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International Phase II clinical trial of CBTPsych: A standalone Internet social anxiety treatment for adults who stutter

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ABSTRACT

Purpose: CBTPsych is an individualized, fully automated, standalone Internet treatment program that requires no clinical contact or support. It is designed specifically for those who stutter. Two preliminary trials demonstrated that it may be efficacious for treating the social anxiety commonly associated with stuttering. However, both trials involved pre- and post-treatment assessment at a speech clinic. This contact may have increased compliance, commitment and adherence with the program. The present study sought to establish the effectiveness of CBTPsych in a large international trial with no contact of any kind from researchers or clinicians.
Method: Participants were 267 adults with a reported history of stuttering who were given a maximum of 5 months access to CBTPsych. Pre- and post-treatment functioning was assessed within the online program with a range of psychometric measures.
Results: Forty-nine participants (18.4%) completed all seven modules of CBTPsych and completed the post-treatment online assessments. That compliance rate was far superior to similar community trials of self-directed Internet mental health programs. Completion of the program was associated with large, statistically and clinically significant reductions for all measures. The reductions were similar to those obtained in earlier trials of CBTPsych, and those obtained in trials of in-clinic CBT with an expert clinician.
Conclusions: CBTPsych is a promising individualized treatment for social anxiety for a proportion of adults who stutter, which requires no health care costs in terms of clinician contact or support.
Educational objectives: The reader will be able to: (a) discuss the reasons for investigating CBTPsych without any clinical contact; (b) describe the main components of the CBTPsych treatment; (c) summarize the results of this clinical trial; (d) describe how the results might affect clinical practice, if at all.

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1. Introduction

1.1. E-therapy and mental health

Fairburn and Patel (2014) have persuasively argued that health researchers need to 'scale up' their interventions if they are to have an impact on community mental health outcomes. With a burgeoning global population, the traditional model of one-to-one, in-clinic intervention faces growing issues of access and cost. Simply increasing the number of therapists in training is unlikely to meet growing demands (Helgadottir et al., 2014), and does not address the issue of increasing service costs. Further, in-clinic interventions only reach those who actively seek treatment from a health care professional (Loucas et al., 2014). Bypassing the need for this gatekeeper with direct-to-user products in healthcare represents a major advance in reach and access for the community (Fairburn & Patel, 2014).

Two main types of intervention have been widely discussed in the search for scalable treatments: self-help books and Internet delivered treatment (e-therapy). Fairburn (2013) has argued that printed material has the advantage that it is potentially available everywhere, whereas e-therapy requires the end user to have Internet access with sufficient bandwidth to download or view audio and video content. However, Fairburn and Patel (2014) do concede that the IT world is changing rapidly and Internet access is expanding. Further, Loucas et al. (2014) point to two advantages of Internet-delivered treatments. They can be personalized to meet individual symptoms and they can be made interactive in the way that a self-help book cannot. Having said this, Loucas et al. point out that few e-therapy developers appear to have adequately explored these advantages. For example, in their exhaustive review of e-therapy programs for the eating disorders they concluded that "the current e-therapy programs need rethinking. They are basic in form and content . . . indeed, the existing interventions differ little from written self-help programs". (Loucas et al., p. 130).

Finally, Loucas et al. (2014) express concern at the absence of evidence for many e-therapy programs. For example, they found a complete absence of trials for the many mobile-device applications on the commercial market. They point out that, like medication, e-therapy has the potential to do harm, and preliminary clinical trialing is needed to establish the safety, usability and tolerability of any e-therapy programs.

1.2. Stuttering and social anxiety

Those who stutter and seek clinical help may benefit from an e-therapy program to deal with social anxiety disorder, which is common among such clinical cohorts, with reported rates of 40% (Blumgart, Tran, & Craig, 2010), 44% (Stein, Baird, & Walker, 1996) and 60% (Menzies et al., 2008). Social anxiety disorder (also known as social phobia) involves a pervasive fear of humiliation and embarrassment in social and performance situations. It can adversely affect the lives of sufferers, causing social avoidance and generally restricting the usual enjoyment of interactions with others. It has been argued that the high rate of social anxiety disorder among those who stutter is unsurprising, given that stuttering is often associated with a history of childhood teasing and bullying (Iverach, Menzies, O'Brian, Packman, & Onslow, 2011; Iverach & Rapee, 2014; Smith, Iverach, O'Brian, Kefalianos, & Reilly, 2014).

Cognitive-behavior therapy (CBT) is the flagship clinical psychology intervention for anxiety. There appears to have been only one clinical trial of its application to those who stutter (Menzies et al., 2008), although published (McColl, Onslow, Packman, & Menzies, 2001) and unpublished (Ezrati-Vinacour, Gilboa-Schechtman, Anholt, Weizman, & Hermesh, 2007) conference presentation has been reported. However, components of CBT are commonly included within stuttering treatments that focus primarily on speech (for example, Blood, 1995; Boberg & Kully, 1994; Craig, Feyer, & Andrews, 1987; Fry, Botterill, & Pring, 2009; Fry, Millard, & Botterill, 2014; Huinck et al., 2006). Amster and Klein (2008) conducted a clinical trial of speech treatment combined with CBT for perfectionism for those who stutter. The Menzies et al. (2008) report showed that a CBT package designed specifically for those who stutter, when presented by a clinical psychologist, improved Global Assessment of Functioning scores and almost completely eliminated speaking situation avoidance. Two thirds of the experimental group were diagnosed with social anxiety disorder pre-treatment, and none of that group retained that diagnosis at follow-up after completion of the treatment.

1.3. CBTPsych

In the earliest fully individualized, interactive e-therapy program designed for social anxiety in those who stutter, Helgadottir, Menzies, Onslow, Packman, & O'Brian (2009b) attempted to address the shortcomings of previous Internet products with CBTPsych. CBTPsych is a cognitive-behavior therapy program and is based on the in-clinic, CBT program for adults who stutter developed by the present team (Menzies et al., 2008). In order to emulate a real clinical experience, CBTPsych used the voices and faces of two clinical psychologists—a man and a woman—who talk to the user throughout the program by means of audio recordings. CBTPsych individualizes the treatment for each user based on a battery of pre-treatment assessments covering negative thoughts, feared situations, safety behaviors and a range of related constructs. These assessments occur at the beginning of the program and form the basis of the homework set for each individual throughout the treatment modules that follow.

In order to assist participants to understand their anxiety, individualized formulations of the factors involved in the development and maintenance of their fears are visually presented. Finally, CBTPsych incorporates individualized automated