

Internet-based Cognitive Behavioral Therapy for Adolescents with Anxiety Disorders: A Feasibility Study

Amalie Dalgaard Nielsen, Majken Maria Gaardsvig, Silke Stjerneklar & Mikael Thastum

Anxiety Clinic for Children and Adolescents, Department of Psychology, Aarhus University, Denmark

Introduction & Aim

Only a small proportion of children and adolescents with anxiety disorders receive treatment, despite evidence of the efficacy of cognitive behavioral therapy (CBT) (Reynolds, Wilson, Austin & Hooper, 2012).

Lately there has been an increase in the development of internet-based CBT (ICBT) programs to reduce costs and enhance accessibility of psychological interventions. Internet-based CBT has proven efficacious towards adults with anxiety disorders (Haug, Nordgreen, Ost & Havik, 2012; Reger & Gahm, 2009). Research in ICBT with children and adolescents with anxiety is still in its infancy and no program has been evaluated in Denmark.

The aim of the current study was to examine the feasibility of a revised and translated version of the *Chilled Out* Program for adolescents with anxiety disorders, developed at Macquarie University, Australia.

Methods

Participants:

Six adolescents aged 13-17 years with an anxiety disorder as primary diagnosis.

The *Chilled Out* program:

Eight modules of approximately 35 minutes each distributed over a 14-week period. The program is interactive using a combination of different media formats to deliver psychoeducation and CBT techniques, activities and exercises for adolescents to manage their anxiety. In addition the adolescents receive a weekly supportive phone call from a therapist.



Study design:

A single case quasi-experimental feasibility study with treatment following a three month baseline period.

Measures:

Anxiety and interference

Anxiety Disorder Interview Schedule for DSM-IV, Parent and Child Versions (ADIS-IV C/P) administered over the phone and electronic self-reported child and parent questionnaires pre and post treatment, and at 3-month follow-up.

User experience

Semi-structured qualitative interviews with adolescents and their parents post treatment, and at 3-month follow-up.

Results

ADIS-C/P:

Despite improvement in clinical severity rating in all participants, four participants (67 %) still met the criteria for their primary anxiety disorder post treatment. Two participants (33 %) were free of all anxiety disorders and all participants with one or more secondary anxiety disorder before treatment were free of these.

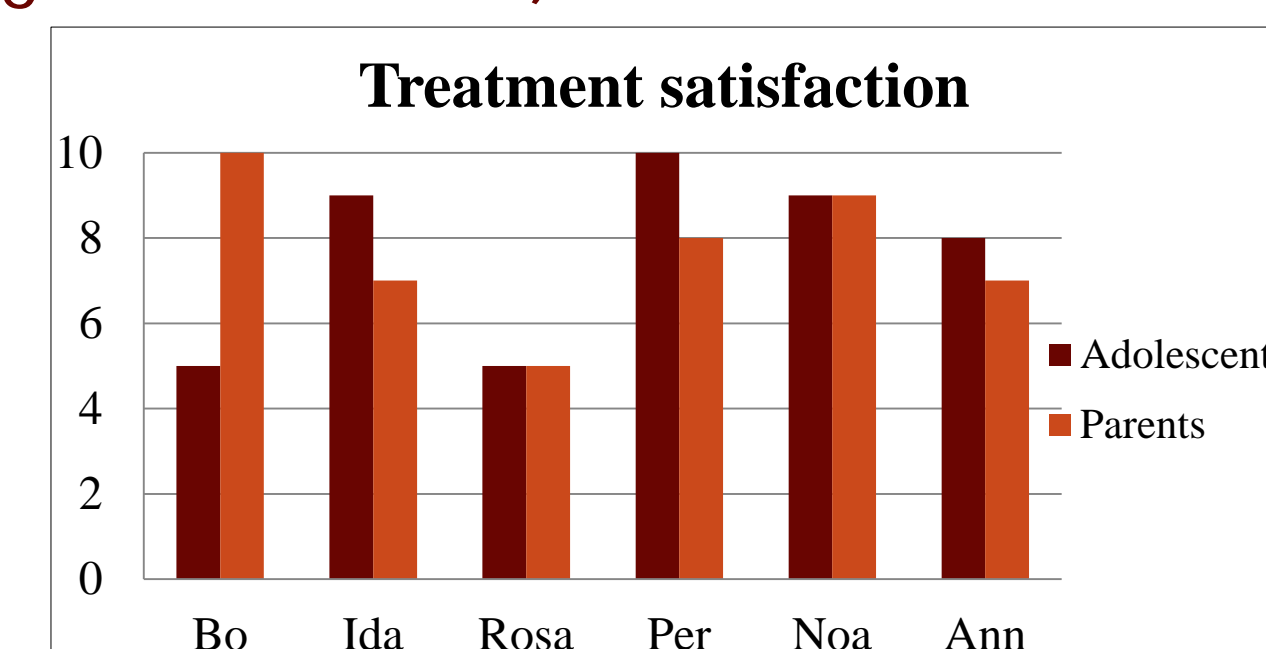
User experiences:

Use

The pilot study had one drop-out. The remaining participants completed in average seven out of eight modules. They had in average 23 log-ins in the program and 13 phone calls from their therapist. The phone calls lasted in average 18 minutes.

Treatment satisfaction

Overall the adolescents and their parents reported moderate to high treatment satisfaction (in average 7,7 out of 10).



Program feedback

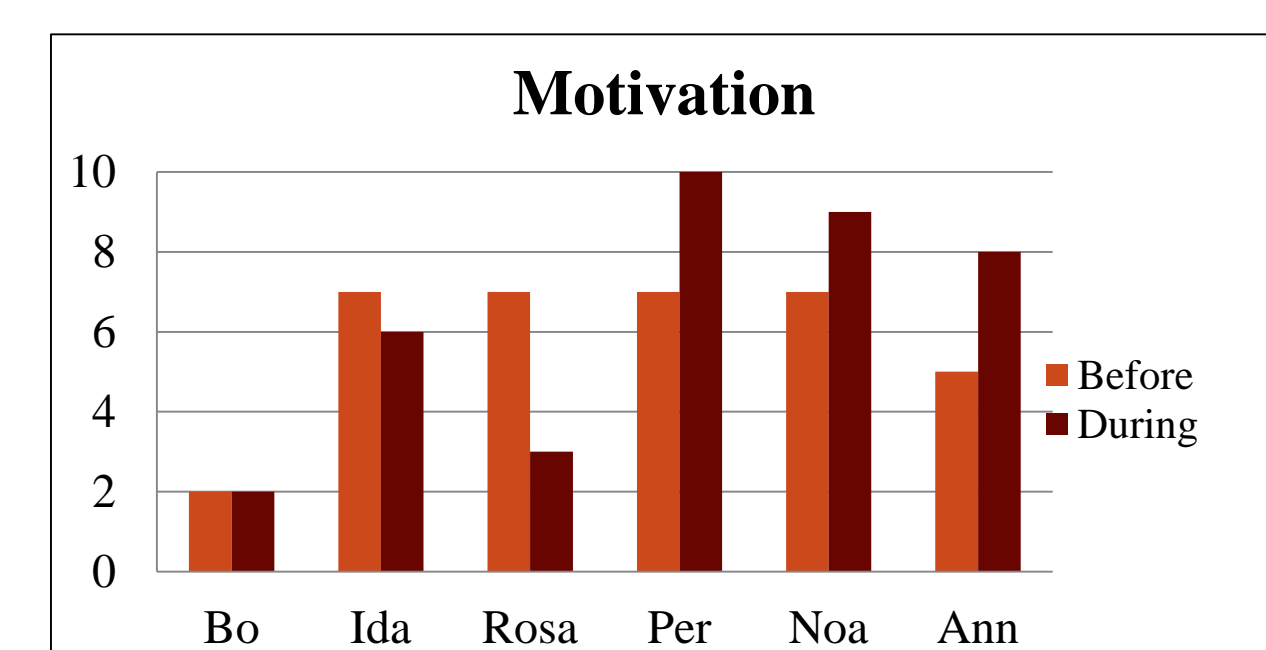
The participants could easily navigate in the program and understand the program content. They found it useful to repeat sequences in the program for better understanding and saw this as an advantage of the internet-based format.

Treatment barriers

Despite the treatment flexibility one of the most frequent reported barrier against treatment was lack of time to work with the program and the related activities. Another reported barrier was technical problems.

Motivation

The participants had a moderate motivation for *Chilled Out* before treatment (in average 5,5 out of 10). The motivation became higher during treatment for half the participants.



Therapist contact

Most of the participants found the phone calls from their therapist very helpful or helpful. The phone calls helped by giving motivation and problem solutions.

Parent involvement

Most of the participants had minimal to moderate parent involvement with parents supporting the treatment process. Some parents requested more involvement but generally the adolescents found the parent involvement appropriate.

Preference regarding delivery method

Half the adolescents preferred internet delivered therapy over face-to-face therapy whereas only one parent had a preference for the internet. Most parents saw internet therapy as a good alternative to traditional therapy but preferred the last.

Discussion & Conclusions

The pilot study found that *Chilled Out* can have some effect and can be feasible as a treatment for anxiety disorders in adolescents. However no firm conclusions can be drawn due to study limitations such as a small sample size, variations in the baseline period, inconsistency between informants, and potential biases in self-reported user experiences due to social desirability.

Information from the pilot study lead to revisions in the *Chilled Out* program and the related procedures before an ongoing RCT with 70 participants.