Developing a Mobile Application to Support Cognitive Analytic Therapy

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Mobile technology in mental health

The use of mobile phones and tablets has grown exponentially in recent years and with this, the development of mobile applications that seek to entertain, support, organise and educate. Preziosa Grassi, Gaggioli and Riva (2009) suggest that mobile phone density was 85% in Europe in 2005 and that this has developed both accessibility to app technology and a mobile culture that could be used positively in a health context.

There are apps that aim to support people with various aspects of wellbeing, including memory and organisation, losing weight, fitness and smoking cessation as well as an increasing number of apps aimed at supporting people with mental health problems.

Proudfoot's review in 2013 suggested that there were over 700 mental health-related apps in the Apple store alone and that this was growing exponentially at the time. The mental health expertise of the developers and efficacy of such apps are often unfortunately unclear, however. The NHS has recognised the value of app supported health care and the NHS Direct/ Choices website has started to develop a resource of apps it recommends for various health-related conditions including mental health.

Modality based apps include Cognitive Behaviour Therapy, Dialectical Behaviour Therapy, parenting interventions and medical support (for drug adherence or symptom monitoring).

These apps support various aspects of therapy such as data collection (for example event or thought diaries for CBT, as well as general rating of mood), self-help through guided interventions such as CBT, relaxation, mindfulness or thought-challenging, and psycho education.

Apps have been developed for a range of problem types such as depression, bipolar disorder, anxiety, addictions, psychosis and eating disorders (Luxton et al, 2011) and borderline personality disorder (Rivizi et al, 2011)

Do apps work?

Initial exploration of an emerging literature suggests a possible benefit of mobile app use in wellbeing. Studies are very small scale but suggest, for example, a reduction in severity of hallucinations, increased social interaction (Granholm et al, 2012), behaviour change (Fjeldsoe, Marshall and Miller, 2009) and decreases in severity of extreme emotions, substance misuse (Rizivi et al, 2011) and depression (Kauer et al, 2012).

There have been a limited but encouraging number of small scale studies that suggest that mobile apps may enhance aspects of therapy. These aspects include efficacy (Watts, MacKenzie et al, 2013), skills development such as relaxation, adherence and compliance (Preziosa Grassi, Gaggioli and Riva, 2009), emotional self-awareness and self-reflection (Morris, 2010; Reid et al, 2011), coping and medication adherence (Granholm et al, 2012).

CAT therapy and app development

The idea for the development of a mobile application to support CAT was initially suggested to me by a client (I work with children and young people) and echoed by other clients, frustrated that paper-based tools were inconvenient and easy to lose, and embarrassed about using paper-based tools that might be seen by others, to the point that they were not used by the client, to the detriment of the work we were able to do. They pointed out that it was less stigmatising and easier to access their phone than paper-based tools.

A number of clients have suggested other apps which I now use, to support monitoring and mapping aspects of the therapy, but these are predominantly informed by other modalities and limited in their use for CAT. Apps on the Android Play store that clients have found useful in supporting CAT therapy work, when they do not wish to use the paper tools, are usually CBT-derived. They include the Activity & Mood Diary Ginsberg (The Scottish Government), CBT Thought Record Diary (Moodtools), 'Catch it' (University of Liverpool) and Diary-Mood Tracker (Mood Tracker Lover). I have found these to be useful in engaging clients in tracking and linking mood, thoughts, events and healthy activity, though they obviously do not quite fit the CAT model. These apps are preferable due to their design, but also because they do not include expensive in-app purchases or connectivity to social media. Other useful apps include habit trackers such as 'HabitBull - Habit Tracker' (Oristats LTD) to motivate

people to start, record and sustain new behaviours that support wellbeing.

CAT and technology

Currently no apps have been developed that are influenced by or support the practice of Cognitive Analytic Therapy. CAT is a relational therapy which focuses on the relationship with the therapist as a medium for change, alongside a focus on a target problem or goal, and paper-supported personal development and monitoring of recognition and revision.

As a relational therapy, it would be difficult to envisage the model being purely delivered through a computer-based, self-help medium; however there are aspects of the model that may be better supported through the development of a mobile application, namely the 'holding' of the tools of therapy. These tools include for example, the map and the letter. The need for portable versions of these tools has been addressed previously through the use of a 'credit card SDR' (Fitzsimmons, 2000). An app could also encourage monitoring (of mood, symptom or presenting problem as well as recognition and revision), awareness diaries to support the development of awareness of causal links, and homework tasks. There may be some benefits of an app to augment therapy by making the process more accessible between sessions or after the therapy has finished, by increasing the ways in which a client can 'hold the therapy in mind' outside the therapy room and so adhere to the treatment model (Preziosa Grassi, Gaggioli and Riva, 2009).

Developing a mobile application for CAT

Having been asked by a small number of clients to develop a CAT specific app and having been encouraged by what limited literature there is, a group of CAT practitioners, researchers and app developers aim to design, build and road test an app which would be free to access for therapists and clients.

We plan to hold a number of focus groups with practitioners and clients, but are also inviting wider input from the CAT community via an online survey. Initially, we would very much appreciate hearing from practitioners who would be interested in participating. We aim to include CAT clients in focus groups during the development stage. Information about the survey can be found below.

http://tinyurl.com/cat-app-survey

Information about the research

We are a team of researchers and clinicians at the University of Sheffield and Sheffield Hallam University and the NHS. We are working together with CAT practitioners and psychotherapists to design, build and evaluate an app to promote clients' engagement with CAT. We'd really like to hear your views on what should be in the app. We want you to be clear that we are not trying to develop an app that is a replacement for therapy, but something that rather enables a client to engage in the work outside the therapy room in a more effective manner.

Participating in this research will involve completing a brief online questionnaire and giving your views by answering specific and general questions about the potential content of the app. Participation is entirely voluntary – you do not have to take part and there will be no consequences of any kind if you decide not to take part. If you take part, your views will help us make the app as useful as possible for clients and clinicians alike. We have achieved ethical approval from the University of Sheffield to approach you for your views (Ref 149033).

We will not ask for any identifying personal data, and so the responses you give will be anonymous. If you type something potentially identifiable in the free text parts of the questionnaire (e.g. names), we will remove them before analysing the data.

Data will be accessed only by the research team for analysis. We may, in the future, report findings from the data, including non-identifiable quotations, in journal articles or conference presentations when we describe how we designed and developed the app. Data will be stored securely for a minimum of 10 years and will be password protected.

If you have any questions about participating in this study, please contact the lead researcher (Stephen Kellett): s.kellett@sheffield.ac.uk

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