Cognitive therapy compared with CBT for social anxiety disorder in adolescents: a feasibility study

Cathy Creswell,1* Eleanor Leigh,2 Michael Larkin,3 Gareth Stephens,4 Mara Violato,5 Emma Brooks,1 Samantha Pearcey,1 Lucy Taylor,1 Paul Stallard,6 Polly Waite,1 Shirley Reynolds,7 Gordon Taylor,8 Emma Warnock-Parkes2 and David M Clark2

1School of Psychology and Clinical Language Sciences, University of Reading, Reading, UK
2Department of Experimental Psychology, University of Oxford, Oxford, UK
3School of Life and Health Sciences, Aston University, Birmingham, UK
4PPI representative, London, UK
5Health Economics Research Centre, Nuffield Department of Population Health, University of Oxford, Oxford, UK
6Child and Adolescent Mental Health Service, Oxford Health NHS Trust, Bristol, UK
7Charlie Waller Institute, University of Reading, Reading, UK
8College of Medicine and Health, University of Exeter, Exeter, UK

*Corresponding author cathy.creswell@psych.ox.ac.uk

Declared competing interests of authors: David M Clark reports personal fees from the NHS outside the submitted work; he is also one of the authors of the cognitive model of social anxiety that CT-SAD-A (Cognitive Therapy for Social Anxiety Disorder in Adolescents) is based on, and he has also played a central role in developing the treatment.

Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

Published March 2021
DOI: 10.3310/hta25200

Scientific summary

Cognitive therapy compared with CBT for social anxiety disorder
Health Technology Assessment 2021; Vol. 25: No. 20
DOI: 10.3310/hta25200

NIHR Journals Library www.journalslibrary.nihr.ac.uk
Scientific summary

Background

Social anxiety disorder (SAD) is characterised by a persistent and disproportionate fear of social situations. It is the third most common of all mental health disorders, with a lifetime prevalence of up to 13%. The age at onset is typically during adolescence (median 13 years), with most people developing the condition before they reach their twenties. Without treatment, SAD often runs a chronic course and is associated with risks of other negative mental health and social outcomes.

Currently, the most commonly delivered treatment approach for adolescents with SAD is a generic cognitive–behavioural therapy (CBT) anxiety programme that is used across a range of anxiety disorders. Unfortunately, in recent studies, young people with SAD have had significantly poorer outcomes than those with other anxiety disorders. However, adults who receive a focused psychological treatment for SAD (cognitive therapy for SAD in adults (CT-SAD)), a therapy that targets key psychological mechanisms that are known to maintain the disorder, achieve much higher recovery rates. CT-SAD has also been shown to be superior to a number of other psychological and pharmacological treatments. It is possible that adapting CT-SAD for adolescents (CT-SAD-A) may improve treatment outcomes for adolescents with SAD over the generic forms of CBT that are often applied, bringing direct benefits to young people and their families, the NHS, child and adolescent mental health services (CAMHS), as well as adult mental health services and society more broadly, by disrupting the negative trajectory associated with adolescent SAD.

Objective 1

This study initially set out to determine the feasibility of a randomised control trial (RCT) in routine NHS CAMHS to assess the use of CT-SAD-A compared with the C.A.T. Project (a CBT programme that has been developed for adolescents with a range of anxiety disorders) for adolescents with SAD. Specifically, our aims were to train NHS CAMHS therapists to deliver the adapted treatment and assess therapist competency and young people’s outcomes; identify appropriate clinical outcomes and economic measures for a subsequent definitive trial; and examine whether or not a definitive trial can be conducted on the basis of a feasibility trial that would:

- explore the acceptability of the treatments and trial procedures
- establish likely recruitment rates
- establish the likely rate of treatment drop out
- establish likely retention to research assessments post treatment and (in a subset of participants) at 3-month follow-up
- establish if adapted cognitive therapy for social anxiety disorder in adolescents can be delivered so that it is clearly distinct from the C.A.T Project, with high levels of fidelity by practitioners and credibility with patients in both arms
- conduct exploratory analyses of possible outcomes for the two treatments, including changes in social anxiety symptoms and diagnostic status, depression, social functioning, school attendance, concentration in class, quality of life, health-care resource use and other outcomes identified through patient and public involvement
- describe negative impacts of the treatments and the trial procedures (to patients, their parents and therapists).
Objective 2

Unfortunately, during the training phase of the study, it became clear that the proposed trial would not be feasible within routine CAMHS, and on the basis of liaison with the Study Steering Committee and the National Institute for Health Research (NIHR), the study aims were adapted to examine the training in and delivery of CT-SAD-A in routine NHS CAMHS, in terms of therapists’ abilities to deliver CT-SAD-A, young people’s outcomes, and the experiences of participating families (young people and their parents/carers), the therapists delivering the treatment, and their service managers within a CAMHS setting. Specifically, our aims were to:

- train NHS CAMHS therapists to deliver the adapted treatment and assess therapist competency (an independent rater is currently rating therapist competency and these outcomes will be reported in a later publication) and young people’s outcomes
- estimate the cost of delivering CT-SAD-A within an NHS CAMHS setting
- understand the experience of receiving CT-SAD-A and participating in a research study within a CAMHS setting among young people and their parents
- understand the experience of CAMHS therapists receiving training in and delivering CT-SAD-A and their experience of being part of a research study
- understand the experiences of the CAMHS service managers in relation to supporting the training and delivery of CT-SAD-A and the accompanying research procedures within their services.

Methods

- We produced a training manual and accompanying materials for the adapted form of CT-SAD-A [PowerPoint® presentations (Microsoft Corporation, Redmond, WA, USA) and video clips].
- NHS CAMHS therapists attended training workshops and received weekly supervision on a series of CT-SAD-A training cases.
- We assessed patient outcomes during the training phase using diagnostic interviews and young person and parent report questionnaires relating to social anxiety, common comorbid difficulties and broader functioning.
- We interviewed young people, parents, therapists and their managers/service leads and used interpretative phenomenological analysis to explore their experiences of CT-SAD-A and the research.

Results

Of the 19 therapists recruited to the training phase, 10 withdrew from the study owing to job changes or other pressures. Participating therapists had a limited amount of time available to work with young people recruited to the study. Some teams identified few young people with SAD because referrals increasingly required a focus on risk management. As a result of the difficulties with therapist retention and participant identification, we concluded that the proposed RCT would not be feasible in the current CAMHS context.

Twelve young people received CT-SAD-A as part of the training case series. Large reductions were reported for symptoms of social anxiety, generalised anxiety, depression, and large increases were reported for social satisfaction and participation. Seven young people no longer met criteria for a diagnosis of SAD at the end of the treatment. Large reductions were also found in the measures of the psychological mechanisms that are targeted in CT-SAD-A. Young people universally endorsed high acceptability of the treatment. The full cost to the NHS would be £4047 [standard deviation (SD) £1003] per adolescent treated in the training phase or £1861 (SD £358), excluding training costs.
On the basis of the qualitative interviews, young people appeared to find some aspects of the intervention challenging, but they reflected on the benefits (especially the improvements in what they were able to do) outstripping the costs. They found the approach taken by their therapists to be open and non-judgemental, and the therapeutic process to be active. They identified the use of measures and behavioural experiments to be particularly helpful.

Parents were aware that young people found some aspects of the intervention challenging, but they noticed and valued the benefits (especially in what their young people were able to do). They found the approach taken by their therapists to be open and inclusive, and they noticed and appreciated that the therapeutic process was an active one. They accepted the need for measures. They reflected on some of the relational impacts of treatment, and some felt that they would have liked to have received support for themselves as well.

The therapists were very positive about the training and the treatment model. They found the process of developing competence through delivery and supervision to be challenging but also constructive, acceptable and achievable. They framed the therapy as an active form of intervention and singled out behavioural experiments as a key component. Their confidence in other components of the therapy was more varied. They expressed concerns about the volume of measures involved and about the viability of delivering the therapy as part of routine CAMHS work. They identified features that they would incorporate into their future work, including the use of measures within treatment and the use of video in supervision.

Managers were sceptical about the viability of both the research and the intervention. They were concerned about the pressure on staff and used ‘time-as-a-limited-resource’ as the main means of framing this problem.

Conclusions

It is not feasible to conduct a RCT to compare CT-SAD-A with a generic form of CBT within the current CAMHS context. The findings of the training case series provide preliminary evidence that good outcomes can be achieved from the delivery of CT-SAD-A in NHS CAMHS and that young people, parents and therapists like and value the intervention. However, because of high service demands and a relatively low capacity within CAMHS, therapists and managers struggled to carve out and protect the time needed to participate in training and deliver the treatment. Furthermore, in some services, referral patterns had become increasingly dominated by risk management needs, and young people with SAD were not reaching services. Further work is needed to ensure that CAMHS workers are fully supported to learn and test CT-SAD-A within a CAMHS setting. Alternatively, CT-SAD-A should be delivered and tested in a community or school setting that is better configured to treat a representative population of young people whose lives are held back by SAD. The new schools Mental Health Support Teams envisaged in the 2017 Children’s Mental Health Green Paper may provide such an opportunity.

Funding

Funding for this study was provided by the Health Technology Assessment programme of the National Institute for Health Research (NIHR). Individual funding was also provided for Cathy Creswell, David M Clark and Eleanor Leigh as follows: NIHR Research Professorship (Cathy Creswell); Wellcome Senior Investigator Award (Anke Ehlers and David M Clark); and the Wellcome Clinical Research Training Fellowship (Eleanor Leigh).
Criteria for inclusion in the Health Technology Assessment journal

Reports are published in Health Technology Assessment (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in Health Technology Assessment are termed ‘systematic’ when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

HTA programme

Health Technology Assessment (HTA) research is undertaken where some evidence already exists to show that a technology can be effective and this needs to be compared to the current standard intervention to see which works best. Research can evaluate any intervention used in the treatment, prevention or diagnosis of disease, provided the study outcomes lead to findings that have the potential to be of direct benefit to NHS patients. Technologies in this context mean any method used to promote health; prevent and treat disease; and improve rehabilitation or long-term care. They are not confined to new drugs and include any intervention used in the treatment, prevention or diagnosis of disease.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

This report

The research reported in this issue of the journal was funded by the HTA programme as project number 14/170/01. The contractual start date was in March 2016. The draft report began editorial review in November 2018 and was accepted for publication in April 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care.

© Queen’s Printer and Controller of HMSO 2021. This work was produced by Creswell et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.
NIHR Journals Library Editor-in-Chief

Professor Ken Stein  Professor of Public Health, University of Exeter Medical School, UK

NIHR Journals Library Editors

Professor John Powell  Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Professor of Digital Health Care, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Professor Andrée Le May  Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

Professor Matthias Beck  Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

Dr Tessa Crilly  Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin  Senior Scientific Advisor, Wessex Institute, UK

Dr Peter Davidson  Consultant Advisor, Wessex Institute, University of Southampton, UK

Ms Tara Lamont  Senior Scientific Adviser (Evidence Use), Wessex Institute, University of Southampton, UK

Dr Catriona McDaid  Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

Professor William McGuire  Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads  Emeritus Professor of Wellbeing Research, University of Winchester, UK

Professor James Raftery  Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma  Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts  Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

Professor Jonathan Ross  Professor of Sexual Health and HIV, University Hospital Birmingham, UK

Professor Helen Snooks  Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Professor Ken Stein  Professor of Public Health, University of Exeter Medical School, UK

Professor Jim Thornton  Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk