

Clinicians' Attitudes Towards the Use of Computerized Cognitive Behaviour Therapy (cCBT) with Children and Adolescents

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Background: Research has begun to examine the effectiveness of computerized cognitive behaviour therapy (cCBT) with children and adolescents. Although cCBT appears promising, the attitudes of clinicians towards this type of intervention with children and young people have not been assessed, yet these are important in determining when and if cCBT will be offered. **Aims:** To survey clinicians' attitudes towards cCBT with children and adolescents. **Method:** A self-report questionnaire was completed by 43 mental health professionals attending a conference. **Results:** Clinicians were cautious but generally positive about the use of cCBT with children and adolescents, particularly for the delivery of prevention programmes and in the treatment of mild/moderate problems. Few felt that cCBT should be available freely online without any professional support. Indeed, the lack of a therapeutic relationship and professional support were identified as the biggest problems, whilst the potential to use cCBT at home was the greatest advantage identified. **Conclusions:** This survey suggests that clinicians are generally positive about the use of cCBT with children and adolescents for the prevention and treatment of mild/moderate problems. Further research is required to address clinicians' concerns about the effectiveness of cCBT for more substantial problems and the level of therapeutic support required.

Keywords: Computer, CBT, attitudes, children, adolescents, clinicians.

Introduction

Emotional disorders are common in children and adolescents in the UK; at any one time 3.9% of children aged 13–15 will suffer from an anxiety disorder, and 1.9% will be experiencing major depression (Ford, Goodman and Meltzer, 2003a). For such disorders, cognitive behaviour therapy (CBT) has been found to be an effective treatment (Compton et al., 2004; Merry, McDowell, Wild, Bir and Cunliffe, 2004; Soler and Weatherall, 2007).

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However, the number of children who might receive CBT is currently limited by two key factors. First, a recent national survey of child mental health specialists in the UK suggests that the availability of appropriately trained CBT therapists may be limited (Stallard, Udwin, Goddard and Hibbert, 2007). This indicates a specific need to increase the number of highly skilled CBT therapists but also a general need to increase the capacity of more limited CBT expertise within the workforce. There is some evidence that limited training and supervision of non-mental health specialists in the delivery of manualized CBT programmes with children can be effective (Stallard, Simpson, Anderson, Hibbert and Osborn, 2007; Stallard, Simpson, Anderson and Goddard, 2008). The delivery of manualized programmes by non-mental health specialists through computers would therefore be a development worth exploring.

A second issue relates to accessibility, and at present very few children and adolescents in the UK with emotional problems receive help from specialist mental health services (Ford, Goodman and Meltzer, 2003b). In order to improve access to effective specialist interventions such as CBT, there is a need to consider how these methods can be adapted and provided in different settings through different media. The use of self-help technologies, school based prevention programmes, and computerized interventions all offer the potential to increase the availability of CBT.

For adults, computerized CBT (cCBT) has been able to effectively address problems of availability (Griffiths and Christensen, 2007) and provide a practical solution to the lack of trained CBT therapists (Van Den Berg, Shapiro, Bickerstaffe and Cavanagh, 2004). For adult depression, computerized CBT has been found to nearly half the amount of therapist time required compared to face-to-face CBT, whilst retaining effectiveness (Wright et al., 2005). Computerized CBT can also be provided by a range of different professionals such as graduate mental health workers and assistant psychologists (Department of Health, 2007), which will reduce pressure on CBT therapists. Thus, for a number of reasons, cCBT may help provide CBT to children and adolescents who otherwise might not gain access to treatment.

Computerized CBT

Computerized CBT refers to the delivery of interventions based on CBT via computer technology. This can be conducted with or without supervision and can be accessed via a CD-ROM or over the internet. Most software packages are interactive with exercises, quizzes and videos as well as text. A number of different areas are covered depending on the packages, such as the link between thoughts, feelings and behaviour, identifying and challenging negative thinking patterns, and relaxation techniques. In adults, cCBT has been shown to be an effective treatment for a number of emotional disorders such as anxiety and depression (Andersson et al., 2005; Learmonth, Trosh, Rai, Sewell and Cavanagh, 2008; MacKinnon, Griffiths and Christensen, 2008; Proudfoot et al., 2004), panic disorder (Bergstrom et al., 2008), agoraphobia (Kiropoulos et al., 2008), obsessive-compulsive disorder (Kenwright, Marks, Graham, Franses and Mataix-Coles, 2005; Marks et al., 2003), and post-traumatic stress disorder (Litz, Engel, Bryant and Papa, 2007). Consequently cCBT is now recommended by the National Institute for Health and Clinical Excellence for the treatment of mild to moderate depression and anxiety in adults (NICE, 2008). Computerized CBT is now also part of the UK's Improving Access to Psychological Therapies Initiative (Department of Health, 2007).

Computerized CBT with children and adolescents

The current literature has not examined the use of cCBT with children and adolescents to the same extent, although initial results are encouraging. Abeles et al. (2009) conducted a case series of the program Stressbusters with adolescents aged 12–16 with depression and found significant reductions in depression and anxiety, with improvements in global functioning and cognitions. O'Kearney, Gibson, Christensen and Griffiths (2006) and O'Kearney, Kang, Christensen and Griffiths (2009) used the program MoodGym with a non-clinical population of adolescents age 15–16 and found that the program reduced the number of those classed as high risk for depression. Cunningham et al. (2009) reported a case series of the program Cool Teens, which appeared to be clinically effective when used with adolescents aged 14–16 with anxiety disorders. March, Spence and Donovan (2009) and Spence, Holmes, March and Lipp (2006) reported randomized controlled trials of the program BRAVE Online when used with children aged 7–12 with anxiety disorders, showing significant improvements compared to those in a control group on diagnostic status, anxiety and depression symptoms, global functioning, and behaviour. Finally, research has examined the use of cCBT for the treatment of chronic pain in children and adolescents (Palermo, Wilson, Peters, Lewandowski and Somhegyi, 2009). Thus whilst these studies have demonstrated the potential efficacy of cCBT with children and adolescents, there are relatively few programmes developed specifically for children and young people and only limited research has yet been undertaken.

Clinicians' attitudes towards cCBT

An important factor in determining whether cCBT programmes are used with patients may be the attitudes of clinicians. For example, Whitfield and Williams (2004) found that clinicians reported a number of concerns that would need to be addressed before they began using cCBT, such as receiving appropriate training and additional research demonstrating effectiveness. This survey of CBT therapists in the UK found that just over 2% of those surveyed used cCBT, and only 1% were using this instead of face-to-face therapy. A number also expressed concerns that satisfaction and outcomes would be poor compared to face-to-face CBT (Whitfield and Williams, 2004). A more recent survey (MacLeod, Martinez and Williams, 2009) found that just over 10% of UK based CBT therapists had used cCBT with their patients. Once again a number of concerns about cCBT were identified, including a lack of technological knowledge, lack of availability of software, absence of a therapeutic relationship, and poor motivation from the patient (MacLeod et al., 2009).

These studies surveyed clinicians working in a range of different settings, and therefore some respondents may have worked with children and adolescents. However, no work has yet looked at attitudes towards cCBT amongst clinicians who specifically work with children and adolescents. The aim of this study was to examine the attitudes of mental health professionals towards the use of cCBT for the treatment of mental health problems in children and adolescents aged 7–18.

Method*Participants*

Participants were an opportunistic sample attending a UK national conference: the 2009 annual meeting of the British Association of Behavioural and Cognitive Psychotherapy.

Forty-three mental health professionals completed the survey. The majority were from the UK (90%, $n = 26$), with clinical psychologists constituting the largest professional group (56%, $n = 24$), followed by researchers (9%, $n = 4$), social workers (7%, $n = 3$), nursing staff (7%, $n = 3$), other professionals (7%, $n = 3$), counsellors/therapists (5%, $n = 2$), psychiatrists (2%, $n = 1$), and 7% ($n = 3$) who belonged to more than one professional group.

Measures

A self-report questionnaire was developed based upon findings in previous literature on cCBT with adults. For example, previous research has demonstrated that participants may find cCBT too demanding (Andersson et al., 2005), and/or have problems with computer or internet access (Carlbring, Westling, Ljungstrand, Ekselius and Andersson, 2001; Kiropoulos et al., 2008). Perhaps as a result of these problems it has been found that cCBT has a high drop out rate (Waller and Gilbody, 2009). However, other literature suggests that it may be easier to share personal information with a computer than in face-to-face meetings (Gega, Marks and Mataix-Cols, 2004; MacGregor, Hayward, Peck and Wilkes, 2009), and that patients like the way they can access cCBT at home (Graham, Franses, Kenwright and Marks, 2000; MacGregor et al., 2009). In terms of accessibility, cCBT may be useful for those in rural areas (Griffiths and Christensen, 2007), and in terms of availability it has the potential to be available 24 hours a day 7 days a week (Kaltenthaler et al., 2006). Additionally, CBT can be readily adapted to a computerized format (Kenardy and Adams, 1993), and offers the potential to provide earlier access to treatment (Marks, Shaw and Parkin, 1998). Finally, it has been noted that cCBT offers a solution to the lack of trained CBT therapists (Van Den Berg et al., 2004).

The questionnaire addressed the above issues and included a total of 11 questions, 2 of which were open-ended and 9 were fixed choice. This allowed both qualitative and quantitative responses. General areas covered included details on the clinicians' work with children and adolescents, views about potential uses for cCBT in clinical practice, and perceived therapeutic outcomes. Also examined were whether clinicians' would use cCBT, where and with whom cCBT should be used, and perceived problems/concerns and benefits/advantages of cCBT. A copy of the questionnaire is included in the online Appendix at Journals.cambridge.org/BCP.

Procedure

Questionnaires were handed to all those attending a symposium on the use of CBT with children and adolescents. No attendees declined and the vast majority of questionnaires were completed before the symposium began.

Data analysis

Quantitative data were analyzed via descriptive statistics, and qualitative data were subjected to a thematic analysis.

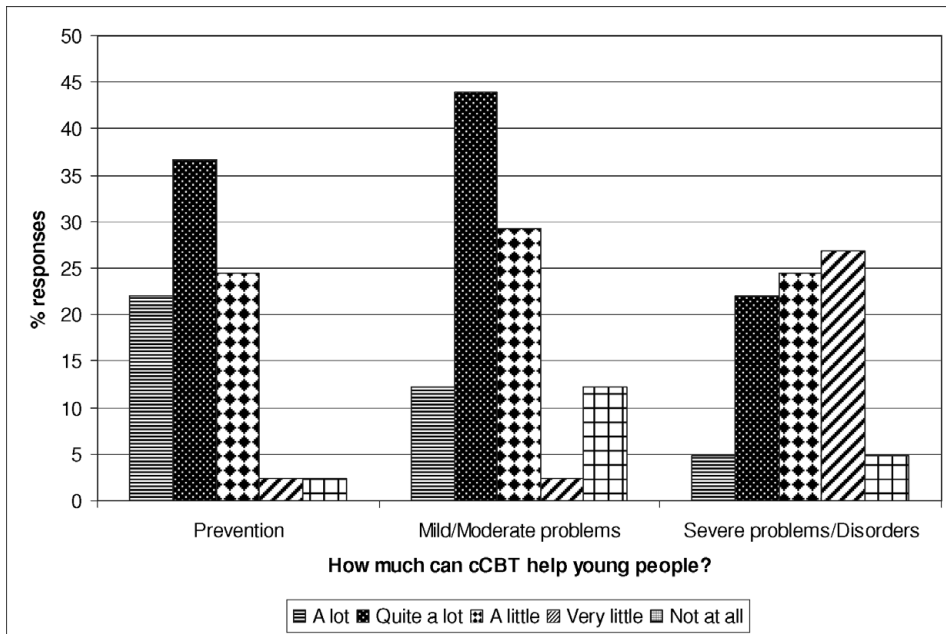


Figure 1. Ratings on potential of cCBT to help children and adolescents

Results

Thirty-seven percent ($n = 15$) of respondents reported using CBT with children and adolescents 80–100% of the time, whilst 22% ($n = 9$) used it none of the time. The remaining 42% ($n = 17$) reported using CBT 20–80% of the time.¹

Potential use and effectiveness of cCBT

A total of 59% ($n = 24$) of respondents rated cCBT as able to help “quite a lot” or “a lot” as a prevention programme and 56% ($n = 23$) as an intervention for mild/moderate problems. However, clinicians were less positive about the use of cCBT to treat more severe disorders with just over a quarter (27%, $n = 11$) reporting that it could help quite a lot or a lot. The results are summarized in Figure 1.

Twenty-nine percent of respondents ($n = 12$) would definitely use cCBT, if available, with children and adolescents. Fifty percent ($n = 21$) would “possibly” do so, no respondents reported they would definitely not, and 9.5% ($n = 4$) were unsure. However, they were less positive about the effectiveness of cCBT compared to face-to-face CBT, with no respondents rating cCBT as “much better” or “better”. A small percentage thought that cCBT would be

¹Due to varying levels of completion, the numbers given here are for those who completed each item, and may not represent the whole sample ($n = 43$). Similarly, percentages are rounded up so may total above 100%.

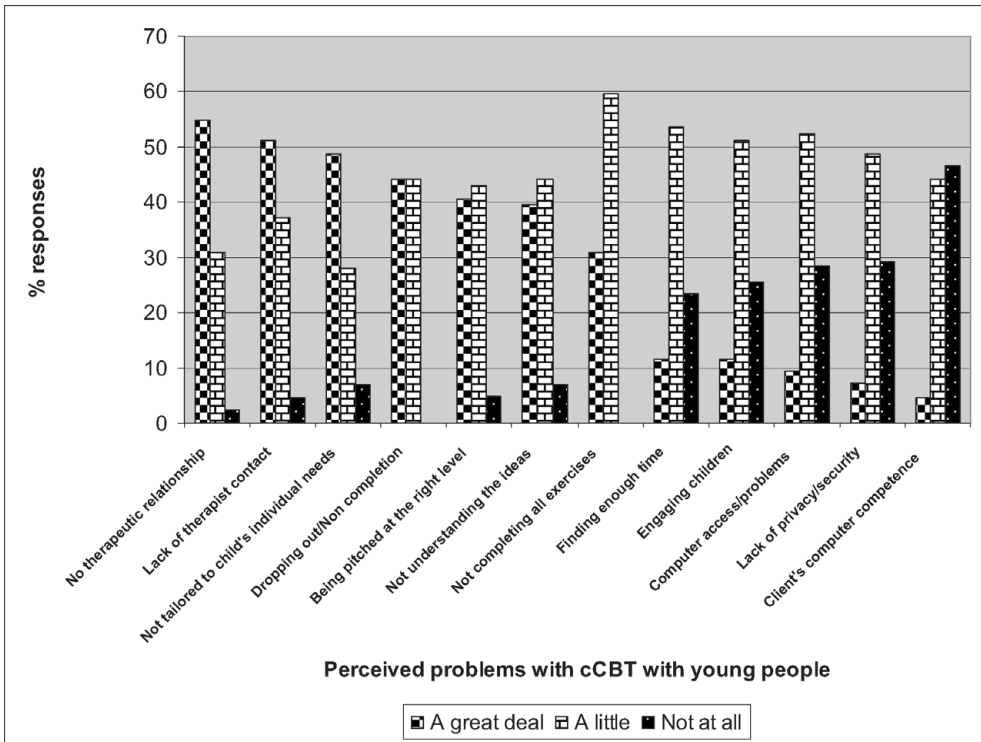


Figure 2. Ratings of potential problems with using cCBT with children and adolescents

equally effective (17%, $n = 7$) but most (59%, $n = 24$) believed that outcomes would be worse or much worse. The remaining 24% ($n = 10$) were unsure.

Delivery of cCBT

In terms of where cCBT should be offered (more than one choice could be given), 86% ($n = 36$) felt it should be available within specialist CAMHS settings, 79% ($n = 33$) in schools and 67% ($n = 29$) in GP surgeries. Only 37% ($n = 15$) felt it should be freely available online, whilst 49% ($n = 20$) were unsure about this. Very few (8%, $n = 3$) felt that cCBT should be offered without any professional support, with 44% ($n = 18$) feeling that this support should be provided by a Tier 2 worker, 25% ($n = 10$) by a Tier 3 worker, and only 8% ($n = 3$) by a teacher.

Perceived advantages and disadvantages of cCBT

Figure 2 summarizes the extent to which respondents endorsed a list of issues as potential problems/disadvantages in using cCBT with children and adolescents. The greatest concerns related to the potential absence of a therapeutic relationship and the lack of therapist contact,

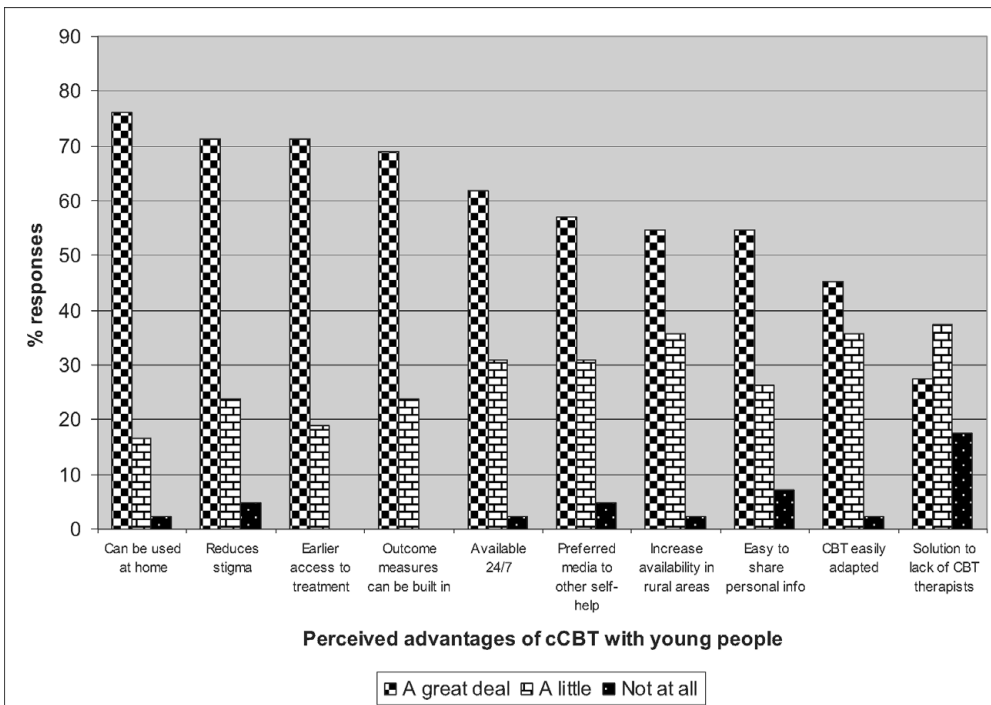


Figure 3. Ratings of potential advantages of using cCBT with children and adolescents

followed by programmes not being tailored to individual needs. Issues that were endorsed less often related to computer problems or lack of access, lack of privacy/security, and the computer competence of the child.

Participants were also asked to rate potential advantages of cCBT with children and adolescents and these are summarized in Figure 3. The greatest perceived benefits/advantages were that cCBT could be used at home, would reduce stigma, and could provide earlier access to treatment. Those issues least endorsed were that personal information could be more easily shared with a computer, CBT being easily adapted to a computerized format, and cCBT being a solution to the lack of CBT therapists. Nonetheless, all the advantages were endorsed relatively highly, with a minimum of a quarter of participants responding “a great deal” for all issues.

The majority (49%, $n = 20$) of respondents were unsure whether they had any concerns about using cCBT with children and adolescents, whilst 32% ($n = 13$) reported that they had concerns, and 20% ($n = 8$) reported having no such concerns. Qualitative descriptions of these concerns were then subjected to a thematic analysis that revealed four themes. The first, “limited potential”, reflected the concerns of clinicians that cCBT is limited in how much it can help children and adolescents. The second theme, “risk management”, reflected those comments about whether computer programmes are able to adequately detect risk factors that may arise during therapy. The third, “support and understanding” reflected clinicians’ concerns that children and adolescents would not understand the theoretical concepts of the

Table 1. Themes relating to professionals concerns with use of cCBT with children and adolescents

Theme	Examples of comments
1. Limited potential	<p>“Child and adolescent mental health concerns occur within particular contexts and the child’s difficulties may be symptoms of family, school or environmental difficulties”</p> <p>“Lack of access to computers”</p> <p>“Making it sufficiently tailored to individual”</p>
2. Risk management	<p>“Picking up ‘risk’ issues”</p> <p>“Other problems may be missed”</p> <p>“A need for the young person to access support if treatment activates wider, distressing or more complex issues”</p>
3. Support and understanding	<p>“Lack of understanding of the programme and no one to explain it to them”</p> <p>“If completely unsupervised (e.g. over the internet) then may not be possible to ensure accurate understanding of rationale and process of intervention- could lead to difficulties with engagement and adherence”</p> <p>“Lack of support. would need very clear explanation in case they got the wrong idea about anything”</p>
4. Lack of therapeutic relationship	<p>“If CBT is based on a relationship and alliance with the therapist then computerized CBT is an oxymoron!”</p> <p>“Lack of therapeutic relationship”</p> <p>“No-one to mitigate against feelings of hopelessness/isolation interfering with engagement/sense possibility for change”</p>
4a. Sub-theme: social isolation	<p>“I think using technology can be helpful as part of psychoeducation and therefore freely available but since many MH problem involve or result in social exclusion I am concerned about the ethics of colluding with this and encouraging it”</p> <p>“Children in my view spend far too much time on computers and I wouldn’t want to discourage the child speaking to a person about their problems. I would be concerned about the ‘isolating’ element”</p> <p>“Electronic media (computers etc) successfully reduce social skills development and increase isolation – why support this further with ECBT?”</p>

programme. Additionally, this theme reflected the view that children and adolescents would not get sufficient support from a mental health professional to facilitate such learning. The final theme, “lack of a therapeutic relationship” reflected worries that cCBT would occur in the absence of a supportive therapeutic relationship. A sub-theme within this, labelled “social isolation”, reflected specific concerns that cCBT could exacerbate the social isolation of some children and adolescents. Table 1 provides examples of quotes within each theme.

A total of 88% ($n = 36$) of respondents believed that there would be benefits of using cCBT with children and adolescents, with the remaining 12% ($n = 5$) being unsure. Qualitative descriptions of these benefits were then subjected to a thematic analysis that revealed five themes. The first theme, “useful for psychoeducation/prevention”, reflected comments that

cCBT could be very useful for psychoeducation and prevention. The second theme, "ease of access", reflected the view that cCBT would allow a wider range of children and adolescents to access CBT than face-to-face therapy would be able to achieve. The third theme, "increased engagement", reflected comments that computers could make therapy "fun" and increase engagement, particularly for those who would be hard to engage in a traditional face-to-face context. The fourth, "preferred medium for children and adolescents", reflected comments that computers are a familiar medium that children and adolescents enjoy and understand. The final theme, "supplementing/replacing face-to-face contact", reflected views that cCBT would work well in both supplementing face-to-face work, for example through homework, but also possibly replace face-to-face therapies in some circumstances. A sub theme of this, labelled "stigma", reflected the feeling that cCBT could be a good way to reduce the stigma of mental health problems in children and adolescents. Table 2 gives examples of the quotes that are within these themes.

Discussion

Potential use and effectiveness of cCBT

The majority of respondents reported that they would definitely or possibly use cCBT with children and adolescents. Whilst this is encouraging, it does not necessarily imply that this positive attitude would be reflected in actual practice. For example, MacLeod et al. (2009) noted that although the majority of clinicians who worked with adults had favourable attitudes towards self-help, only 10% had actually used cCBT. The majority of clinicians viewed cCBT as having good potential for use as a preventative tool as well as an intervention for use with those who have mild to moderate problems. This view has been endorsed in small scale studies that have found cCBT to be effective in the prevention of depression in adolescents (O'Kearney et al., 2006, 2009). This interest in the use of cCBT for prevention in children and adolescents suggests that cCBT could be developed as a key part of a stepped care approach and could be made widely available as a psychoeducational preventive intervention in schools. In terms of treatment, cCBT was seen as a less effective option than face-to-face CBT for children and adolescents. The majority of clinicians believed that cCBT would have worse outcomes compared to face-to-face CBT, indicating they would not see it as an adequate alternative. Such scepticism about the potential of cCBT compared to face-to-face CBT has been identified in previous research on clinicians' views about cCBT with adults (Whitfield and Williams, 2004). However, work with children and adolescents suggests that the outcomes of cCBT and face-to-face CBT may be similar (Spence et al., 2006), although research in this area is currently limited.

Delivery of cCBT

Clinicians expressed strong views that cCBT should not be freely available for children and adolescents online. They were also clear that cCBT should not be provided without any professional support and that this support would best be provided by a trained mental health professional rather than a teacher. This concern is consistent with the results of research with adults that has documented that a lack of support whilst using cCBT is associated with low uptake and poorer outcomes (Gellatly et al., 2007; Spek et al., 2007; Murray

Table 2. Themes relating to professionals perceived benefits of the use of cCBT with children and adolescents

Theme	Examples of comments
1. Useful for psychoeducation/ Prevention	<p>“Use them with people with mild problems so more people can be treated more quickly (shorter wait list?)”</p> <p>“Possible preventative measures for young people”</p> <p>“Would be good as preventative programme/psychoed”</p>
2. Ease of access	<p>“Flexible re timing”</p> <p>“Access wider group kids (rural areas)”</p> <p>“Ease of access”</p>
3. Increased engagement	<p>“Children that may struggle to engage with 1 to 1 face-to-face therapy – may engage better with a computer programme”</p> <p>“Provides interesting visual stimulation”</p> <p>“I think some children would value the use of technology and would engage when perhaps they might not with face-to-face”</p>
4. Preferred medium for children and adolescents	<p>“Internet very well used by young people – likely to be popular with YP”</p> <p>“Young people are technically minded and usually are very comfortable with the use of computers – specially for those who are shy and do not enjoy face-to-face contact”</p> <p>“It’s a good medium for them. May inspire some children and adolescents who otherwise may not seek help”</p>
5. Supplementing/replacing face-to-face contact	<p>“To supplement the one-to-one or group work element of treatment. It also lends itself very well to the ‘homework’ aspects of treatment. CBT is taught so why wouldn’t we use computers as another media with which to support learning?”</p> <p>“Level of knowledge of clients greater when they come with and can move onto specific/individual tricky bits”</p> <p>“In terms of demand may help to manage waiting lists, where young person may present with mild/mod symptoms but by the time they are seen may be worse. cCBT could be used either at this stage with therapeutic follow-up or at GP level, and initial referrals as an EI approach. And lack of resources/CBT therapists”</p>
5a. Sub-theme: reduced stigma	<p>“Not stigmatizing psych stuff”</p> <p>“Stigma”</p> <p>“Normalizing problems”</p>

et al., 2003). However, the results are not consistent with Murray et al. (2007) which shows that improvements in clinical symptoms can be achieved without therapist support. Future research needs to explore whether outcomes differ with varying levels of therapist support when cCBT is used with children and adolescents. This is one of a number of issues that have been previously identified as needing further research in the field of cCBT for adults (Murray et al., 2007; NICE, 2008).

Perceived advantages and disadvantages of cCBT

Issues relating to the importance of the therapeutic relationship were highlighted as a major concern about the use of cCBT with children and adolescents. The most highly endorsed problems were all related to the lack of support that the clinicians felt cCBT would provide. Clinicians worried about both the lack of a therapeutic relationship and therapist contact. Related to this was the belief that the lack of support would mean the young person would not understand the concepts and that the programme would not be responsive to an individual's needs. Once again these perceived problems are similar to those found in the adult literature, where the absence of a therapeutic relationship is seen by both service users and clinicians to be a major problem (Lange, Van De Ven and Schriecken, 2003; Marks et al., 2003; MacLeod et al., 2009).

Many clinicians in this current survey also expressed concerns that standardized cCBT might not be pitched at the right developmental level. This raises important questions about the suitability of cCBT programmes initially developed for adults being used with children and adolescents. It would therefore appear important that cCBT software is developed specifically for this younger age group. Currently there are few child specific cCBT programmes compared to the number available for adults. Most packages available specifically for children and adolescents have been developed for the treatment of anxiety disorders (Khanna and Kendall, 2008; Cunningham, Rapee and Lyneham, 2006; Spence et al., 2006), with only one cCBT programme being targeted at depression (Abeles et al., 2009) and one for general emotional problems (McCusker, 2008). Further, it may be necessary to develop different software packages for children and adolescents of different ages to ensure that they are pitched at the right level.

This survey found that few clinicians believed that computer competence would be an issue with children and adolescents. This is in contrast to work with adults, which has found that many clinicians are concerned over the technical ability of service users (MacLeod et al., 2009). In addition, issues such as engagement, computer access and lack of privacy and security can be problematic when cCBT is used with adults (Carlbring et al., 2001; Kiroopoulos et al., 2008; Beattie, Shaw, Kaur and Kessler, 2009; Whitfield and Williams 2004). In the current study these issues were not frequently seen as problematic by clinicians in relation to cCBT with children and adolescents. Indeed, the qualitative analysis suggested that clinicians thought that children and adolescents might be more engaged with cCBT compared to face-to-face CBT. This is consistent with previous research that has shown that children and adolescents attending CAMHS are very familiar with computers (Stallard, Velleman and Richardson, 2010).

Clinicians perceived cCBT to offer some benefits, including use at home, reduced stigma, and earlier access to treatment. Additionally, the fact that outcome measures can be built into cCBT software packages, and that it is available 24/7, were rated favourably. These perceived advantages are in line with work concerning cCBT with adults, where a number benefits, such as ability to use at home, earlier access to treatment and 24/7 access, have been identified by both clinicians and service users (Beattie et al., 2009; Graham et al., 2000; MacGregor et al., 2009; Gega et al., 2004; Marks et al., 1998; Peck, 2007; Kaltenthaler et al., 2006). Other potential advantages, such as facilitating the sharing of personal information, increased availability in rural areas, and being a solution to the lack of CBT therapists, were not so frequently endorsed, but were nonetheless relatively high.

Implications

The issues identified have implications for how cCBT would be widely adopted. First, clinicians are concerned whether cCBT is supported by a mental health professional. Previous studies have offered such support using a range of media, such as text messages, telephone calls and e-mails (Cunningham et al., 2009; March et al., 2009; Spence et al., 2006; Gerrits, van der Zanden, Visscher and Conijn, 2007). Such methods of providing professional support may help address this concern, whilst also being convenient for the clinician. Second, this survey suggests that clinicians may be more likely to suggest cCBT if it is offered in addition to, rather than as a replacement for, face-to-face contact. The use of cCBT programmes that run alongside, or are provided as a precursor to, individualized face-to-face therapy may be viewed by many clinicians as preferable. Finally, clinicians' concerns about the potential failure of cCBT to identify risks such as suicidal ideation is an important issue. Ensuring that all children and adolescents offered cCBT are appropriately screened, assessed and monitored, with support being provided at regular periods throughout the programme, will help identify and address such risk factors. In addition, standardized measures to assess mental health could be built into software packages. This has previously been implemented within the cCBT package FearFighter (Kenwright, Liness and Marks, 2001) designed to treat phobia and panic in adults, which has standardized measures of fear and adjustment built-in.

Limitations and future directions

The findings of this study are limited by the small sample size, and it is unclear whether the respondents here are representative of the wider population of CAMHS therapists. Indeed, it should be noted that 21% of those surveyed had never used CBT and thus their attitudes may be different to those who regularly use this approach. Future research should use a larger sample with a wider range of mental health professionals. Whilst a number of open-ended questions were used, most were closed questions, which means that some of the issues raised here cannot be examined in detail. Future research studies could address this through the use of semi-structured interviews. This study did not examine whether clinicians had actually used cCBT with children and adolescents, which would have been useful information in interpreting the results. However, as previously mentioned, there are few software packages available for this age group, and thus it was deemed unnecessary to examine the actual use at this stage. When additional software packages have been trialled such an examination may prove useful.

Conclusions

This is the first survey to assess clinicians' attitudes to the use of cCBT with children and adolescents. Despite certain limitations, the findings add to and extend previous work examining attitudes towards cCBT with adults. This study suggests that whilst clinicians have a number of concerns, they are generally positive about the use of cCBT with children and adolescents. In particular, clinicians see potential for cCBT as a prevention programme and an intervention for mild to moderate problems. Whilst a number of issues previously identified in relation to cCBT with adults were highlighted, some issues appear to be unique to children and adolescents. Such issues can help in the development and implementation of cCBT packages

for this age group, and subsequently help improve access to effective treatments for mental health problems.

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