Tailoring evidence-based psychological therapY for People with common mental disorder including Psychotic EXperiences (TYPPEX)

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Plain Language Summary

Background and Research Aim

Many people who experience common mental health problems such as depression, anxiety or a mixture of the two receive high-quality cognitive-behavioural therapy (CBT) through NHS Talking Therapies services. CBT helps people understand and change unhelpful thoughts and behaviours. It is effective for many people, but not everyone.

CBT works less well when people have psychotic experiences alongside anxiety or depression. Psychotic experiences include hearing voices, unusual beliefs or the feeling that other people are talking about them. These experiences can occur in severe mental illnesses (SMI) which include psychotic conditions such as schizophrenia, but most people who have them never develop SMI. Instead, they are often associated with severe anxiety and depression and can happen after traumatic life events.

NHS Talking Therapies services do not normally ask about psychotic experiences, so people with them receive standard CBT that was not developed to address all their difficulties. Some are referred to specialist mental health services, but these mainly focus on preventing or treating psychotic conditions.

We designed the TYPPEX research programme to fix this gap by creating and testing a new, more personalised form of CBT for use in NHS Talking Therapies services. The aim was to better support people with both common mental health problems and psychotic experiences, improving access to effective, less stigmatising care without increasing referrals to specialist services.

What we did

The TYPPEX programme included several linked research activities. Our team included clinicians, academics and The McPin Foundation, a charity partner that supported a lived-experience advisory panel (LEAP).

First, we reviewed the published research evidence on talking therapies for psychotic experiences in people without psychotic conditions. We then investigated how common psychotic experiences are among people using NHS Talking Therapies services by screening more than 2,000 people receiving care.

Combining the findings with the expertise of clinicians and people with lived experience, we developed *cognitive-behavioural therapy tailoring for severity* (CBT-ts). Rather than replacing standard CBT, CBT-ts adapts established techniques to address psychotic experiences alongside anxiety and depression. It involves routinely asking about psychotic experiences, helping people understand them, developing a shared understanding of how their difficulties are connected, and tailoring CBT techniques to meet individual needs. We also created a three-day online training programme followed by monthly supervision to support therapists. We did a small study of CBT-ts in three talking therapies services to check whether and how CBT-ts and the therapist training should be delivered.

Next, we tested CBT-ts in a large trial across four NHS Talking Therapies services in England. Groups of therapists received training in a random order according to chance, allowing us to compare the outcomes for people treated before and after CBT-ts was introduced. We predicted that people with psychotic experiences who were treated after their therapist had been trained in CBT-ts would end treatment with lower

depression and anxiety levels than people treated by therapists waiting to be trained. In other words, we predicted that treatment with CBT-ts would boost recovery.

Alongside the trial, we interviewed people receiving treatment, therapists, service managers, researchers and people with lived experience to understand their experiences of the intervention.

What we found

The review of research found little strong evidence about which psychological treatments work best for psychotic experiences in people without psychotic conditions. CBT reduced distress associated with psychotic experiences and was likely to be cost-effective compared with usual care. However, it was unlikely that any particular treatment used at the time of our review produced meaningful improvements in recovery. These findings supported the development of our tailored CBT intervention.

Our screening work confirmed that psychotic experiences are common among people with anxiety or depression receiving NHS Talking Therapies services. Almost one in three reported psychotic experiences that affected their wellbeing. Suspiciousness and feeling that others were talking about or watching them were more common than hearing or seeing things that others did not. Depression and anxiety scores improved with standard treatment in people with and without psychotic experiences, but those with psychotic experiences started therapy with more severe symptoms, making recovery less likely than for those without psychotic experiences.

The small study before the main trial showed that therapists could be trained successfully to deliver CBT-ts. It also helped refine both the intervention and the training.

In the main study we assessed more than 2,600 people using NHS Talking Therapies services. Around one-third had distressing psychotic experiences alongside anxiety or depression and nearly 800 of them were included in our trial. They were generally positive about being screened for psychotic experiences and the CBT-ts approach. Their therapists valued the training but found it challenging and reported that ongoing supervision was needed to use the new techniques effectively. Overall, only around 28% of people with psychotic experiences recovered from anxiety or depression by the end of their treatment, regardless of whether their therapists had been trained in CBT-ts. People who received CBT-ts were no more likely to recover from anxiety or depression or to improve on any other outcome we measured compared with those receiving standard CBT. Further, CBT-ts was unlikely to provide good value for money, although incomplete information and unexpectedly high healthcare costs for some people complicated things.

The trial highlighted practical challenges within NHS Talking Therapies services. High workloads, organisational changes and pressure to meet targets made it difficult to deliver CBT-ts consistently. Almost half the participating therapists did not complete the training or deliver CBT-ts because of heavy workloads, limited managerial support, sickness absence, parental leave or changing their job. As a result, relatively few therapists delivered CBT-ts as intended.

Overall, the TYPPEX programme showed that psychotic experiences are common among people receiving treatment for anxiety or depression in NHS Talking Therapies services. These individuals are less likely to recover than those without psychotic

experiences. Adapting standard CBT alone is not enough to improve outcomes under current service conditions.

Patient and Public Involvement

People with lived experience of talking therapies and psychotic experiences were involved at every stage of the TYPPEX programme. Their expertise helped identify the gap in care, including the feeling of being left "in no-man's land" because neither NHS Talking Therapies nor specialist psychosis services fully met their needs.

Our lived experience partners contributed to the development of CBT-ts alongside clinicians and other researchers, and guided decisions on the words used in the training programme to describe living with psychotic experiences.

Following the main trial, members of our LEAP helped make sense of the trial results and the information from the interviews we did alongside the trial. We showed the results reflected wider problems in mental health services and research. LEAP members said people with depression, anxiety and psychotic experiences are still in a care gap without support.

Next steps

The reasons that CBT-ts did not boost recovery in the trial are complex but may partly lie in the challenges of delivering a new, complex intervention within overstretched NHS services. Members of our LEAP recommended that people with psychotic experiences alongside anxiety or depression may benefit from research on a dedicated treatment pathway designed specifically for their needs, rather than relying on adaptations to already overstretched talking therapies services.

The practical methods for identifying psychotic experiences during routine care and the structured CBT-ts approach supported by therapist training and supervision developed during the programme may provide a foundation for future research.

Research Inclusion

The programme focused on people who are under-recognised within NHS Talking Therapies services and whose needs are often not fully met by existing service pathways. Through the development and evaluation of tailored interventions, TYPPEX sought to ensure that this population was represented in research and that findings would be relevant to people accessing routine mental health services.

People with lived experience were involved from the inception of the programme through a diverse LEAP supported by the McPin Foundation. Lived experience contributors informed the research priorities, study design, intervention development, participant-facing materials, interpretation of findings, and dissemination activities. This collaborative approach helped ensure that research questions and study procedures reflected the needs and perspectives of those directly affected by anxiety, depression and psychotic experiences.

The programme recruited participants through talking therapies services across four NHS Trusts across Cambridgeshire, Peterborough, Norfolk, Suffolk, Sussex and inner London. Embedding research within routine services enabled us to include people from a wide range of backgrounds. During the randomised trial we included everyone on the caseloads of participating therapists unless they chose to opt out. This helped groups who may be less likely to volunteer for research to take part, maximising inclusion and reducing recruitment bias. Across the programme, we monitored participant characteristics and considered how findings might vary across different patient groups.

Trial outcomes were assessed using routinely collected NHS service data rather than requiring additional data collection for research purposes, further reducing participant burden and enabling inclusion of people who might otherwise have been excluded because of time, capacity, or engagement constraints. As a result, the trial more closely reflected the diversity and complexity of patients receiving care in real-world mental health services.

Programme findings have been shared through academic publications, conference presentations, the project website, stakeholder engagement activities and public-facing communications. Our LEAP helped us present findings in accessible language wherever possible and supported dissemination beyond academic audiences.

A key lesson from TYPPEX was the value of involving people with lived experience as genuine partners from the beginning of the research, rather than solely as consultees. This relationship evolved over the course of the programme and was explored in a reflective report on the impact and experience of working with lived experience partners in mental health research.

Research Capacity Development

Clare Knight, our first Programme Manager who laid the foundations for TYPPEX, has a successful career as a clinical trial professional. Emma Soneson, first author of our systematic review, completed her PhD in psychiatry at the University of Cambridge; she is now a senior post-doctoral researcher in child and adolescent mental health at the University of Oxford. Anna Weidemann, first author on our publication about the range and patterns of psychotic experiences reported by people attending NHS Talking Therapies services, completed her PhD degree in psychiatric epidemiology at the University of Cambridge funded by the NIHR ARC East of England. Anna worked as a

post-doctoral scientist in child and adolescent mental health at Cambridge while undertaking clinical placements as a psychologist; she is now an observational research manager in the private sector while training as a consulting psychologist. Annabelle Olson was funded by the programme to work on the process evaluation led by The Healthcare Improvement Studies (THIS) Institute; she is now completing a PhD in mental health science at UCL. Aisha Raza is studying data we collected from CBT-ts therapists and their supervisors for her ClinPsyD degree at UEA. Debra Russo was promoted to non-doctoral Research Associate during the programme. Jesus Perez was elected to a full professorship at the University of Salamanca alongside his role in Cambridgeshire & Peterborough Foundation NHS Trust. Polly Ashford became co-Chief Investigator with Jesus for an NIHR Programme Development Award (series B) investigating the care pathways taken by the participants in the trial before and after attending NHS Talking Therapies services. Tim Croudace now chairs CSO-Scotland's EPD panel. Thomas Kabir took up an academic appointment at the University of Oxford focusing on PPI. Annie Walsh, LEAP member, joined the McPin Foundation staff and was recently promoted to senior public patient and involvement manager. Across the programme the researchers by profession and the experts by experience in our LEAP all improved their understanding and capability in research co-design and co-production, exemplified by an evaluation led by LEAP members of their impact on the programme that was both extensive and positive.

One reflection is how to develop the ability of NHS Talking Therapies services to host research and test new talking treatments like CBT-ts. Across the country, the services see tens of thousands of people a year with depression, anxiety and psychotic experiences, most of whom will not recover with current therapy. Setting our programme in NHS Talking Therapies services helped us include patients from many backgrounds, but the services are so busy and the therapists under so much pressure that it was difficult to make the research happen in practice. The suggestion by our LEAP of a dedicated care pathway for people with psychotic experiences would also support research into the best care for them.

Acknowledgements

We are grateful to the late Hannah Murray, University of Oxford, who contributed enormously to our programme and especially to training and supervision development. Hannah clarified our thinking about the clinical significance of psychotic experiences in the context of NHS Talking Therapies services. Michelle Griffiths-Reeve, Nicola Marshall and Michelle Painter were key to therapy development and supervision. We acknowledge the commitment of the NHS Talking Therapies services, managers and especially the therapists involved in the programme, with particular thanks to Nesta Reeves and James Clarke. We are grateful to our Programme Steering Committee chaired by Professor Simon Gilbody and our Data Monitoring and Ethics Committee chaired by Professor Obi Ukoumunne.

Data sharing statement

See link [https://www.nihr.ac.uk/documents/nihr-position-on-the-sharing-of-research-data/12253] for the NIHR position on the sharing of research data. The NIHR strongly supports the sharing of data in the most appropriate way, to help deliver research that maximises benefits to patients and the wider public, the health and care system and which contributes to economic growth in the UK. All requests for data should be directed to the award holder and managed by the award holder.

Disclaimer

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This project was carried out between February 2018 and June 2026. This final report has not been peer-reviewed. The report was examined by the Programme Team at the time of submission to assess completeness against the stated aims. These reports do not undergo an external peer review process.

PGfAR 0616-20003 Annex to Plain Language Summary listing the manuscripts it summarises

Published:

Horizon-scanning paper describing the background and rationale for the programme

Perez J, Russo DA, Stochl J, Clarke J, Martin Z, Jassi C, French P, Fowler D, Jones PB. Common mental disorder including psychotic experiences: Trailblazing a new recovery pathway within the Improving Access to Psychological Therapies programme in England. *Early Interv Psychiatry*. 2018 Jun;12(3):497-504. doi: 10.1111/eip.12434.

Observational study describing a predicted but hitherto un-identified group of patients presenting with more severe common mental disorders including psychotic experiences who are less likely to recover following conventional CBT in NHS Talking Therapies services

Knight C, Russo D, Stochl J, Croudace T, Fowler D, Grey N, Reeve N, Jones PB, Perez J. Prevalence of and recovery from common mental disorder including psychotic experiences in the UK Primary Care Improving Access to Psychological Therapies (IAPT) Programme. *J Affect Disord*. 2020 Jul 1;272:84-90. doi: 10.1016/j.jad.2020.04.015.

Systematic review and meta-analysis of evidence regarding existing talking therapy interventions for people with psychotic experiences as prelude to tailoring our own intervention (CBT-ts) for use in NHS Talking Therapies services

Soneson E, Russo D, Stochl J, Heslin M, Galante J, Knight C, Grey N, Hodgekins J, French P, Fowler D, Lafortune L, Byford S, Jones PB, Perez J. Psychological interventions for people with psychotic experiences: A systematic review and meta-analysis of controlled and uncontrolled effectiveness and economic studies. *Aust N Z J Psychiatry*. 2020 Jul;54(7):673-695. doi: 10.1177/0004867420913118.

Invited editorial that describes the conceptual framework behind the programme

Perez J, Jones PB. *Breaking the web*: life beyond the at-risk mental state for psychosis. *Psychol Med*. 2021 Apr;51(6):934-939. doi: 10.1017/S0033291719002605.

The protocol for our Stepped-wedge cluster randomised controlled trial (RCT) of delivering CBT-ts training, our tailored talking therapy intervention, to help people in NHS Talking Therapies services who have common mental disorders with psychotic experiences

Ashford PA, Knight C, Heslin M, Clark AB, Kanaan M, Patel U, Stuart F, Kabir T, Grey N, Murray H, Hodgekins J, Reeve N, Marshall N, Painter M, Clarke J, Russo D, Stochl J, Leathersich M, Pond M, Fowler D, French P, Swart AM, Dixon-Woods M, Byford S, Jones PB, Perez J. Treating common mental disorder including psychotic experiences in the primary care improving access to psychological therapies programme (the TYPPEX study): protocol for a stepped wedge cluster randomised controlled trial with nested economic and process evaluation of a training package for therapists. *BMJ Open.* 2022 Jun 22;12(6):e056355. doi: 10.1136/bmjopen-2021-056355.

Identification of factors associated with baseline severity of depression and anxiety symptoms, rate of symptomatic change over the course of therapy, and symptomatic recovery in NHS Talking Therapies

Stochl J, Soneson E, Stuart F, Fritz J, Walsh AEL, Croudace T, Hodgekins J, Patel U, Russo DA, Knight C, Jones PB, Perez J. Determinants of patient-reported outcome trajectories and symptomatic recovery in Improving Access to Psychological Therapies (IAPT) services. *Psychol Med*. 2022 Oct;52(14):3231-3240. doi: 10.1017/S0033291720005395.

Detailed clinical description of the range of psychotic experiences in people attending NHS Talking Therapies services but routinely unassessed

Wiedemann A, Stochl J, Russo D, Patel U, Ashford PA, Ali N, Jones PB, Perez J. Clinical presentation of psychotic experiences in patients with common mental disorders attending the UK primary care improving access to psychological therapies (IAPT) Programme. *J Affect Disord*. 2024 Jan 1;344:233-241. doi: 10.1016/j.jad.2023.10.073.

Under review at academic journals:

A structured account of the development of the CBT-ts complex intervention that would be delivered in the stepped-wedge cluster-randomised controlled trial.

*Ushma Patel, *Debra Russo1, Polly-Anna Ashford, David Fowler, Joanna Fox, Paul French, Nick Grey, Michelle Griffiths-Reeve, Joanne Hodgekins, Thomas Kabir, Nicola Marshall, Michelle Painter, Annabel Walsh, **Jesus Perez and **Peter B Jones. (*/** joint first/last authors) Development of a CBT-based Intervention Tailored for Severity (CBT-ts) for Anxiety and Depression including Psychotic Experiences in NHS Talking Therapies Services. *Revised after peer at Behavioural & Clinical Psychotherapy*

An evaluation led by the LEAP about the impact of doing research with lived experience partners

Joanna Fox, Roya Kamvar, Vanessa Pinfold, Annabel Walsh, Polly-Anna Ashford, Rosie Lindsay, Debra Russo, Jesus Perez, Peter B. Jones. Unpacking the impact and experience of working with lived experience partners in mental health research –

exploring research team and public partner perspectives. *Revised after peer review at Health Expectations.*

Ready for submission:

The results of the process evaluation of the TYPPEX trial

Rosie K Lindsay, Annabelle Olsson, Roya Kamvar, Janet Willars, Meredith McLaughlin, Peter B Jones, Jesus Perez, Polly-Anna Ashford, Annabelle Walsh, Joanna Fox, Mary Dixon-Woods. Tailoring evidence-based psychological therapY for People with common mental conditions including Psychotic EXperiences intervention (TYPPEX): A qualitative process evaluation of a stepped-wedge cluster randomised controlled trial

In draft:

The results of the TYPPEX trial

Tailoring evidence-based psychological therapY for People with common mental conditions including Psychotic EXperiences intervention (TYPPEX): Clinical and health economic results from a stepped-wedge cluster randomised controlled trial of a complex CBT-based intervention.

Impact of NHS Talking Therapies on psychosocial functioning

Longitudinal psychosocial functioning in people with depression and anxiety reporting psychotic experiences in NHS Talking Therapies services.