

Computer Use and Attitudes Towards Computerised Therapy Amongst Young People and Parents Attending Child and Adolescent Mental Health Services

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Background: There has been little research examining attitudes towards computerised therapy in young people. **Method:** A self-report survey of 37 young people and 31 parents using Child and Adolescent Mental Health Services (CAMHS). **Results:** Young people reported high levels of computer usage and online help-seeking behaviour. Young people were cautious about computerised therapy whereas parents were more positive, identifying more benefits than concerns. **Conclusions:** Mental health professionals need to be aware of young people's online help-seeking behaviour in order to correct inaccuracies and maximise uptake of computerised therapy.

Key Practitioner Message:

- Children and young people using CAMHS frequently use computers. Many have used computers to find out about their problems, but few find this helpful
- Children and young people are sceptical about using computerised therapy, possibly because of these previous unsuccessful experiences
- Uptake may be low if offered as an alternative to face-to-face contact and it is important to engage young people in order to increase uptake
- Parents are generally positive about computerised therapy with the majority being interested in using it with their child

Keywords: Computer; therapy; CBT; attitudes; children; adolescents; young people; parents

Introduction

Interest has recently focused upon the use of internet and computer technology as a media for delivering psychological interventions. The use of such media offers a number of benefits including improved accessibility, greater convenience, increased privacy and reduced embarrassment from meeting a mental health specialist whilst maintaining treatment fidelity (Williams, 2001). Consequently, a number of computerised interventions, particularly based upon cognitive behaviour therapy (cCBT), have been developed for use with adults with anxiety and depressive disorders. These include 'Beating the Blues' (Proudfoot et al., 2003), 'COPE' (Osgood-Hynes et al., 1998), 'Overcoming Depression' (Williams et al., 2002), 'MoodGym' (Christensen & Griffiths, 2001) and 'Fear Fighter' (Kenwright, Liness & Marks, 2001). The results of cCBT with adults are generally positive and have been

summarised in recent reviews (Kalenthaler et al., 2006, 2008).

Computer delivered interventions may be particularly attractive to young people who are typically familiar with computers and competent in their use (Cuijpers, Van Straten & Andersson, 2008; Przeworski & Newman, 2006). However, comparatively few computerised interventions have yet been developed specifically for children and young people. Of the mental health programmes that have been developed most have focused upon anxiety disorders. Cool Teens (Cunningham, Rapee, & Lyneham, 2006) is an interactive multimedia CD-ROM software program based on CBT techniques and consists of 12 weekly modules. Khanna and Kendall (2008) describe the 'Coping Cat' CD-ROM, which has been designed specifically for use with children aged 7 to 13. 'BRAVE for children-online' (Spence et al., 2006) is a 10 session CBT programme that includes graphics and cartoon

animations. It is interactive with games, quizzes and question and answer tasks as well as providing psycho-educational reading material. Stressbusters is an eight session programme based upon cognitive behaviour therapy that has been developed specifically for depression (Abeles et al., 2009). The program is interactive and multi-media with video, audio, animations and graphics. Think Feel Do (McCusker, 2008), is a six session cCBT programme for use with both anxiety and depressive disorders. The programme is designed to be completed with a trained facilitator and includes cartoon characters, interactive quizzes, videos and music. Research evaluating the effectiveness of computerised interventions is beginning to be reported and, as with adults, the early results are positive (March, Spence, & Donovan, 2008; Spence et al., 2006, 2008; Abeles et al., 2009).

Whilst the development and use of computerised programmes with children and young people appears promising, research with adults suggests that potential users are not always keen to engage with these interventions. For example, Mitchell and Gordon (2007) found that fewer than 10% of university students initially expressed a preference for cCBT over other interventions although this increased to 30% following a demonstration of the programme. The attitudes of young people and their parents towards cCBT have not been assessed and as such it is unclear whether they are more or less disposed to such interventions. Understanding their views is important in determining how the uptake of potentially effective interventions can be maximised. This study therefore aimed to examine computer usage in young people using Child and Adolescent Mental Health Services (CAMHS), and to explore the attitudes of young people and their parents towards computerised therapy.

Method

The study was approved by the Local Research Ethics Committee. Self-report questionnaires were developed for parents and young people to examine attitudes towards computerised therapy. The young person questionnaire focused on general computer usage, online help-seeking behaviour and attitudes towards computerised interventions with the parent questionnaire assessing perceived value, benefits and concerns.

Recruitment was made via a Tier 3 CAMHS outpatient service. All children over eight years of age who attended the above service over a two week period were eligible to participate. They were not however approached if the clinician was concerned that the child and /or their parent might be in a distressed state or that being approached might interfere with their clinical session. The questionnaire was completed in the waiting room, with a researcher present to answer any questions. Of those approached, one child refused to take part because they did not have enough time and five adults refused because they were too busy or did not use computers. Therefore 86% ($n = 31$) of parents and 97% ($n = 37$) of young people who were approached took part in the study. The 31 parents were from 27 different families and the 37 young people from 36 different families. The young people were aged 8 to 17 years with a mean of 14.5 years. Of the young people

who reported their gender 17 were males and 17 females.

Results

Computer usage

All but one young person had access to a computer at home with 21 (58%) having their own. Only 10 (27%) used a computer for three hours a week or less, in comparison to 15 (41%) who used a computer for between four and seven hours a week, and 12 (32%) whose usage was eight hours a week or more. The most common daily activity was social networking (18, 58%), followed closely by internet searches for information (20, 54%), playing games (15, 43%), joining in with discussions on chat rooms (12, 39%), for homework or work (10, 28%) or sending emails (8, 24%)¹.

Just over one half of the young people (17, 52%) reported that they had used a computer or the internet to search for information about their worries, unhappiness or problems. Of those who had done so, 7/17 (41%) reported that they had searched for information between 3 and 10 times and 6/17 (35%) searched on more than 10 occasions. However, of those who had used the internet in this way, only a quarter found the information they obtained to be very helpful (4/17, 24%). Half (9/17, 53%) reported that it helped a little with the remaining (4/17, 24%) reporting that it hadn't helped or had confused them.

A similar proportion (17, 47%) had used a computer or the internet to find ways to cope or deal with their worries, unhappiness or problems. Amongst those who had searched for this information, most had searched on more than three occasions (12/17, 71%), the majority had tried the ideas they found (11/17, 65%) but only seven (41%) reported that these had been helpful.

E-mails, chat rooms and social networking sites were used by just over a third of the young people (14, 39%) to talk about their problems or worries with others. The majority (10/14, 71%) of those who had done so reported that it only helped a little.

Young person attitudes to computerised and internet based mental health programmes

Young people were asked whether they would be interested in using a computer programme to help them with their worries and problems. One quarter were interested (9, 24%), one quarter were not (10, 27%), with half (18, 49%) being undecided. If given the choice, the vast majority (29, 88%) would prefer to use a computer program at home. However, when asked about their preferred course of treatment, 17, (49%) wanted to meet and talk with someone 'in a clinic like this', 10, (29%) wanted to meet and talk with someone at home, 2, (6%) wanted to meet and talk with someone at school, 3 (9%) wanted to use a computer program on their own

¹Please note, due to varying levels of completion and certain answers not requiring a response to further questions, the percentages stated in the results may not represent all of the participants ($n = 31$ for parents and $n = 37$ for young people), but rather all of those who completed that specific question.

and 3 (9%) wanted to meet and talk with someone as well as using a computer program.

Parent attitudes to computerised and internet based mental health programmes

The majority of parents (19, 61%) felt that computer programs could help young people understand more about their psychological problems and worries with 17 (55%) feeling that they could help them learn ways to cope with these. Two thirds of parents (20, 67%) identified potential benefits of such computer programs. When asked what these were, a total of 25 potential benefits were identified relating to five main themes: opportunities for peer support; IT competence; anonymity reducing potential embarrassment; opportunities for independent help seeking and the provision of good quality information. Table 1. provides quotes to illustrate these themes. Only a third of parents (10, 32%) identified concerns. When asked to describe these, 16 concerns were identified relating to four main areas; children having access to poor quality information; problem behaviour being supported or encouraged; personal safety being potentially compromised

and the lack of face to face contact/support. Table 2. provides quotes to illustrate these themes.

When parents were asked if they would want their children to try using a computer program to help them with their problems, the majority responded positively (23, 74%) with a quarter being undecided (8, 26%).

Discussion

Computers are a familiar aspect of everyday life for young people, with nearly all those attending CAMHS having access to a computer at home. Three quarters of those surveyed used computers and/or the internet for more than four hours per week particularly for social networking and searching for information. Interestingly, half had used the internet to find information, or ways to cope, with worries and problems although the majority had not found this very helpful. This suggests that clinicians in CAMHS should routinely check with young people about whether they have searched for internet information and the sites they have visited in order to correct any negative or inaccurate information obtained. Similarly, in order to counter random

Table 1. Themes relating to parents' perceived benefits about computerised therapy

Name of theme	Parents comments
Socialising/peer support	<p>'To know that they are not alone and others may be experiencing the same problems'</p> <p>'Websites implies that there are others with similar problems'</p> <p>'May help where there are social interaction problems'</p> <p>'They place great emphasis on social interaction sites- so anything that emulates that will be taken notice if'</p> <p>'To understand what they are feeling also affects others'</p> <p>'Could see others in the same scenario and not feel alone'</p>
IT competence	<p>'My son spends a lot of time on the computer'</p> <p>'Interacting as a medium which they feel comfortable with'</p> <p>'Familiar format that they are used to'</p> <p>'Children are far more familiar with computers than persons of my generation. This is a media to know and understand. Generally, it is an ideal way to connect with them'</p> <p>'As children grow up with computers- they find it very easy to use ... ease of use would benefit that child with any problems'</p>
Anonymity	<p>'An impersonal interaction on occasion, would be beneficial as there would be no embarrassment'</p> <p>'Able to work through a difficult topic with a 'detached' view or different perspective'</p> <p>'A computer program might give them some anonymity while working through a person problems'</p> <p>'Avoids potential awkwardness/ embarrassment in seeking to find answers/help'</p>
Independence/encourage help-seeking	<p>'Might help highlight whether there is a more serious problems that would require professional help'</p> <p>'Encourage them to seek help from other source'</p> <p>'Teenagers like to be independent- There own research is valuable in helping them make their own informed choices'</p>
Ease of access to information	<p>'Ease of access to information or FAQs'</p> <p>'My son is more inclined to read information on a screen than in a book and is more responsive to this also'</p> <p>'Finding information they may not otherwise be able to access'</p> <p>'Information. My daughter and I both found the internet very useful for finding out more about her condition'</p> <p>'Access to wider range of information'</p> <p>'Very detailed professional opinion available that can supplement professional input'</p> <p>'If they have a problem they can look it up on their computer'</p>

Table 2. Themes relating to parents' concerns about computerised therapy

Name of theme	Parents comments
Quality of information	'Accessing incorrect advice which would prove to be unhelpful' 'Searches for information need to be conducted with adult help, as not all information sites are accurate'
Supporting negative behaviours	'Concern over where the advice is coming from' 'Possible problems with obsessional playing of games- addiction' 'Choosing to play computer over dealing with reality' 'Working in isolation' 'The internet can suggest new ideas of how to continue negative behaviour- anorexia, self harm etc.'
Safety and security	'Accessing inappropriate websites' 'Concern over where the advice is coming from' 'Chatrooms are a concern. There is a need to monitor their access and be certain who they are contacting' 'They could be someone else!' 'Safety risks' 'X is very good with computers and will download unacceptable articles'
Lack of face to face contact	'May be inappropriate if seen as a replacement for support from family, friends or professional' 'The complexities of human emotional, psychological and psychiatric behaviours and feelings cannot be explained, expanded and developed and understood without the process of dialogue with another person' 'Working in isolation'

searching for sites clinicians should consider helping young people to be more focused by routinely providing web addresses of good quality sites.

Young people expressed a preference to use a computer programme at home which is consistent with the adult literature (Graham et al., 2000). However, some individuals stated a preference to undertake this on their own without a facilitator, which raises questions about the importance of the therapeutic relationship. The need for computer programmes to be delivered within the context of a supportive therapeutic relationship has been emphasised by some developing cCBT with children (Khanna & Kendall, 2008). However the trials of cCBT that have been reported have involved minimal therapist input and yet all have demonstrated significant change (March et al., 2008; Spence et al., 2006). The optimum way of delivering computerised interventions and the nature and extent of therapist involvement requires further attention.

The negative experience of many young people with internet sites may, in part, explain why they were less positive about the possibility of using computerised programmes to help with their problems. Given the choice, three quarters of young people would prefer to meet face to face and talk with someone, with less than a quarter expressing a positive preference to use a computerised programme. These results indicate that the uptake of computerised programmes would be relatively low if offered as an alternative to face-to-face contact. However, half were unsure suggesting that if computerised programmes are to be offered then the process of engaging with the young person may be important in increasing their uptake. An initial meeting with a CAMHS clinician would provide an opportunity to discuss previous on-line or computer experiences, to re-assure the young person and their parents about quality and confidentiality, to clarify expectations and to demonstrate the programme. Indeed, research has shown that after

use of cCBT, young people express a number of positive views (March et al., 2008; Spence et al., 2006).

Parents were generally positive about computerised therapy, identifying more benefits than concerns. Benefits related to issues of information quality and the use of a less personal, more familiar media resulting in less embarrassing discussions. Concerns related more to the use of internet based programmes and poor information quality, inappropriate behaviour being encouraged and personal safety being compromised. These issues are very similar to those mentioned by adults participating in cCBT (Mitchell & Gordon, 2007; Murray et al., 2003). However, despite some reservation the majority of parents reported that they would want their child to take part in computerised therapy if offered. In view of the preference of young people to talk with someone at CAMHS, there may need to be flexibility in the way that computerised therapy is offered. It could, for example, be offered as an alternative intervention whilst waiting for an appointment with a therapist or to supplement or reinforce ideas discussed during face-to-face therapy.

Another potential offered by cCBT is to significantly increase the availability and accessibility of mental health interventions. In addition to being available within specialist CAMHS as a treatment for mental health problems, cCBT could be provided in a range of locations, including schools, for mild and moderate problems. This is consistent with the development of cCBT for adults with anxiety and depression which is now widely available as part of a stepped care approach within primary care (NICE, 2006). The minimal therapeutic involvement required for many of the current child programmes would suggest that they could be developed into, and provided as, self-help resources. However, as mentioned previously, some authors have highlighted the central importance of cCBT being delivered within a supportive therapeutic relationship

(Khanna & Kendall, 2008). Drop-out and non-completion rates of cCBT with adults are also high, and if replicated in child programmes would serve to reinforce the negative views of young people encountered in this study about the potential value of such approaches. This suggests a need to carefully consider the primary purpose of computerised programmes which in turn will help to determine the most effective way of providing them. For example, computerised programmes designed to be psycho-educational or developing general psychological skills and coping strategies could be widely provided as stand alone universal interventions. Those designed as interventions for mild or moderate problems may need to be more targeted and may require additional input from a facilitator or supporter who can help the child apply the computerised content to their own life or problems. The supporter may not necessarily be a mental health specialist but could be a suitably trained child professional who can encourage the child to reflect upon the content of the programme. For those with more significant mental health disorders, computerised interventions may provide a useful adjunct to face to face therapy. However, more specialist face to face input will be required in order to ensure that the intervention is responsive and tailored more clearly to the child's needs.

The findings of this study are limited by the small sample size. Although the response rate was good, a few parents declined because they did not use computers very often and it is possible that these parents might have more negative attitudes towards computers. Whilst the sample included equal numbers of boys and girls, the age range was skewed towards older adolescents, with 22 (61%) of the young people being aged 15 to 17. Whether similar results would be found with a younger age group is therefore unclear. This study was conducted in one geographical area with limited social and ethnic diversity. Further research in more diverse areas is required to assess the degree to which these views are representative of the wider population attending CAMHS. Despite these limitations this study is one of the first to directly examine attitudes towards computerised therapy in young people and their parents attending CAMHS. The results suggest that if computerised therapy was developed within CAMHS then the process of engaging young people may be important in facilitating uptake.

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