use it when I was feeling really low
PF46	would try and go through it when I was feeling bad
PA36	would use it when I was at the end of my limit
PA38	disregarding advice of program and indulging negative thoughts instead
PE61	using it on my commute wasn't a productive time
PE22	used it on my commute, so I was feeling lower
PG70	using the tools when I felt bad
PM25	using it in the evenings when my son was in bed and I was totally exhausted
PB47	using it when lower than usual and probably should have scheduled use instead

PG35	using it when I felt crappy to see if there was anything on there to help me
PD81	did it when things went wrong rather than when they were going well
PN25	used it in the late evenings when I couldn't sleep
PB5	stupidly do it in the evening and then stupidly wouldn't be able to sleep
Couldn'	t prioritise time to use it 12/15 (P: A-G, I-K, M, O) (I=45)
PC33	didn't have a set time of doing it, just when I had the time
PD13	the day I had my appointments were the days I would use it
PD12	using it when out and about on my phone
PF13	very bad usage, mostly when I needed something to support me
PI48	didn't have a pattern to my use, just when I had the opportunity
PG33	when I felt I needed it, not a daily login
	kept postponing contacts with supporter because I hadn't done anything and there was no point
PA44	speaking
PD74	didn't use it as much as I should have done
PA23	I know I didn't use it to its full extent
PO16	not 100% committed - have other things to be doing
PD31	not being prepared and not wanting supporter to waste their time
PD46	not totally committed to it
PM19	just didn't have the time to do it properly
PM13	just didn't have the time to give to the programme
PO4	you don't get a push to do it - I'm an avoider
PM5	wasn't disciplined to use on my own
PI28	couldn't find time for it
PM21	can't find the right balance in my life to fit it in
PA50	just couldn't fit in at all
PA85	such a stressful life - it's hard to fit in
PF69	didn't put enough work in
PK47	didn't do as much work as I should have
PA96	didn't put enough work in
PA95	time used to get away from me and I hadn't one anything before the review
PA113	just didn't have time for the supporter contacts
PA48	struggled to fit it in
PM55	didn't have the time for treatment
PM4	didn't have the time
PF90	Had to prioritise other things
PJ18	have 2 jobs so difficult to prioritise around that
PA5	constantly feeling like too many other things in life to tick off
PI93	time is difficult for me
PJ13	if and when I had time to do it
PE63	didn't schedule the time for the intervention
PA60	had it on a to do list but it just kept getting pushed down the list
PJ22	more committed to other aspects of my life
PA49	supposed to be doing it in my own time - kept making excuses not to do it
PK50	knew I needed to use it more but took a while to get in gear
PI90	needed to push myself to use it - a lot of people depending on me - exhausting
טכו ו	necaca to pash mysell to use it - a lot of people depending of the - extrausting

PJ21	how busy I am, I didn't do it as much		
PI43	hard year with other things going on so hard to focus on self		
PI40	hard to prioritise myself		
PB39	putting myself first no longer a priority		
PE60	I'm not the top priority		
PI38	find it hard to prioritise myself		
Kept fo	rgetting about the programme and appointments 3/15 (P: B, D, G) (I=4)		
PD30	bad at remembering my appointments		
PG41	I just kept forgetting to use it		
PD32	laziness forgetting to write down when the appointment was		
PB109	memory has been very bad - kept forgetting login details		
Using it	Using it out of a sense of obligation rather than for a positive outcome 8/15 (P: A, D-F, I-L) (I=16)		
PA86	felt like I'd just been given this so I had to try it		
PJ14	I just went along with it		
PJ26	felt an obligation to use it - to try and see if it would work		
PD14	doing it because I knew my supporter would be checking me		
PA7	felt like a chore rather than something that could help me		
PA34	just felt like something I kept having to tick off and felt like a chore		
PA29	it was just another thing to think of		
PI36	using it felt like a chore		
PF26	I felt like we were just going along ticking the boxes rather than getting to the point		
PA47	it was just another thing to do and I couldn't do it		
PE59	doing it for the sake of it rather than for a positive outcome for myself		
PF50	felt obligated to do stuff because supporter checking in on me		
PA45	felt like I had to do all these things for my therapist		
PL24	had a sense of obligation at the end		
PF49	felt like an obligation - tick the box exercise		
PK27	using it more so for other people because my problems were putting a strain on my relationships		

## Changes due to the intervention 14/15 (P: A-I, K-O) (I=115)

## Positive 14/15 (P: A-I, K-O) (I=115)

Sympto	Symptom improvement 13/15 (P: A-D, F-I, K-O) (I= 45)	
PD38	feel more empowered that I can manage my symptoms with what I've learned	
PN29	it has helped me a lot and improved me	
PN39	got me the help I needed and boosted my confidence	
PB70	feel less stressed and much calmer	
PC8	having done it it was really useful for me	
PA100	felt more in control of how I feel	
PF79	helped me and got what I needed	
PI41	felt I was improving while using the intervention, found it useful	
PD35	felt I was improving while using the intervention	
PB100	it kept me going, without it I wouldn't have been able to work	
PG19	felt like it helped me	
PH22	improved from using the intervention	

PH23	work is less stressful now because I spoke to them after using the programme
PB102	it has had a huge impact on me
PB85	helped me to not get into a deep deep depression
PB84	it helped me to keep contact with friends, look good and do things that I enjoy
PB83	gave me the motivation to go on with my life and things that interest me
PB82	helped me more than I thought it had
PG48	the intervention was helping
PF47	improving up to a point
PO39	when you try really hard, the treatment definitely does work
PH50	it did help because I was looking for something to turn things around in my head and it did that
PF59	it definitely helped
PK25	I was improving by using it
PC53	overcame an OCD associating bad things happening with items of clothing
PC24	overcame hoarding, threw things I didn't need out finally
	worst thing ever had happened and because in the past I had felt suicidal and didn't now, well it
PB53	must have been working
PB52	I wasn't getting an worse - and I never thought about suicide considering my past I had
PN26	relaxes me more because I've kind of got it off my system
PB60	not self-absorbed in own problems anymore
PK29	I can communicate better now
PB44	now I think more positively and use mindfulness
PH25	trained me to not get so down on myself
PL27	I don't catastrophize as much anymore
PH32	it has sort of helped me
PO31	one of the best things you can do for anxiety
PB51	I was improving
PD47	now when I'm having difficulties, I have more tools at my disposal to cope
PG37	I was making progress
PN31	helps me move on from things when I'm having a wobble
PG36	generally felt a bit better
PL21	I improved and in the long-term it has been a benefit
PI46	more able to cope with things now
PM26	feeling better while using the intervention
PB7	my health scores were improving
Applyin	g learned CBT techniques in everyday life 12/15 (P: A-I, K, M, O) (I= 27)
PB59	have brought the meditation into other aspects of my life
PO21	beneficial using the techniques and have spread them to people I work with in my job
PI54	have continued to use the techniques
PD48	continue to apply strategies I learned everyday
PH28	continue to apply strategies I learned everyday
PI63	it has helped me know how to apply CBT techniques to more complex anxieties
PB43	in a notebook I'd write things down and do some meditations - applying techniques
PB87	made sure I was exercising and applying the techniques advised
	The control of the deficition of the state o
PK18	I have a notebook of the stuff I do and write things down - applying techniques

PH29	revisit the site now and again to remind myself of the techniques I need to use
PC111	still do the things I've learned
PH44	still apply the little things to my everyday
PE76	applying some of what I learned
PC49	learned about mindfulness and still use those skills now
PK28	catching thoughts - I used to make a mountain out of a molehill
PM24	spotting and challenging thoughts - applying techniques
PK26	still have times when I feel crappy but have skills to get me out of it now
PG28	haven't logged in for a while because I remember the main points of me and continue to apply them
PF56	continued to identify triggers, moods and circumstances and how they affect me
PD72	activity scheduling since doing the intervention scheduling gym classes
PA56	taking parts of the tools and applying to my everyday
PB37	I can think of things that I read and us them
PO64	sometimes all I needed was to log on and get a technique and use it
PA99	taking time away for self when becoming overwhelmed, ways of coping
PA92	I go to a calming place and lie down listening to music
PM28	still trying to apply the techniques - breathing techniques
Increas	ed awareness and/or insight 7/15 (P: A-D, G-I) (I= 25)
PI44	has made me change my way of thinking - son's support worker
PC78	felt empowered working through OCD ladder, understanding my anxieties
PI39	change how I cope because I learned it isn't sustainable
PB69	realised how husband had been controlling me
PB56	needed to let it out and feel worse to feel better
PA101	realising the importance of focusing on self and mental health
PB68	realised how I'd been gaslighted in my relationship for years
PI47	now I understand my anxiety and I'm not frightened of it
PC41	without the intervention I wouldn't have made the connection with OCD
PH24	still feel depressed but think about things differently now
PB114	maybe working through it and thinking through those difficult thoughts was a good thing
PG44	see what I can do about how I'm feeling and if I can't do anything, I just move on
PC52	understanding how thought process works and the cycle and triggers
PC51	realised that I make associations between bad stuff happening and things I'm wearing
PC48	recognising I can't do anything about my worries and work through some stuff by writing it down
PC61	realising that anxiety and depression are two different things
PC60	just because I've a down day it doesn't mean I'm depressed
PA55	important to recognise cause and root of what I'm feeling and why
PH43	realised you focus so much on a worry you ignore everything else
PB66	CBT has been really good because it made me see things and be self-reflective
PA97	it made me realise there are things I need to address in myself
PC40	talking through how I was feeling it became apparent what was going on with me
PC39	until I did the programme I didn't realise how many OCDs I had
PH45	identified work was my catalyst - make sure I'm being more active
PD39	programme helped linked moods and weather - increased psych mindedness/root of problem
Encoura	aged to get the help needed 3/15 (P: E-F, L) (I=7)
PE42	made me realise I need to open up more

PF37	starting on the platform was a good idea
PE120	made me realise I do need some help
PE125	the intervention pushed me to actually go and seek f2f help
PF36	intervention was a good first step and helped me get on the road to recovery
PE41	it was a good idea to go through the online programme and I may have been shut down if I had gone f2f first
PL26	good starting point to pull myself up on the horse
Develo	ped a knowledge of CBT treatment 8/15 (P: C-D, F-H, L-M, O) (I=11)
PL34	CBT is a way of understanding your thoughts - depth of learning
PM34	the programme isn't just about talking, it's about working with yourself to understand and control - depth of learning
PO33	a way of changing the way you think, changing perspective
PD43	learned so much common sense
PF62	CBT is a method of mapping triggers and moods and having a positive outlook
PD63	CBT is a toolkit to help you sort your mood/problem, not an answer but a tool
PH42	it reminds you to think more positively
PF38	it was great to look at the theory behind things and getting to really delve into things
PG51	way to train your brain to understand emotions not just overcome them - depth of learning
	I've learned there's only so much you can do about a situation and apply
PO22	techniques (depth of learning/applying techniques)
PC65	a way to get my armour to deal with the bad stuff that happens

## Engagement with Content 15/15 (P: A-O) (I=201)

#### Positive 15/15 (P: A-O) (I=129)

Positive	: 15/15 (P: A-O) (I=129)
Conten	t relevant and relatable to concerns 9/15 (P: B, D, G-I, L-O) (I= 31)
PM38	relevant to me
PB78	relevant to me
PD64	all modules relevant to me
PI65	CBT right approach for me
PG52	intervention felt tailored to me and felt appropriate to me
PG7	would jump around and use the content that was specific to me
PH17	content clarifies your thoughts and makes you feel you're not the only one going through this
PO40	content makes you feel that you're not alone in how you're feeling
PI59	reading content made me feel like I wasn't the only one, especially if there was a whole programme
PB81	made me feel like it was okay to feel the way I was feeling and there was hope - could identify with the content
PD79	interesting to see what other people had said and relate to that
PN47	content makes you feel like you're not so alone
PL38	real world examples that were relatable and relate it back to my situation - useful
PL39	relatable and realised not the only one going through this
PI71	general topics were relatable to me
PG63	could find something helpful that was related to how I was feeling at a certain time
PD71	motivation module really applied to me
PI67	it was covering content on my concerns like worry and physical symptoms
PG64	some of the content addressed my concerns

PG62	realised how the content applied to me
PD27	helpful that it could be tailored according to things that came up in therapy
PL41	it was tailored to my needs and concerns
PH16	found it quite helpful
PO62	really good content on there, very informative and specific to a range of problems
PI41	found the modules useful
PD16	the content was helpful and interesting
PL42	programme was general but I could find what was specific to me and tailor my treatment
PN46	had all the information I needed, helped me to relate to things
PO38	goes into sufficient detail about different topics so you can take the techniques you need
PL40	it addressed a wide range of topics and concerns
PB44	like that it's not just CBT, it's a mix of content
Useful t	cools and exercises 14/15 (P: A-L, N-O) (I= 34)
PB6	the materials were all amazing
PB43	used a notebook for what was relevant to me and practised the meditations
PA91	liked the mindfulness
PD70	tried the activity scheduling because I sit around a lot
PA81	used the mood monitor as was easy to keep on top of
PL29	used the mood monitor to track extreme emotions
PN32	mood monitor was helpful
PK28	I like the catching thoughts and challenging them exercises
PD44	used the TFB and challenging thoughts tool
PH41	tools for thought processes and cycles (TFB) did help me
PG43	used TFB to understand my moods and change what's happening
PI55	TFB tool was useful and interesting to use
PL28	TFB cycles were useful
PC50	TFB was massively helpful
PA54	TFB kinda helped once I figured out how to apply it
PA53	really liked TFB
PO24	worry tree - most beneficial tool for me, learning to let my worry go
PI42	worry tree - this has been really helpful for me to do
PO23	worry tree was really good for me
PA76	diary - liked being able to write down how I felt
PN21	good reading other peoples' stories, worked with how I was feeling
PA103	liked to write in the diary
PH40	good to read other peoples' stories and see what it has done for them
PB80	personal stories made it real and that it happens to other people
PB79	personal stories were really good
PC74	personal stories - some were relatable
PI57	personal stories useful to know how to relate techniques to my life
PC76	personal stories made the content and issues raised relatable to my situation
PE13	some of the exercises were beneficial to me
PK43	could relate to some of the personal stories
PF66	liked the idea of the personal stories and could identify with bits of them
PI56	personal stories - found them useful and different bits were relatable to me

PD66	personal stories were interesting but I didn't relate to any of them
PJ33	used the spotting thoughts tool
Informa	ation laid out clearly and concisely 4/15 (P: E-F, I, O) (I= 7)
PE20	chronological order allows you to understand how to use the programme and what you may need
PO42	don't have to read too much indepth, it's an easy process
PI45	bitesize information - you can do as little or as much as you want
PI73	gave the detail needed - clear and concise without waffling on
PO19	so much on there that was beneficial and put so simply
PI6	manageable amount of information
PF33	lots of information available and good start to therapy
Manage	eable workload 7/15 (P: B-D, F-I) (I= 14)
PN50	could log on for 5 minutes and go through as much as you could
PI74	felt like not that much work was required - as much or as little as I could manage
PO43	gets to the point quickly and doesn't require too much work
PG68	knew I'd have to put in some level of work on my side
PB90	level of work required on my side met my expectations
PB89	you can do as much or as little as you want
PC83	the workload was manageable and fair
PG69	workload was manageable enough
PH51	the programme/tasks weren't too much
PF70	the programme wasn't too much work
PD75	wasn't too much, I was just being lazy
PD67	workload absolutely fine, took 15/20 mins
PD76	didn't feel I was given too much work
PO14	easy to go through the content in an online format, as and when you need it
Writing	about thoughts and feelings felt therapeutic 6/15 (P: B-C, E, K, L, N) (I=8)
PN24	found it very therapeutic just logging on and going through the platform
PL45	nice to write - felt like I was writing it all out
PE96	plenty of advantages of writing - more therapeutic
PK51	writing and reading felt like getting a weight off
PB67	good for when you don't want to say certain things out loud, you can write it down instead
PN11	used the programme like my own diary
PE98	pen to paper - can get lost in art of writing rather than worrying about your problems
PC48	write down all my worries to put them somewhere and assess them
Reading	g and writing provided clarity 7/15 (P: C, F-G, I, L-M, O) (I= 13)
	doing the worry list and seeing how bad it made me feel was a good thing, made me reassess
PC34	how detrimental my worrying is
PC88	writing is good because it allows you to think more deeply and revisit if you feel you've something to add
PC86	writing it down/reading something helps to make it sink in for me
PI76	reading and writing helps to clarify my mind and pinpoint what's going on for me
PI77	writing down your thoughts makes you think a little deeper
PO44	can write well and find it easy to get words down on paper
PC87	writing it down makes it become firmer/more real
PM45	writing makes you see clearer what's bothering you
PL48	I learn a lot more when I have to write it down myself

PG72	writing makes it easier to see why the emotion is there
PF71	writing was better - like a visual map of my problems
PG71	writing it down is good to figure out exactly what's going on
PM44	writing down your concerns is good because you have to name that problem
Reflecti	ng back on completed work was beneficial 10/15 (P: C, F-I, K-O) (I=13)
PI78	quite useful to reflect a little while later to assess outcomes
PH19	after I'd gone through the course, I'd revisit highlighted bits for me
PM46	helpful to reflect to see how far I'd come, motivating
PH48	it was motivating to tick the boxes off in your goals tool
PO46	reflecting is helpful to see how far you've come
PL46	reflecting useful to see progress
PG74	reflected to judge how far I'd come
PC88	writing is good because it allows you to think more deeply and revisit if you feel you've something to a
PF72	reflected back on my work
PF73	reflection was a helpful process to identify how you've moved on, I did it
PK52	reflection helpful in identifying patterns
PN32	if I was having a bad day reflecting on my mood monitor on how far I'd come made me feel better about myself
PN33	reading back on things did give me a boost
Felt sup	ported by the programme content 5/15 (P: A, C-D, I, N) (I=5)
PD38	having access to the content on the programme makes me feel ok
PC110	I feel supported even by just the fact I have access to the content
PN2	just logging on and going through content made me feel supported and not so alone
PI60	had somewhere to go with my worries and the content felt like it supported me
	alliance with content - used it when had noone there - could write something down in
PA104	diary or read something helpful
_	e 13/15 (P: A-M) (I=72)
	t was too generic at times 5/15 (P: C, E-F, J-K) (I=10)
PE83	content was only relevant in places and that is a criticism
PJ46	content wasn't relevant to my concerns
PJ47	telling me about different situations, but not about how I was feeling - read like a medical report
PC75	some aspects of content focused too much on depression and this wasn't relevant to me
PK41	some of the content just sat on the edge of not being so relevant to me
PK42	didn't see it as relevant to me
PE85	some places content wasn't relevant
PE17	content needed to be more tailored
PF24	too generic
PF34	got to the point that content felt automated
	ike the mood monitor 1/15 (P: D) (I=1)
PD69	didn't like the mood monitor - pointless and of no value to me
	ike the personal stories 5/15 (P: A, D-E, G, J) (I=8)
PA73	personal stories didn't seem real
PD65	didn't relate to any of the personal stories
PJ48	personal stories had nothing to do with me
PG61	personal stories not very relatable

PE87	didn't like personal stories
PA72	didn't like personal stories, didn't care to hear how other people felt
PG45	personal stories didn't feel relatable
PE88	personal stories - didn't believe they were real and didn't care
Felt like	e too much work 7/15 (P: A, E, H, J-M) (I=13)
PE86	felt like I was searching for the bits that were relevant to me, felt like a chore
PE11	chronological order made it feel like I was searching for what I needed always
PA74	felt like I had to do all these things in order to get to what I needed
PJ10	too much reading
PJ27	content too heavy
PJ23	content too long
PJ20	content too long
PH52	questionnaires were long
PJ9	content was long-winded
PA67	more work required than I wanted to put in
PL44	think it was more work than I had actually realised
PM42	had to do more work than I thought I had to do
PK49	thought the workload would be less
Conten	t was boring 4/15 (P: A, E-F, J) (I=7)
PE92	it just felt like going through workbook exercises
PE12	felt like going through the motions with a book
PJ35	jumping between videos, I started to switch off
PF44	content was repetitive
PA39	felt like it was telling me the obvious thing/things I already knew
PJ29	like reading a book - monotonous
PF55	bit repetitive, same stuff mentioned over and over again
	I reading and writing 6/15 (P: A, D, F, I L-M) (I=7)
PL47	typing is different to writing and I didn't absorb as much
PM43	felt weird reading and writing about my feelings
PD78	I'm better verbally, difficulty writing down how I feel
PI75	didn't give as much detail in writing as I would have f2f
PF74	typing how you're feeling makes it feel more formal and you water it down, too processed
PF75	writing makes it too processed
PA76	didn't like that I had to keep writing in the diary (interactive)
Conten	t exacerbated symptoms 4/15 (P: A-B, E, L) (I= 19)  programme relies on you to set up your own reminders and when you're desperately anxious
PB50	that's not good
PE47	I know why and I just want the root of the cause but doing all this other stuff is frustrating me
PE14	content exacerbated symptoms
PE16	chronological layout of content made me feel worse, constantly searching for what I needed
PA114	started to associate frustration with the content and didn't want to use it anymore
PA38	knew it was a negative thought but instead of challenging it like advised, I indulged it - exacerbation
PL20	using it when I was feeling down and putting a lot of pressure on myself and then I'd feel worse
PA84	not having done anything on the programme made me feel bad everytime I logged in and didn't want to use it again as a result

PB56	in a way it makes you feel terrible and you're crying
PB48	I was feeling low and I couldn't cope with all those reminders
PB56	do it in the evening and then wouldn't be able to sleep
PB113	do it late at night and then couldn't get back to sleep
PE52	using the tools was exacerbating my symptoms
PB6	using the meditations and personal stories and kept feeling guilty/worse
PE51	thinking about my negative thoughts was making me feel worse and not what I needed
PE53	found myself in a downward cycle going through some of the exercises
PB86	reading and writing made me feel worse
PE21	didn't want to focus on the negative thoughts it was asking me to think about, felt worse then
PE84	some content made me feel worse
Reflecti	ng of no benefit 2/15 (P: A, E) (I=4)
PA102	doesn't want to reflect, feeling better now and looking back will make me feel worse
PE93	really saw no value in reflecting back on my work or progress
PE95	didn't see the point in reflecting back on work done
PE100	doesn't see the benefit to reflecting back when trying to move forward
Difficul	t to understand 1/15 (P: J) (I=1)
PJ34	trying to read and understand it was too complicated
Questic	onnaires felt pointless 1/15 (P: E) (I=1)
PE44	knew what my answers should be to the questionnaires so didn't see the value
Conten	t felt disconnected from one section to the next 1/15 (P: F) (I=1)
PF51	content was disconnected, didn't flow

Experience interacting with the supporter 15/15 (P: A-O) (I=175)

Positive 14/15 (P: A-I, K-O) (I=123)

## Felt supported by and connected to supporter 10/15 (P: B-E, G-H, K-L, N-O) (I=36)

PG67	support met my expectations
PK63	support definitely helped me
PN63	overall the support met my expectations
PC67	found it supportive
PO11	Felt supported
PG18	Felt supported
PC72	felt as supported and cared about as f2f scenario
PC68	felt supported in everything because there was someone there
PO53	supporter would check in on me, support and help me
PB98	felt supported and was stepped-up as required by my needs
PO47	even though it was online, the catch ups still made me feel supported
PE110	happy with support I received
PC85	got lots of supportive and encouraging messages from my supporter
PN37	my supporter was very supportive
PH58	to know there was someone there was good
PH56	let's you know that someone is there if you need them
PC8	found it very supportive
PL52	acknowledged everything and was supportive

PG76	felt like they cared and were helping me
PO49	someone there that knows your problems and you can build a relationship, they care and want to help you
PE112	never felt awkward or like they didn't understand me
PB28	felt connected to my supporter and that I knew them
PB95	understood straight away what I was going through - gave guidance and reassurance
PL49	good to have somebody there to share with, having that human connections
PG82	made the effort to listen to me and understand what's going on - so I gave it a chance
PG77	felt like they wanted to be there for me
PG42	they never gave up on me
PG14	felt connected to my supporter
PD49	felt comfortable talking to her
PC103	my supporter just really got me
PO48	felt connected and good that it was the same supporter all the time
PD61	felt connected to my supporter, they were so lovely
PK60	felt connected and good to have a conversation with someone
PN53	felt connected to my supporter
PG16	felt connected to my supporter
PE104	felt connected to my supporter to a degree
_	e to speak freely 8/15 (P: B-D, F-H, K, O) (I=8)
PC23	discussed my fears at length with my supporter
PH60	felt able to talk freely
PF31	very approachable and felt able to ask for something else if needed
PG83	felt able to ask for something else if I needed
PK59	felt able to communicate openly
PO60	supporter really helps you open up and they were really good at signposting to what was next
PB94	felt able to ask for something else if I needed
PD88	felt able to ask for something else if I needed
	er encouraged engagement 8/15 (P: B, D, F-H, K, M-N) (I=12)
PK61	supporter encouraged me to be proactive
PD18	supporter incentivise me to use the programme
PM5	accountability when I knew supporter would be checking in on my work
PH61	having a review coming up made me do more - accountability
PD15	didn't want to waste someone's time if I hadn't looked at what I was supposed to
PD14	doing it because knew someone would be looking over the work
PF50	felt obligated to do stuff knowing I'd be checked in on
PG86	the supporter encouraged me to adhere
PD84	supporter encouraged me to adhere
PN59	supporter was always encouraging me to log on
PB96	contacts encouraged adherence to treatment
PK58	supporter really encouraging in getting me on track at the start of treatment
Benefit	red from having a supporter 7/15 (P: A, C-D, G-H, N-O) (I=9)
PD58	what really helped me was the contacts with my supporter
	<u> </u>
PG24	liked having the supporter because I needed someone to talk to

PD59	I needed the support alongside the online resources
PN60	needed the support at the start but would have continued without it too if necessary
PD17	needed the supporter
PA107	the phone conversations made me feel better
PH55	contacts were useful, good to have a catch up with them
PC95	always took something positive from our contacts
	ter discussed treatment goals 5/15 (P: C-E, G, L) (I=9)
PD83	had same goals in mind with supporter
PC98	had agreed upon goals with my supporter
PC99	supporter asked me what I wanted out of treatment at the start
PC100	had agreed goals with my supporter and what we were working towards
PE74	supporter and I had agreed goals at the start
DIEE	supporter would always put positive goals for me and gauge from me what I needed and I
PL55	would set goals for myself
PC36	supporter asked me what I wanted out of treatment at the start
PG53	agreed goals with supporter and they set them week by week with me
PG54	supporter setting goals for me gave me the motivation to have things done by a certain time
PG80	ter demonstrated a good level of expertise 6/15 (P: B-D, G, M-N) (I=12)  felt my supporter had expertise
PG94	
	confident in supporter's expertise had confidence and trust in my supporter
PD95 PG81	
PB74	knew what they were talking about
PC105	my supporter explained thigs to me like gaslighting supporter would help me realise things about myself and my anxieties
PC103	never questioned my supporter's expertise - showed some true genius
PC102	supporter made me realise how awful it is to worry all the time about everything
PC94	supporter would probe vague things I'd say
PC104	supporter was logical and broached stuff in a way I could understand
PN65	supporter was logical and broached stuff in a way reduit understand supporter went through everything and made sure I knew how to use the programme
PM59	supporter tried the best for me to understand my story and introduced treatment to me in a helpful w
	ter tailored treatment to needs 9/15 (P: A-E, G, L, N-O) (I=23)
PO59	supporter explored all angles with me and identified what direction I needed to go in
PO50	anything I ever said they were responsive to and tailored recommendations for me
PC31	supporter set tasks for me to have done and deadlines which was good
PG55	deadlines my supporter set were good for me
PG78	supporter listed some things to help me
PD89	supporter would make recommendations and really listened to me and simplified things
PO60	supporter really helps you open up and they were really good at signposting to what was next
PB9	got a lot out of the contacts and would act on what supporter said
PN55	supporter would recommend content to me like worry diary
PD28	listened to me and tailored the treatment to my needs
PD27	unlocked content for me which was tailored to needs expressed in treatment
PC26	supporter would advise me not to do the programme while I'm distracted
PC48	would recommend writing down all my worries to get them out and I did that
PL57	recommended modules for me and I would follow the advice
. 237	recommended modules for the drid r would follow the davice

PL53	supporter recommended useful modules to me
	supporter would make suggestions but never impose anything on me - taking time to think about
PB29	what I was going through
PC91	supporter was really good at pointing me to where I needed to go
PG79	would follow my supporter's recommendations
PN54	supporter responded to anything I ever asked
PA106	relationship was nice, supporter would listen and make suggestions
PE113	on an individual level it felt responsive
PN58	supporter went with the flow of how I was feeling
PO50	anything I ever said they were responsive to and tailored recommendations for me
Suppor	er offered understanding 5/15 (P: A-D, G) (I=8)
PA94	understanding - set manageable tasks for next review
PD87	supporter was really accommodating
PG40	supporter understanding if I'd not got around to doing something
PG84	accomodating when I missed a review and rescheduled
PD77	supporter never made me feel guilty for missing a review
PB29	supporter would make suggestions but never impose anything on me - taking time to think about what I was going through
PC101	supporter never forced opinions on me or told me what to do
PA46	supporter was understanding of missing reviews
	er provided a good introduction and explanation of treatment 9/15 (P: B, D-G, I, L-M, O) (I=11)
PG50	CBT and treatment rationale was explained quite well
PD62	my supporter explained what to expect from iCBT
PM32	treatment rationale was explained quite well
PI101	first session was useful in getting me started
PL65	understood treatment rationale and it was explained really well to me
PF83	first session was useful in getting me started
PG93	the first session was good at getting me going
PE123	felt optimistic after the first session
PD92	first session was useful in getting me started
PB107	supporter introduced treatment well
PO30	treatment was introduced and explained well
	e 7/15 (P: A, E-F, I-K, M) (I=42)
_	supporter didn't care 1/15 (P: I) (I=8)
PI19	no understanding or checking up on me from my supporter when I missed the review
PI80	relationship was too cold, didn't feel like I was that person's agenda
PI82	don't think they cared about me as much as I care about myself getting better
PI17	for all my supporter knew I was dead in the ditch
PI21	didn't feel cared for
PI16	didn't feel supported by TT, no checking in
PI14	didn't feel supported by my supporter
PI24	felt unsupported
	er never made contact 1/15 (P: J) (I=1)
PJ61	no contact from supporter at all for the duration of treatment

PK45	getting nothing back from what I was doing on the platform	
PM47	never got a reply to the online messages I'd sent my supporter	
PI33	didn't get a reply to my message online and didn't know how to get in touch with them	
Didn't f	eel comfortable talking with supporter 1/15 (P: I) (I=4)	
PI84	didn't feel comfortable saying that the scheduled times weren't working for me	
	was at a low point and didn't feel able to ask for a change in treatment approach, supporter	
PI85	wasn't picking up on this either	
	supporter should do more to make someone with low self-esteem/confidence feel more	
PI87	comfortable to talk with them	
PI31	waiting on the supporter contacts was stressful in itself	
	sense of connection with supporter 4/15 (P: A, F, I, M) (I=5)	
PM49	didn't feel connected to my supporter	
PA109	didn't feel connected to my supporter	
PF16	didn't feel connected to my supporter	
PI37	found it hard to build any sort of a relationship	
PI32	found it hard to feel any connection with my supporter	
	t felt scripted and impersonal 4/15 (P: E-F, I-J) (I=10)	
PJ30	had been expecting a more personal approach to support	
PF15	supporter very impersonal and scripted	
PJ56	supporter was flat like reading from a transcript	
PF20	supporter tried to steer the conversation in a particular way and it felt impersonal	
PF43	same conversation over and over again	
PF17	supporter seemed scripted and gave me automatic responses regardless of what I said	
PE34	online review process felt automated and just kept referring me back to things in the programme	
PI79	responses felt generic	
PE66	online reviews and interactions felt scripted, impersonal	
PF18	scripted conversation	
Lack of	empathy and understanding from supporter 2/15 (P: I, M) (I=5)	
PI81	lack of empathy from my supporter	
PI91	supporter didn't try to understand my life and my difficulties	
PM51	I don't think my supporter could understand my situation	
PI89	no effort to understand, kept signposting me, I felt unworthy of help	
PI92	no understanding of my situation	
Lack of	guidance from supporter 2/15 (P: I, M) (I=3)	
PI25	felt alone and doing it by themselves with no guidance	
PM23	lack of guidance from supporter	
PM50	wanted more guidance and better listening from supporter, felt like a time schedule	
Supporter never discussed treatment goals and expectations 2/15 (P: E, J) (I=3)		
	if my supporter had pushed me harder and discussed with me what I wanted out of treatment,	
PE32	online would never have been an option	
PJ58	never discussed treatment goals with supporter	
PJ57	thought the supporter would have explained more what I was to do	

Positive 13/15 (P: A-I, K-L, N-O) (I=41)

Liked communicating online with supporter 8/15 (P: A, C-E, G-H, K, N) (I=11)

Likea co	ommunicating online with supporter 8/15 (P: A, C-E, G-H, K, N) (I=11)
PN45	online is my preference
PN52	preferred communicating with my supporter online, easy for me
PG75	communicating online was helpful because I didn't have to repeat myself
PE102	communicating online was fine with me, I shared everything with them
PA21	say what I want online, didn't bother me that it was online
PC20	communicating online or in person wouldn't change what I said
PD60	happy with the reviews - liked the back and forth
PK56	the reviews were helpful
PH38	online catch-ups worked well
PA108	it was good having a record of what was said during a review, advantage of online reviewing
PE103	open to sharing with my supporter online
Frequer	ncy of online communication worked well 10/15 (P: A, C-D, F-I, L, N-O) (I=15)
PH57	review process worked well for me
PN14	never felt pressured with reviews and they were accommodated around me
PA110	able to work reviews into schedule
PG29	found it easy to make time for the reviews
PL56	the review schedule was flexible enough
PN56	reviews were as often as I needed
PO51	fortnightly was good for me
PD82	frequency of reviews was perfect
PC96	frequency of the reviews was good for me
PC84	amount of contact I received was good for me
PL54	frequency was good for me and could fit into my schedule
PF23	made the frequency of the reviews work for me
PI102	time between reviews was fine for me
PG56	liked the frequency of the reviews
PC97	frequency was good for getting things done in between
Easier t	o open up online, feeling of disinhibition 7/15 (P: B-C, G-H,K, N-O) (I=15)
PO9	more honest when I'm sharing online (disinhibition)
PC5	liked that I never met my supporter in person and felt more anonymous (disinhibition)
PN41	wouldn't go and sit and share with someone in person (disinhibition)
PG59	feel less judged communicating online (disinhibition)
PN42	you can hide behind your screen and say how you're feeling and not feel embarrassed (disinhibition)
	more comfortable communicating online, would have felt silly going in depth about problems in person
PN3	(disinhibition)
PH54	preferred online communication because it's hard to talk to someone f2f (disinhibition)
PB67	might not want to say things out loud but with this you can write them down and it's easier sometimes (disinhibition)
PO44	I can open up much easier when I write (disinhibition)
PN8	opened up more online (disinhibition)
PN19	wouldn't feel comfortable sharing in person (disinhibition)
PK8	could share stuff and not necessarily link it to the appointment and be more open (disinhibition)
PK9	there wasn't an instant consequence for something I said (disinhibition)
PK55	disconnect on communication side of things (in terms of disclosing more freely), just jotting
1 1133	and the state of t

down thoughts

PK54 didn't view it as a way of communicating - didn't associate it with the supporter reading it Negative 9/15 (P: A-B, E-F, I-M) (I=53)

Negativ	e 9/15 (P: A-B, E-F, I-M) (I=53)			
Needed more contact with supporter 6/15 (P: A-B, E, K-M) (I= 11)				
PK57	could have done with more frequent reviews			
PL58	could have done with longer on the phone			
PM52	needed more reviews and longer in duration			
PB14	more supporter contact would have helped me			
PB92	more supporter contact			
PB26	option for more contact between reviews			
PB13	more supporter contact between reviews			
PB46	needs a weekly message back			
PB57	option of an additional reply from supporter during the week			
PA120	more personal and frequent reminders from supporter			
PE108	impromptu message between reviews would have helped			
	nce for face-to-face communication 8/15 (P: A-B, E-F, I-J, L-M) (I= 30)			
PA52	needed f2f support first and then move to online communication			
PB49	needed an initial f2f session to get me started			
1 043	if there was something particular going on it would have been useful to be able to request to			
PI70	talk in person			
PE111	didn't like communicating with my supporter online			
PM22	it would have been helpful to be able to actually talk with someone			
PM35	the human contact was missing, I think you should be able to talk to somebody			
PA89	looking back I should have had in person contact aswell as the online aspect			
PM60	not the right approach for me at the time, I needed to go and see someone			
PM57	would choose f2f moving forward			
PE40	approach with minimal human interaction was wrong for me			
PL8	having a face to communicate with would have made it easier for me			
PJ28	needed someone to talk to in person at the time - wrong approach			
PA90	F2F would have been better for me at the time			
PJ34	needed to talk to someone in person			
PE15	having a f2f support could have given me instant feedback			
PM37	preference for f2f moving forward			
PJ24	preference for f2f moving forward			
PJ45	preference for f2f moving forward			
PM53	preference for f2f			
PE81	preference for f2f now			
PA71	would choose f2f next			
PF22	preference for f2f			
PF37	probably would prefer f2f			
PF43	definitely prefer f2f			
PE9	f2f works much better for me			
PB75	preference for f2f			
PI66	would try f2f next if I needed something			
PJ37	if I did it again, I'd choose f2f			

PI97	go and try f2f next		
PL9	I need a face		
PL36	preference for f2f counselling moving forward		
Commu	Communicating online was too formal and structured 5/15 (P: E-F, I-J, L) (I=6)		
PE105	online interacting feels more formal		
PL50	online communications felt too structured and closed		
PI36	online contacts with my supporter felt like a chore		
PI35	it didn't flow and felt like quite a lot of effort to achieve anything with them		
PF77	online communication was too formal and structured		
PJ31	communicating online felt like a process		
Couldn't open up to a computer 2/15 (P: I, M) (I=2)			
PI75	didn't open up as much as I would have in person		
PM10	you can't really communicate with a computer and say how exactly you're feeling		
Lack of instantaneous responding with supporter 2/15 (P: E, I) (I=3)			
PE10	restraints on online instanteous reactions		
PE8	online supporter relationship is limited because of the lack of instantaneous responses		
PI23	asynchronousity didn't work for me, needed an in the moment interaction		
Online communication felt too anonymous 1/15 (P: E) (I=1)			
PE6	interacting with my supporter online was too anonymous		

# Termination of supported period 15/15 (P: A-O) (I=48)

Positive 14/15 (P: A-E, G-I, K-O) (I=37)

Had a conversation with supporter about finishing treatment 3/15 (P: B-C, N) (I=6) supporter suggested maybe online wasn't what I needed right now and suggested f2f - inappropriate for needs  PB10 for needs  PB97 had a conversation and decided I needed something more and to be stepped-up to f2f  PB99 didn't feel abandoned, it just wasn't working at the time supporter and I realised my problems were related to OCD and wanted to tackle those separately  PC11 - inappropriate for needs  PN61 had a conversation with my supporter before ending support  PC107 supporter and I realised we needed to take a different approach so planned to end support  Happy with how support was terminated 6/15 (P: C-D, H, K, N-O) (I=11)
PB10 for needs  PB97 had a conversation and decided I needed something more and to be stepped-up to f2f  PB99 didn't feel abandoned, it just wasn't working at the time  supporter and I realised my problems were related to OCD and wanted to tackle those separately  PC11 - inappropriate for needs  PN61 had a conversation with my supporter before ending support  PC107 supporter and I realised we needed to take a different approach so planned to end support
PB99 didn't feel abandoned, it just wasn't working at the time supporter and I realised my problems were related to OCD and wanted to tackle those separately - inappropriate for needs PN61 had a conversation with my supporter before ending support PC107 supporter and I realised we needed to take a different approach so planned to end support
supporter and I realised my problems were related to OCD and wanted to tackle those separately - inappropriate for needs  PN61 had a conversation with my supporter before ending support  PC107 supporter and I realised we needed to take a different approach so planned to end support
PC11 - inappropriate for needs PN61 had a conversation with my supporter before ending support PC107 supporter and I realised we needed to take a different approach so planned to end support
PC107 supporter and I realised we needed to take a different approach so planned to end support
Happy with how support was terminated 6/15 (P: C-D, H, K, N-O) (I=11)
PC109 it was a natural break away
PC112 didn't feel abandoned
PD85 end of support came about because I kept forgetting and I was feeling well - not a priority/improved
PH66 I was fine about it though
PH67 felt ready to leave treatment
PK16 I was ready for it and in a much better place
PN22 got out of it what I needed and was given the option by my supporter to continue using it on my own
felt like I didn't need the supporter anymore and I was happy to continue working through the PO55 platform on my own
PK19 didn't feel the need to keep signing in
PC108 came to a natural end as I worked on other OCD exercises
PC113 natural time to stop and continue with different treatment approach
Feel able to go back to treatment if needed 12/15 (P: A-C, E, G-I, K-O) (I= 15)

PG26	supporter let me know I could get back in touch if needed		
PO56	I know how to get back into treatment if needed		
PN23	if I need treatment again I know what to do and where to go		
PH68	would go back to TT if needed		
PN62	feel able to go back no problem		
PB101	would feel able to go back		
PG88	know that I can get back in touch with them and restart if I need to		
PM56	I'd go back to TT if needed		
PK62	I'd go back to TT if needed		
PE119	always felt able to go back and try something else if needed		
PL61	felt able to go back to TT if needed		
PL15	felt able to go back to CBT		
PI96	would feel able to go back to TT now but I'd ask for something different		
PC66	I would go back on SCH		
PA33	would go back on SCH now probably		
Negative	7/15 (P: A, D, H-K, M) (I=16)		
No longe	r a priority, just let it go 4/15 (P: A, D, I, K) (I=8)		
PA62	just stopped logging on to the programme		
PK14	I never answered the last call from my supporter		
PD85	end of support came about because I kept forgetting and I was feeling well - not a priority/improved		
PI28	it ended due to the fact that I couldn't find a time slot for it in my life		
PA44	kept postponing appointments with supporter so didn't see the point in continuing - not a priority		
PA115	I just stopped logging in and checking for reviews - not a priority		
PD36	didn't officially terminate treatment - just kept missing calls and appointments - not a priority		
PA13	didn't affect me personally, just decided to let it go then when the supporter stopped contacting me		
Waiting o	n call from supporter 1/15 (P: H) (I=1)		
PH15	I was just waiting for my supporter to call me and they never did		
Support s	topped unexpectedly, felt abandoned 2/15 (P: J, M) (I=5)		
PJ59	support just stopped without any warning		
PJ60	shocked and disappointed at how my treatment ended		
	I missed the deadline for my questionnaires and I got discharged - didn't know this		
PM12	would happen and felt alone		
PM14	disappointed and felt abandoned and didn't know how I was going to continue getting better		
PM15	just got an email saying they had tried to contact me and I had no record of that - disappointed		
Felt relieved that support stopped as it was a negative experience 1/15 (P: I) (I=2)			
PI95	was relieved my support ended (negative experience)		
PI30	support wasn't useful enough to me and I didn't have time to be wasting on that and it was easier to engage online unsupported I felt		