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ORIGINAL RESEARCH

A questionnaire-based qualitative study of therapist views on computerized CBT

J. Newton and E. C. Sundin*

Division of Psychology, Nottingham Trent University, Nottingham, UK

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Abstract. Few studies have explored therapists' views on computerized cognitive behavioural therapy (cCBT) and this study aimed to provide an in-depth understanding of accredited therapists' views on cCBT's role in treating depression. Twelve therapists constituted this self-selected sample (eight female, four male). Mean age was 52 years (range 46–61). The data obtained from a semi-structured questionnaire were analysed using thematic analysis. Three themes were identified and discussed: (1) the standardized nature of cCBT for depression, (2) the importance of the therapeutic relationship in cCBT, and (3) the pros and cons with cCBT as an alternative to CBT. The therapists in this study emphasized that innovations in CBT delivery formats (e.g. internet-based, computerized) show promise. However, participants expressed some views that clash with the evidence-based viewpoint. More work is needed to improve the implementation of evidence-based practice and policy.

Key words: Cognitive behavioural therapy, cCBT, depression, thematic analysis, therapist views.

Introduction

Depression is a common mental disorder worldwide with more than 350 million people affected. Although there are known, effective treatments for depression, fewer than half of those affected in the world receive such treatments. While only a third of the adult population in the UK who have diagnosable depression receive some form of treatment (Department of Health, 2007), the majority of people who seek help are cared for by their general practitioner (GP) instead of a specialist (National Health Service Centre for Reviews and Dissemination, 2002). But, psychological therapies are increasingly preferred by patients (McHugh *et al.* 2013). Moreover, empirical evidence suggests that patients who are able 'to exercise control over their healthcare decisions may experience improved outcomes' (Winter & Barber, 2013, p. 1049).

*Author for correspondence: Dr E. C. Sundin, Division of Psychology, Nottingham Trent University, Nottingham NG1 4BU, UK (email: eva.sundin@ntu.ac.uk).

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Against this background, the UK government's Improving Access to Psychological Therapies (IAPT, n.d.) programme was developed to instigate an increase in the provision of evidence-based psychological therapies, mainly aimed at treating anxiety and depression in primary care. Within the NHS, treatment for anxiety and depression follows the stepped care approach, which is 'a flexible model of healthcare delivery in which patients can begin their treatment with a low intensity intervention requiring only limited practitioner support such as guided self-help' (Kenicer *et al.* 2012, p. 1).

Unfortunately, the observation made at the beginning of this century that many patients are not offered psychological treatment, is still relevant (Proudfoot *et al.* 2004). In particular, treatment such as CBT is often not available to patients because of therapist shortages (Du *et al.* 2013). Therefore, the need for alternatives to one-to-one therapeutic treatment delivery has been underlined.

This study aims to analyse one of the most recent treatment options for depression offered within the NHS, i.e. computerized cognitive behavioural therapy (cCBT). The NHS currently offers cCBT via stand-alone computer-based or web-based programmes which meet criteria set out by NICE (2009). We chose to evaluate 'Beating the Blues (BtB)', which is 'one of the most commonly used cCBT programmes in the UK' (Koeser *et al.* 2013, p. 307). Furthermore, although the NICE (2009) guidance recommends cCBT programmes 'for people with persistent subthreshold depressive symptoms or mild to moderate depression' and does not specifically endorse BtB, BtB is the only 'cCBT programme with an RCT evidence base within the United Kingdom' (Rhodes & Grant, 2012, p. 4).

BtB is a software package which aims at treating patients with mild to moderate depression or anxiety (the latter condition will not be discussed further in this paper). BtB provides standardized treatment via the computer, thereby allowing patients to work at their own pace and take responsibility for their own improvement Proudfoot *et al.* (2003*b*). BtB consists of eight 1-hour sessions, usually completed once weekly (Proudfoot *et al*. 2003*b*) and mainly consisting of psycho-education, assessment of current problems, action plans and goals, change techniques, and homework. Throughout the sessions, video-recorded case studies which depict individuals modelling depressive symptoms and applying change techniques are available to the patient, as a means for them to learn about their symptoms and how to manage them with CBT techniques (Proudfoot, 2004). After each session the patient and their GP each receives a progress report. In the final session, relapse prevention strategies are introduced to equip the patient with skills to recognize when depression may be recurring, and how to cope with it in an efficient manner. Once a patient is diagnosed with mild to moderate depression by their GP and has agreed to do BtB, the only contact a patient receives during the treatment is with a practice nurse or a secretary who provides assistance with the package; they do not offer any support on clinical issues (Proudfoot *et al*. 2003*a*, 2004). While BtB does not include therapist guidance, there are other cCBT packages that do (Høifødt *et al.* 2013).

In several studies, the efficacy of cCBT has been shown to be superior to treatment as usual (Foroushani *et al.* 2011; but see De Graaf *et al.* 2009 and Gilbody *et al.* 2015) and on level with therapist-led CBT (Foroushani *et al.* 2011). A few studies have used qualitative method to examine patients' attitudes towards cCBT (e.g. Beattie *et al.* 2009; Gerhards *et al.* 2010). The findings suggest that subgroups of people with depression find cCBT to be an acceptable treatment method as it allows for improved access, managing time constraints, and the potential for anonymity; barriers include a lack of non-verbal cues, delayed responses, and the need for a sufficient level of computer literacy. Researchers have pointed out that

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it is important to understand 'factors that might have affected healthcare professionals and therapists in advocating cCBT ... since their attitudes and perceptions towards cCBT may have a direct impact on the uptake of cCBT and subsequent adherence rates by patients' (Du *et al*. 2013, p. 217). According to a survey study of therapists' attitudes towards cCBT, published in 2004, the majority of respondents saw cCBT as a useful treatment approach for mild to moderate problems (Whitfield & Williams, 2004).

Although a number of quantitative studies have been conducted to examine the effectiveness of cCBT, there is limited qualitative research. In particular, to our knowledge, cognitive behavioural therapists' views on cCBT have not been explored qualitatively. This study aims to use qualitative methods to explore the views of cCBT in cognitive behavioural therapists who treat people for depression. In particular, the study aims to examine therapists' thoughts about (1) how cCBT fits into the stepped care approach to treating depression, (2) whether cCBT can provide a suitable alternative to face-to-face CBT, and (3) what are cCBT's main strengths and weaknesses.

Method

Design

A qualitative, paper-based study of views on cCBT treatment for depression was conducted using data collected from cognitive behavioural therapists accredited by the British Association for Behavioural and Cognitive Psychotherapies (BABCP) using a questionnaire format. The purpose of the study was to check participants' understanding and ability to answer the questions and highlight areas of confusion in order to amend problems with the questionnaire before issuing a large-scale survey.

Participants

To be considered for this study, therapists had to meet the following criteria: listed as an already accredited member of BABCP (those listed as provisional members were not contacted); listed as practising CBT; a contact email address present on their BABCP profile; their BABCP profile needed to specify that they treat those suffering from depression.

Therapists in this sample were obtained via the BABCP website using the 'Find a Therapist' function, then the 'Geographical Search' option. All therapists within a certain geographical area (e.g. Greater Manchester) who met the inclusion criteria were contacted and invited to complete the questionnaire. The geographical areas from which therapists were contacted were chosen at random, but were limited to only areas in England as guidelines can differ in Scotland, Wales and Ireland. The geographical areas selected were: Derbyshire, Nottinghamshire, Greater Manchester, Northumberland and Bristol.

Therapists were contacted via email, and of the >100 accredited therapists contacted, 12 therapists replied. Age ranged between 46 and 61 years, average age was 52 years. Eight therapists were female and four were male. All participants were white British. Participants were not selected on the basis of how much experience they had, nor were they asked if they had had previous positive or negative experiences with cCBT. Thus, rather than asking about personal experience, focus in this study was on general attitude. In this study, the mean age was higher compared to the large-scale randomized controlled CoBalT trial by Nicola Wiles and colleagues (mean age was 39 years; Wiles *et al.* 2013).

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The questionnaire

Qualitative data was collected with a questionnaire containing open questions that focused on participants' views and experiences of BTB or other cCBT computer programs for depression. A few sample questions are 'Do you think the standardized style of "Beating the Blues" is appropriate for treating a unique and varied illness like depression?' and 'The "mood diary" is used to log the emotions of a patient while they use "Beating the Blues". Do you believe dwelling on negative thoughts in this way would be a helpful or harmful experience when discussing emotions with a therapist is not part of the treatment?'

Analysis

Anonymity was assured by using a unique identifier (e.g. ID1) that was chosen by participants at the same time as their consent was collected. For this study, we used thematic analysis (Braun & Clarke, 2006) which is an 'abbreviated' approach to grounded theory (Willig, 2001) as compared to the 'full' approach of Glaser & Strauss (1967). Thus, while the 'full' grounded theory approach builds on an iterative process of data collection, coding, analysis and planning to allow for building theory grounded in the data, the abbreviated version of grounded theory works with the original data only. Participants' responses to the open questions in the questionnaire were analysed applying the six-phase model proposed by Braun & Clarke (2006): (1) reading and rereading the data, noting down initial ideas; (2) initial coding of interesting features of the data; (3) collating codes into potential themes; (4) reviewing the themes and checking them against the initial coded extracts; (5) continued refining of themes and the way in which they explain the analysis, allowing for themes to be labelled; (6) selecting extracts which illustrated the themes. Having such a small sample allowed for all opinions to be debated by the two authors. Both authors independently of each other formulated themes and selected quotes that were thought (1) to capture the gist of the themes, and (2) to demonstrate differing views between participants. Following detailed discussions, the final themes and quotes were agreed.

Results

Three major themes emerged in the participants' responses: (1) the standardized nature of cCBT is suitable for depression, (2) the importance of the therapeutic relationship in CBT and cCBT, and (3) the pros and cons with cCBT as an alternative to CBT. The themes will be presented in detail below.

The standardized nature of cCBT is suitable for depression

The majority of participants reported that, in their view, the standardized nature of cCBT is not a problem when treating depression.

> Yes [the standardized nature of cCBT is appropriate for treating depression] – [but] it does depend on the person and their problem but I think it can be helpful to a certain extent. (ID1)

In addition, several therapists emphasized that patient motivation for treatment is particularly important in cCBT, and cCBT is useful only to those who are highly motivated for computerized therapy.

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> Probably okay for . . . patients [who] are well motivated to use the prograM and carry out suggested homework. (ID6)

Many of the therapists also pointed out that while in CBT, the therapist has the opportunity to ‘encourage patients to believe they can manage their mood differently in the future’ (ID8), this is not an option in cCBT. Therefore, the therapists suggested that cCBT should be used as an initial step to orientate and motivate patients for psychological treatment before they start face-to-face CBT. However, even at this stage there is a risk that the patient may feel that cCBT is not helpful.

> cCBT may or may not help while patients are waiting for therapy, i.e. psychoeducation and socialization, etc. (ID5)

Majority of therapists who participated in the study outlined the manner in which they deliver CBT. In doing so, they explained that a fair number of elements in CBT have been incorporated into cCBT while other elements are less common. The elements that participants feel are integral to successful face-to-face CBT and are incorporated in the software include: cognitive restructuring of unhelpful core beliefs and thoughts, relapse prevention techniques, and demonstrations of how to manage moods in the future. But, other features in CBT were thought to be more difficult or even impossible to incorporate into cCBT. For example, interaction with the therapist, non-verbal communication, mutual formulation of a treatment plan, mindfulness training, monitoring recurrent depression, and improving the patient’s understanding of why they have not been able to improve on their own.

> cCBT cannot provide some of the things that CBT centres around [for example] . . . mindfulness for recurrent depression. (ID1)

> 70–80% of communication is through body language, and a computer cannot give you that. (ID9)

> The problem with cCBT is poor [patient] motivation, and there is no real monitoring of risks. (ID11)

The importance of the therapeutic relationship in CBT and cCBT

Therapists underlined that the alliance is the core element of any psychotherapy and that recovery is not possible without it. The therapist’s capacity to listen empathically is crucial, together with ‘a willingness to listen and “be human”’ (ID8) and ‘using the core conditions of warmth, empathy, genuineness, respect, non-judgemental attitude’ (ID2). Thus, many of the therapists expressed concern that unguided cCBT may not be clinically effective.

> An essential part of CBT of course is the therapeutic relationship, or for any other therapy for that matter . . . BtB does not provide these features. (ID10)

A couple of the participants alluded to the importance of showing the patient that they are more than just ‘another name on your list’. One therapist questioned whether unguided cCBT can make a patient feel that they are an important person in their own right.

> Computerized CBT seems so impersonal – patients must feel like numbers. (ID7)

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In contrast, other therapists argued that the absence of a therapeutic relationship in BtB is not a problem as the educative approach in this treatment approach is appropriate for patients with a mild level of depression.

> No [the self-help nature of BtB is not detrimental to treatment] – there is a significant amount of psychoeducation and health education in BtB. (ID3)

Several participants mentioned that there will always be some patients who feel more comfortable to communicate with a computer. In addition, one participant suggested that although a computer is unable to show empathy, some patients may take comfort from the fact that a software package to treat depression has been put in place.

> I think the existence of a program for self-help may be [seen as] a kind of empathy because the patient will realize that they are not alone and others have had a similar problem. Someone has cared enough about the problem that they have designed a computer program to help them. (ID3)

A few participants suggested that adequately trained practitioners can provide the necessary level of support to people with mild depression as they can review progress, risks and software-related problems.

> My understanding is that PWPs [psychological wellbeing practitioners] should help set up patient/s at the start of the session and then do a quick review of risk, progress, user problems, etc. (ID8)

However, the therapists pointed out that there are moments in the therapy which might be difficult for PWPs to manage. For example, when a patient has identified their negative thought patterns, how would they be able to cope with this realization without having the option of communicating with a therapist?

> They feel even worse because they realize some of the problem is to do with their inner world. They then blame themselves. (ID12)

Pros and cons with cCBT as an alternative to CBT

Despite having certain issues, all participants agreed that cCBT is a viable complement to CBT which is required due to the high costs of CBT together with a continued rising demand for it.

> I do not believe it is an alternative [to CBT], I believe it is something that could be considered along with bibliotherapy, psychoeducation courses, CBT group therapy and individual therapy. (ID6)

Majority of participants reported that they believed that cCBT should be used on step one only, with patients without comorbidity, and only when the patient has expressed that they would like to do cCBT.

> [whether cCBT can be successful] depends on the individual and whether the case is mild, moderate or severe. (ID4)

> BtB could provide psychoeducation while people are on waiting lists – to get the ball rolling. (ID12)

> Give patients the choice [to do BtB] at the first step – if they have mild depression. (ID4)

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Discussion

This research set out to explore the views on cCBT among a self-selected group of accredited CBT therapists and three key themes were identified: (1) the standardized nature of cCBT for depression, (2) the importance of the therapeutic relationship in CBT and cCBT, and (3) the pros and cons with cCBT as an alternative to CBT.

The participants reported that they viewed cCBT to be well suited for treating depression, but only when the patient presents with mild depression. Thus, the therapists appeared to disagree with the recommendation in NICE guidelines (2009) that cCBT is an adequate treatment for patients with moderate as well as mild depression. However, our results concur with a review of the literature on barriers to uptake of computer-based therapies, where practitioners were less positive about computer-based therapies than were patients (Waller & Gilbody, 2009). In similar, a national survey of accredited CBT therapists' attitudes towards CBT self-help showed that the CBT therapists generally saw self-help interventions as useful when supplementing or continuing one-to-one work with an accredited CBT practitioner; however, only a relatively small percentage (10.6%) recommended cCBT to their patients (MacLeod *et al.* 2009).

Several of the accredited therapists in this study emphasized that patient motivation is a crucial factor in cCBT without therapist guidance because the patient in this type of treatment does not receive regular support from a therapist. The issue of patient motivation in cCBT has been widely discussed (e.g. Powell *et al.* 2012; Graham *et al.* 2013; Wilhelmsen *et al.* 2013) and, in some studies, patient motivation has been linked to attrition (Christensen *et al.* 2009; Melville *et al.* 2010; Wilhelmsen *et al.* 2013). In turn, this finding may reflect research results which indicate that a substantial number of patients allocated to cCBT do not start their treatment (e.g. Waller & Gilbody, 2009). Moreover, it is safe to suggest that patients' motivation for treatment is related to their understanding of the treatment (Calkins *et al.* 1997; Meyer *et al.* 2002; Makaryus & Friedman, 2005).

Some of the views expressed by the practitioners who participated in this study showed that they agreed on aspects of the NICE recommendations as well as research reports, e.g. that professional support during cCBT enhances outcome (Kaltenthaler *et al.* 2006; NICE, 2009; Newman *et al.* 2011).

At other times, participants expressed views that are in conflict with the evidence-based viewpoint; for example, participants suggested that cCBT should be only for mild symptoms while NICE (2009) as well as researchers (e.g. Pittaway *et al.* 2009) have suggested that cCBT is beneficial for adults with both mild and moderate depression. Second, in contrast to the evidence base, some participants purported that psychoeducation but not guidance should be viewed as a critically important feature in any cCBT package. In contrast, research has found that the effect of psychoeducation is 'clinically negligent' but guidance is associated with greater effectiveness (Gellatly *et al.* 2007). Also contrary to research findings (Ormrod *et al.* 2010; Anderson *et al.* 2012; Barazzone *et al.* 2012), participants expressed concern that a cCBT package does not allow the development of a therapeutic relationship.

Since the present study has a questionnaire format with open questions, the researchers were prevented from using follow-up questions to explore further what were the therapists' reasons and rationale for taking their stance. However, the results seem to suggest that the implementation of evidence-based practice and policy remain a challenge in clinical practice. In particular, in the discussion of the gap between research findings and CBT practice, two

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sets of barriers to dissemination of research findings have been identified (Shafran *et al.* 2009, p. 903). The first set includes 'commonly held beliefs among clinicians' about, e.g. the limited relevance of research trials to clinical practice and the importance of common factors (the therapist is more important for treatment outcome than the specific treatment protocol). The second set includes 'gaps in our knowledge about treatments, their delivery and training modes'. Shafran *et al.* presented eight recommendations to facilitate the utilization of empirically supported CBT protocols in routine practice, for example that practitioners should have easy access to treatment guidelines and manuals which state how the clinical trials address comorbidity, and they should have easy access to training in diagnostic assessments and routine outcome measures.

The participants in the present study pointed out a number of benefits of cCBT such as low costs, which will lead to expansion in treatment availability, flexibility, which means that patients can access the treatment program at a time and place that is convenient for them, and, cCBT was also thought to offer privacy. These advantageous features were also reported in previous studies (Kenwright *et al.* 2005; Griffiths & Christensen, 2007; Beattie *et al.* 2009; Green & Iverson, 2009; Gerhards *et al.* 2011). In summary, cCBT provides people who suffer from depression with the opportunity to access psychological treatment delivered over the Internet in the privacy of their own home which allows them to avoid 'long waiting lists, increase convenience and confidentiality, and lessen stigma' (Marks *et al.* 2007, p. 473).

While the majority of participants suggested that professional support would not be required in cCBT delivered to patients with mild depression, other studies have found that the addition of support to cCBT may be a way of improving adherence (Palmqvist *et al.* 2007; Spek *et al.* 2007, but see Murray *et al.* 2007). A couple of the participants in our study suggested that an 'informed support worker' could review progress, monitor risks and help solve problems with the software. This finding lends support to previous research which found that support from lay people (Angermeyer *et al.* 2001; Oliver *et al.* 2005) and technicians (Titov *et al.* 2010) are commonly seen among people with mental health problems engaged in computerized treatment. Indeed, this could be because the therapy is accessed via a computer program, and therefore the support that the patient needs requires less skills than in face-to-face therapies. Moreover, as suggested in one study (Gerhards *et al.* 2011, p. 124), adding (professional) support might endanger the appealing aspects of cCBT including 'accessibility, low costs, and independence on availability of healthcare professionals'.

Several participants in this study emphasized the importance of offering patients the choice of what type of treatment they wish to undergo. Since an estimated two thirds of the adult population in the UK who have a diagnosable depression are hidden, and thus do not receive any treatment (Department of Health, 2007), it seems fair to suggest that we do not know what type of treatment and support, if any, these people wish to undergo. A related issue is whether people in general have sufficient knowledge about CBT to allow them to choose, e.g. between face-to-face and cCBT. However, the increasing distribution of knowledge about CBT treatment over the Internet and via software programs is likely to lead to a growing knowledge and understanding of CBT in the general population.

As this research used qualitative method to examine a small self-selected sample, there are a number of methodological concerns that need to be highlighted. An important limitation is the small sample size. More than 100 BABCP-accredited therapists were approached; however, only 12 chose to complete the questionnaire. In addition, the average age (52.25 years) of the therapists who participated in the study is perhaps not representative of the population, and

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younger therapists may have different views on computerized forms of therapy. Furthermore, therapists were contacted by email which again may have limited the number of therapists who were made aware of the study. Finally, participants were recruited using BABCP's online CBT Register, which inadvertently excluded therapists who opt out of the register. A future study involving accredited practitioners should attain the whole contact list of practitioners from BABCP.

In agreement with many qualitative researchers, we believe that it is important for qualitative researchers to demonstrate quality in their research (e.g. Yardley & Moss-Morris, 2009, but see, for example Buchanan, 1992). Despite this general agreement, there is no consensus on how quality in qualitative research should be evaluated (see, e.g. Hefferon & Gil-Rodriguez, 2011). In this study, we made use of guidelines summarized by Golafshani (2003) who concluded that 'Reliability and validity are conceptualized as *trustworthiness*, *rigor and quality* in qualitative paradigm' (p. 604). In our study, we added a third criterion, *impact and importance* (Yardley, 2000, 2008). Our evaluation of the development of the study design and questionnaire as well as the data collection and analysis showed that these procedures were undertaken in a systematic and rigorous manner. Thus, the study's trustworthiness, or the extent to which the findings could present a true picture of the phenomenon under study, suggested that the findings had a good quality. A future study could confirm the findings' credibility by triangulating the findings from this study using, e.g. focus groups or interviews. However, the rigor and quality of the study was limited by the usage of a questionnaire with open-ended questions, which most likely lowered the degree to which the participants were able to fully disclose their views on cCBT. On the other hand, the questionnaire format removed biases that pervade many other qualitative data collection methods, for example, the interviewer–interviewee relationship in the individual interview.

In conclusion, the accredited therapists that took part in this study agreed that cCBT is a useful complement to face-to-face therapy as more patients can be provided with therapy at a lower cost while maintaining treatment benefit. However, some of the views that the participants expressed, for example that a therapeutic relationship cannot be formed in cCBT, are incorrect from an evidence-based viewpoint. This finding suggests that more work is needed to improve the implementation of evidence-based practice and policy, i.e. to implement evidence-based treatment protocols. Nevertheless, the possibility of standardizing aspects of CBT with software programs offers a strategy for increasing the availability of CBT. Challenges ahead for clinical practitioners and researchers lie in ascertaining for which patients in which settings cCBT is beneficial and adding appropriate support (i.e. laymen/technician, therapist support) to patients who undergo unguided cCBT.

Main points

- Participants in the study saw that cCBT for individuals with depression is an important alternative to face-to-face CBT.
- In line with current empirical research, several participants emphasized the critical importance of patients' motivation for being able to engage in cCBT.
- Some participants thought that an important limitation with cCBT is that it can only be used successfully for individuals with mild depression. This assumption goes against NICE guidelines and accumulating evidence which suggests that cCBT can be used to treat people with both mild and moderate depression.

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- Other participants expressed concern that it is not feasible to create a therapeutic relationship in cCBT; however, a number of studies have suggested that aspects of a relationship is present in cCBT (Ormrod *et al.* 2010; Anderson *et al.* 2012).
- CBT therapists and researchers are facing the task to improve the knowledge and evidence on what patient groups can benefit from CCBT.

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Declaration of Interest

None.

Ethical standards

The study was approved by the Social Sciences School Research Ethics Committee (SREC), Nottingham Trent University, before it was conducted.

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

Recommended follow-up reading

Anderson R, Spence S, Donovan C, March S, Prosser S, Kenardy J (2012). Working alliance in online cognitive behavior therapy for anxiety disorders in youth: comparison with clinic delivery and its role in predicting outcome. *Journal of Medical Internet Research* **14**, e88.

Ormrod J, Kennedy L, Scott J, Cavanagh K (2010) Computerised cognitive behavioural therapy in an adult mental health service: a pilot study of outcomes and alliance. *Cognitive Behaviour Therapy* **39**, 188–192.

Shafran R, Clark DM, Fairburn CG, Arntz A, Barlow DH, Ehlers A, Freeston M, Garety PA, Hollon SD, Ost LG, Salkovskis PM, Williams JM, Wilson GT (2009). Mind the gap: Improving the dissemination of CBT. *Behaviour Research and Therapy* **47**, 902–909.

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**, 705–712.

References

Anderson R, Spence S, Donovan C, March S, Prosser S, Kenardy J (2012). Working alliance in online cognitive behavior therapy for anxiety disorders in youth: comparison with clinic delivery and its role in predicting outcome. *Journal of Medical Internet Research* **14**, e88.

Angermeyer MC, Matschinger H, Riedel-Heller SG (2001). What to do about mental health disorder – help seeking recommendations of the lay public. *Acta Psychiatrica Scandinavica* **103**, 220–225.

https://doi.org/10.1017/S1754470X16000131 Published online by Cambridge University Press

Barazzone N, Cavanagh K, Richards DA (2012). Computerised cognitive behavioural therapy and the therapeutic alliance: a qualitative enquiry. *British Journal of Clinical Psychology* **51**, 396–417.

Beattie A, Shaw A, Kaur S, Kessler D (2009). Primary-care patients' expectations and experiences of online cognitive behavioural therapy for depression: a qualitative study. *Health Expectations* **12**, 45–59.

Braun V, Clarke V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* **3**, 77–101.

Buchanan DR (1992). An uneasy alliance: combining qualitative and *q*uantitative *r*esearch methods. *Health Education Quarterly* **19**, 117–357.

Calkins DR, Davis RB, Reiley P, Phillips RS, Pineo KL, Delbanco TL, Iezzoni LI (1997). Patient-physician communication at hospital discharge and patients' understanding of the postdischarge treatment plan. *Archive of Internal Medicine* **157**, 1026–1030.

Christensen H, Griffiths KM, Farrer L (2009). Adherence in internet interventions for anxiety and depression. *Journal of Medical Internet Research* **11**, e13.

De Graaf LE, Gerhards SAH, Arntz AR, Riper H, Metsemakers JFM, Evers SMAA, Severens JL, Widdershoven G, Huibers MJH (2009). Clinical effectiveness of online computerized cognitive behavioural therapy without support for depression in primary care: a randomized trial. *British Journal of Psychiatry* **195**, 73–80.

Department of Health (2007). Improving Access to Psychological Therapies (IAPT) programme: computerised cognitive behavioural therapy implementation guidelines. (http://www.scie-socialcareonline.org.uk)

Du E, Quayle E, Macleod H (2013). Service providers' perceptions on the uptake of computerised cognitive behavioural therapy (cCBT). *Psychology* **11**, 213–233.

Foroushani S, Schneider P, Assareh N (2011). Meta-review of the effectiveness of computerised CBT in treating depression. *BMC Psychiatry* **11**, 131.

Gellatly J, Bower P, Hennessy S, Richards D, Gilbody S, Lovell K (2007). What makes self-help interventions effective in the management of depressive symptoms? Meta-analysis and meta-regression. *Psychological Medicine* **37**, 1217–1228.

Gerhards SAH, Abma TA, Arntz A, de Graaf LE, Evers SMAA, Huibers MJH, Widdershoven GAM (2011). Improving adherence and effectiveness of computerised cognitive behavioural therapy without support for depression: a qualitative study of patient experiences. *Journal of Affective Disorders* **129**, 117–125.

Gerhards SAH, De Graaf LE, Jacobs LE, Severens JL, Huibers MJH, Arntz A, Riper H, Widdershoven G, Metsemakers JFM, Evers SMAA (2010). Economic evaluation of online computerised cognitive-behavioural therapy without support for depression in primary care: randomised trial. *British Journal of Psychiatry* **196**, 310–318.

Gilbody S, Littlewood E, Hewitt C, Brierley G, Tharmanathan P, Araya R, Barkham M, Bower P, Cooper C, Gask L, Kessler D, Lester H, Lovell K, Parry G, Richards DA, Andersen P, Brabyn S, Knowles S, Shepherd C, Tallon D, White D (2015). Computerised cognitive behaviour therapy (cCBT) as treatment for depression in primary care (REEACT trial): large scale pragmatic randomised controlled trial. *British Medical Journal* **351**, 351.

Glaser BG, Strauss AL (1967). The discovery of grounded theory. London: Weidenfield and Nicolson.

Golafshani N (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report* **8**, 597–607.

Graham AL, Cha S, Papandonatos GD, Cobb NK, Mushro A, Fang Y, Niaura RS, Abrams DB (2013). Improving adherence to web-based cessation programs: a randomized controlled trial study protocol. *Trials* **14**, 48.

Green KE, Iverson KM (2009). Computerised cognitive-behavioural therapy in a stepped care model of treatment. *Professional Psychology Research and Practice* **40**, 96–103.

https://doi.org/10.1017/S1754470X16000131 Published online by Cambridge University Press

Griffiths KM, Christensen H (2007). Internet-based mental health programs: a powerful tool in the rural medical kit. *Australian Journal of Rural Health* **15**, 81–87.

Hefferon K, Gil-Rodriguez E (2011). Reflecting on the rise in popularity of interpretive phenomenological analysis. *The Psychologist* **24**, 756–759.

Høifødt RS, Lillevoll KR, Griffiths KM, Wilsgaard T, Eisemann M, Waterloo K, Kolstrup N (2013). The clinical effectiveness of web-based cognitive behavioral therapy with face-to-face therapist support for depressed primary care patients: randomized controlled trial. *Journal of Medical Internet Research* **15**, e153.

IAPT (n.d.). About us (http://www.iapt.nhs.uk/about-iapt). Improving Access to Psychological Therapies. Accessed September 2013.

Kaltenthaler E, Brazier J, De Nigris E, Tumur I, Ferriter M, Beverley C, Parry G, Rooney G, Sutcliffe P (2006). Computerised cognitive behaviour therapy for depression and anxiety update: a systematic review and economic evaluation. *Health Technology Assessment* **10**, 1–186.

Kenicer D, McClay A, Williams C (2012). A national survey of health service infrastructure and policy impacts on access to computerised CBT in Scotland. *BMC Medical Informatics and Decision Making* **12**, 102–107.

Kenwright M, Marks I, Graham C, Franses A, Mataix-Cols D (2005). Brief scheduled phone support from a clinician to enhance computer-aided self-help for obsessive-compulsive disorder: randomized controlled trial. *Journal of Clinical Psychiatry* **61**, 1499–1508.

Koeser L, Dobbin A, Ross S, McCrone P (2013). Economic evaluation of audio based resilience training for depression in primary care. *Journal of Affective Disorders* **149**, 307–312.

MacLeod M, Martinez R, Williams C (2009). Cognitive Behaviour Therapy self-help: who does it help and what are its drawbacks? *Behavioural and Cognitive Psychotherapy* **37**, 61–72.

Makaryus AN, Friedman EA (2005). Patients' understanding of their treatment plans and diagnosis at discharge. *Mayo Clinic Proceedings* **80**, 991–994.

Marks IM, Cavanagh K, Gega L (2007). Hands on help: computer-aided psychological therapies. London: Maudsley Monograph.

McHugh RK, Whitton SW, Peckham AD, Welge JA, Otto MW (2013). Patient preference for psychological vs pharmacologic treatment for psychiatric disorders; a meta-analytic review. *Journal of Clinical Psychiatry* **74**, 595–602.

Melville KM, Casey LM, Kavanagh DJ (2010). Dropout from internet-based treatment for psychological disorders. *British Journal of Clinical Psychology* **49**, 455–471.

Meyer B, Pilkonis PA, Krupnik JL, Egan MK, Simmens SJ, Sotsky SM (2002). Treatment expectations, patient alliance, and outcome: further analyses from the national institute of mental health treatment of depression collaborative research programme. *Journal of Consulting Clinical Psychology* **70**, 1051–1055.

Murray K, Schmidt U, Pombo-Carril MG, Grover M, Alenya J, Treasure J, Williams C (2007). Does therapist guidance improve uptake, adherence and outcome from a CD-ROM based cognitive-behavioural intervention for the treatment of bulimia nervosa? *Computers and Human Behaviour* **23**, 850–859.

National Health Service Centre for Reviews and Dissemination (2002). Improving the recognition and management of depression in primary care. *Effective Health Care* **7**, 1–11.

Newman MG, Szkodny LE, Llera SJ, Przeworski A (2011). A review of technology-assisted self-help and minimal contact therapies for anxiety and depression: is human contact necessary for therapeutic efficacy? *Clinical Psychology Review* **31**, 89–103.

NICE (2009). Depression in adults: the treatment and management of depression in adults. (https://www.nice.org.uk/guidance/cg90/chapter/1-guidance#footnote_12). National Institute for Health and Care Excellence.

Oliver MI, Pearson N, Coe N, Gunnel D (2005). Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. *British Journal of Psychiatry* **186**, 297–301.

https://doi.org/10.1017/S1754470X16000131 Published online by Cambridge University Press

Ormrod J, Kennedy L, Scott J, Cavanagh K (2010). Computerised cognitive behavioural therapy in an adult mental health service: a study of outcomes and alliance. *Cognitive Behaviour Therapy* **39**, 188–192.

Palmqvist B, Carlbring P, Andersson G (2007). Internet-delivered treatments with or without therapist input: does the therapist factor have implications for efficacy and cost? *Expert Review of Pharmacoeconomics & Outcomes Research* **7**, 291–297.

Pittaway S, Cupitt C, Palmer D, Arowobusoye N, Milne R, Holttum S, Pezet R, Patrick H (2009). Comparative, clinical feasibility study of three tools for delivery of cognitive behavioural therapy for mild to moderate depression and anxiety provided on a self-help basis. *Mental Health Family Medicine* **6**, 145–154.

Powell J, Hamborg T, Stallard N, Burls A, McSorley J, Bennett K, Griffiths KM, Christensen H (2012). Effectiveness of a web-based cognitive-behavioral tool to improve mental well-being in the general population: randomized controlled trial. *Journal of Medical Internet Research* **15**, e2.

Proudfoot J, Goldberg D, Mann A, Everitt B, Marks I, Gray J (2003a). Computerized, interactive, multimedia cognitive behavioural therapy reduces anxiety and depression in general practice: a randomised controlled trial. *Psychological Medicine* **33**, 217–227.

Proudfoot JG (2004). Computer based treatment for anxiety and depression: is it feasible? Is it effective? *Neuroscience and Behavioural Reviews* **28**, 353–363.

Proudfoot JG, Ryden C, Everitt B, Shapiro DA, Goldberg D, Mann A, Tylee A, Marks I, Gray J (2004). Clinical efficacy of computerised behavioural therapy for anxiety and depression in primary care. *British Journal of Psychiatry* **185**, 46–54.

Proudfoot JG, Swain S, Widmer S, Watkins E, Goldberg D, Marks I, Mann A, Gray JA (2003b). The development and beta-test of a computer-therapy program for anxiety and depression: hurdles and lessons. *Computers in Human Behaviour* **19**, 277–289.

Rhodes H, Grant S (2012). A review of computerised cognitive behavioural therapy (cCBT) for depression. *Cumbria Partnership Journal of Research Practice and Learning* **2**, 2–9.

Shafran R, Clark DM, Fairburn CG, Arntz A, Barlow DH, Ehlers A, Freeston M, Garety PA, Hollon SD, Ost LG, Salkovskis PM, Williams JM, Wilson GT (2009). Mind the gap: improving the dissemination of CBT. *Behaviour Research and Therapy* **47**, 902–909.

Spek V, Cuijpers P, Nyklicek I, Riper H, Keyzer J, Pop V (2007). Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: a meta-analysis. *Psychological Medicine* **37**, 319–328.

Titov N, Andrews G, Perminder S (2010). Computer-delivered cognitive behavioural therapy: effective and getting ready for dissemination. *Medicine Reports Limited* **2**, 49–53.

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**, 705–712.

Whitfield G, Williams C (2004). If the evidence is so good – why doesn't anyone use them? A national survey of the use of computerized cognitive behaviour therapy. *Behavioural and Cognitive Psychotherapy* **32**, 57–65.

Wiles N, Thomas L, Abel A, Ridgway N, Turner N, Campbell J, Garland A, Hollinghurst S, Jerrom B, Kessler D, Kuyken W, Morrison J, Turner K, Williams C, Peters T, Lewis G (2013). Clinical effectiveness and cost-effectiveness of cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment-resistant depression in primary care: the CoBalT randomised controlled trial. *Lancet* **381**, 375–384.

Wilhelmsen M, Lillevoll K, Risør M, Høifødt R, Johansen M, 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**, 296–304.

Willig C (2001). *Introducing Qualitative Research in Psychology: Adventures in Theory and Method.* Buckingham: Open University Press.

https://doi.org/10.1017/S1754470X16000131 Published online by Cambridge University Press

Winter SE, Barber JP (2013). Should treatment for depression be based more on patient preference? *Patient Preference and Adherence* **7**, 1047–1057.

Yardley L (2000). Dilemmas in qualitative health research. *Psychology and Health* **15**, 215–228.

Yardley L (2008). Demonstrating validity in qualitative psychology. In: *Qualitative Psychology: A Practical Guide to Methods*, 2nd edn (ed. A. Smith), pp. 235–251). London: Sage.

Yardley L, Moss-Morris R (2009). Current issues and new directions in psychology and health: increasing the quantity and quality of health psychology research. *Psychology & Health* **24**, 1–4.

Learning objectives

After reading this paper the reader will be able to:

(1) Understand how a group of therapists view cCBT.
(2) Appreciate the need for innovations in CBT delivery formats (e.g. internet-based, computerized) and treatments based on CBT principles delivered by health professionals other than psychotherapists.
(3) Appreciate strength and limitations of cCBT as a treatment for patients with depression.

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