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Culturally adapted, task-shifted Compensatory Cognitive Training for young adults with first-episode psychosis in Nigeria: a pilot randomised controlled trial

Submission date
07/12/2025

Recruitment status
Recruiting

Registration date
09/12/2025

Overall study status
Ongoing

Last Edited
09/12/2025

Condition category
Mental and Behavioural Disorders

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Many young people who develop psychosis also have problems with memory, attention, planning, and everyday problem-solving. These difficulties can limit recovery and make it harder to return to school, work, and independent living, even when symptoms such as hallucinations or delusions improve. In Nigeria, structured treatments for these thinking and memory problems are rarely available in routine mental health services.
This study aims to find out whether a culturally adapted cognitive training programme, delivered by trained social workers and supported by mobile phones, is feasible, acceptable, and practical to use in public psychiatric hospitals in Nigeria. The study will also explore whether the programme shows early signs of improving thinking skills and daily functioning.

Who can participate?
Young people aged 18 to 30 years who:
Have had a diagnosis of psychosis within the last five years
Have difficulties with memory, attention, or thinking skills
Are receiving care at one of the participating hospitals
Can speak and understand English or Nigerian Pidgin
Young people with severe medical illness, current substance dependence, or very high suicide risk will not be included.

What does the study involve?
Participants will be randomly placed into one of two groups:
One group will receive Compensatory Cognitive Training (CCT). This is a group-based programme that teaches practical strategies to improve memory, attention, and problem-solving in everyday life. Sessions will be held once a week for 12 weeks, last 60–90 minutes, and will involve 6–8 participants per group. Sessions will be led by trained social workers under specialist supervision.
The other group will receive recreational therapy, which includes group activities such as creative work, physical exercise, and group discussion. This group will also meet once a week for

the same length of time but will not receive cognitive training.
All participants will continue with their usual hospital care. Assessments will be carried out at the start of the study and again after 3 months, 6 months, and 12 months.

What are the possible benefits and risks of participating?
Participants may benefit from learning new ways to cope with memory and thinking difficulties, which could help with daily activities, school, or work. Some people may also find the group sessions helpful for confidence and social support.
Possible risks are minimal and may include mild tiredness during sessions, frustration when learning new skills, or discomfort when answering personal questions during interviews. Participants will be supported throughout the study, and any concerns will be addressed promptly.

Where is the study run from?
The study will be run from public psychiatric hospitals in Lagos and Ogun States, Nigeria, including:
1. Lagos State University Teaching Hospital
2. Federal Neuropsychiatric Hospital, Yaba
3. Neuropsychiatric Hospital, Aro, Abeokuta

When is the study starting and how long is it expected to run for?
Participant recruitment is expected to start in February 2026 and continue for 9 months, until November 2026. Each participant will be followed for 12 months. The full study is expected to be completed by November 2027.

Who is funding the study?
The study is funded by the Wellcome Trust (UK)

Who is the main contact?
Prof. Abiodun Adewuya, abiodun.adewuya@lasucom.edu.ng

Contact information

Type(s)
Public, Scientific, Principal investigator

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Study information

Scientific Title
Contextualisation, cultural adaptation and pilot randomised controlled trial of compensatory cognitive training to improve cognition and functioning in young adults with first-episode psychosis in Nigeria

Acronym
Youths-CCT Nigeria

Study objectives
1. To determine the feasibility of recruiting, randomising, and retaining young people with first-episode psychosis into a culturally adapted, task-shifted Compensatory Cognitive Training (CCT) intervention delivered within public psychiatric hospitals in Nigeria.
2. To evaluate the acceptability of the culturally adapted CCT intervention to service users and providers, including satisfaction with content, delivery format, and supervision model.
3. To assess the implementation fidelity and practicality of delivering CCT through trained psychiatric social workers under specialist supervision.
4. To estimate the preliminary effects of CCT, compared with enhanced recreational therapy, on global cognition, functional capacity, symptom severity, and quality of life over 12 months of follow-up.
5. To generate preliminary data on the resource use and cost implications of delivering CCT within routine public mental health services in Nigeria.
6. To explore the perceived barriers and facilitators to CCT delivery and sustainability through embedded qualitative interviews with service users, caregivers, and health workers.

Ethics approval required
Ethics approval required

Ethics approval(s)
1. approved 18/11/2024, Federal Neuro-Psychiatric Hospital, Yaba (Harvey Road . Yaba, Lagos, 100213, Nigeria; +234 (0)9060001907; enquiries@fnphyaba.gov.ng), ref: FNPHY/HREC/2024/001/11/279

2. approved 06/11/2025, NeuroPsychiatric Hospital Aro Research Ethics Committee (Aro, Abeokuta, 104567, Nigeria; +234 (0)706 054 8430; ethics@npharo.gov.ng), ref: PR/0031/25

3. approved 10/01/2024, Lagos State University Teaching Hospital Health Research Ethics Committee (1-5 Oba Akinjobi Way. Ikeja, Lagos, 100010, Nigeria; +234 (0)14710670; dcst@lasuth.org), ref: LREC/06/10/2373

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking

Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Supportive care, Treatment

Study type(s)

Health condition(s) or problem(s) studied
First-episode psychosis; Cognitive impairment in psychotic disorders; Schizophrenia spectrum and other psychotic disorders

Interventions
Participants are randomly allocated in a 1:1 ratio to either a Compensatory Cognitive Training (CCT) intervention arm or an enhanced Recreational Therapy control arm using computer-generated block randomisation with allocation concealment by an independent statistician. Outcome assessors are blinded to group allocation.

Intervention Arm: Culturally Adapted Compensatory Cognitive Training (CCT)
Participants receive a culturally adapted, manualised Compensatory Cognitive Training programme delivered in small groups of 4–8 participants. The intervention is delivered once weekly for 12 consecutive weeks, with each session lasting approximately 60-90 minutes . CCT is delivered by trained psychiatric social workers under regular specialist supervision. The programme targets prospective memory, attention, learning and memory, and executive functioning using compensatory strategies, real-world skills training, and structured homework tasks. Participants receive mobile phone reminders and low-technology memory aids to support between-session practice. Fidelity is monitored using standardised checklists.

Control Arm: Enhanced Recreational Therapy
Participants receive structured group-based recreational therapy delivered once weekly for 12 consecutive weeks, matched to the intervention arm for session duration, frequency, facilitator contact time, group size, and incentives. Recreational therapy includes creative activities, physical exercise, leisure education, and group discussion but does not include any formal cognitive strategy training.

Follow-up and Assessments
All participants continue to receive routine clinical care at their treatment centres. Outcome assessments are conducted at baseline, 3 months, 6 months, and 12 months post-randomisation.

Intervention Type
Behavioural

Primary outcome(s)
1. Recruitment rate measured using Proportion of screened eligible patients who provide informed consent at End of recruitment period

2. Retention rate measured using Proportion of randomised participants who complete the final assessment at 12 months post-randomisation

3. Intervention completion rate measured using Proportion of participants attending ≥9 of the 12 scheduled sessions at End of 12-week intervention phase

4. Intervention fidelity measured using Percentage adherence to the manual assessed by independent raters on 20 % of audio-recorded sessions at Throughout the 12-week intervention delivery period

5. Acceptability measured using Client Satisfaction Questionnaire-8 (CSQ-8) total score (range 8–32) at 3 months post-randomisation (immediately post-intervention)

Key secondary outcome(s))
1. Global cognition measured using Brief Assessment of Cognition in Schizophrenia (BACS) composite z-score at Baseline, 3 months, 6 months, 12 months

2. Social cognition measured using Social Cognition Screening Questionnaire (SCSQ) total score at Baseline, 12 months

3. Functional capacity measured using UCSD Performance-Based Skills Assessment (UPSA) total score at Baseline, 3 months, 6 months, 12 months

4. Disability measured using WHO Disability Assessment Schedule 2.0 (WHODAS 2.0) 36-item total score at Baseline, 3 months, 6 months, 12 months

5. Symptom severity measured using Positive and Negative Syndrome Scale (PANSS) total score at Baseline, 3 months, 6 months, 12 months

6. Quality of life measured using WHO Quality of Life-BREF (WHOQOL-BREF) domain and total scores at Baseline, 3 months, 6 months, 12 months

7. Health-care costs and cost-effectiveness measured using Client Service Receipt Inventory (CSRI) + EQ-5D-5L for QALYs; incremental cost-effectiveness ratio (ICER) at Baseline, 3 months, 6 months, 12 months

Completion date
31/10/2027

Eligibility

Key inclusion criteria
1. DSM5 diagnosis of a primary psychotic disorder (schizophrenia, schizophreniform, schizoaffective, delusional, brief psychotic, substanceinduced, or affective psychosis with psychotic features) with onset within the previous 5 years, confirmed using MINI 7.0
2. Age 18–30 years inclusive
3. Objective cognitive impairment documented on the Brief Assessment of Cognition in Schizophrenia (BACS), defined as composite score ≥0.5 SD below age/educationadjusted norms
4. Fluent in English or Nigerian Pidgin sufficient to participate in group sessions and complete assessments
5. Mental capacity to provide informed consent and follow study procedures

6. Clinically stable (no psychiatric admission in previous 4 weeks; no major antipsychotic dose change in previous 2 weeks)
7. Receiving care at one of the participating hospitals

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Upper age limit
30 years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Dementia, intellectual disability or primary organic brain disorder
2. Traumatic brain injury with persistent cognitive sequelae or other neurological disease affecting cognition
3. Current substance dependence (excluding nicotine)
4. Severe comorbid medical illness preventing group attendance
5. High imminent suicide/homicide risk or acute agitation requiring intensive intervention
6. Very severe acute psychotic symptoms unsuitable for group participation
7. Residence outside facility catchment areas without reliable transport
8. Current participation in another cognitive intervention trial
9. Previous participation in formal cognitive remediation within past 12 months

Date of first enrolment
01/02/2026

Date of final enrolment
31/10/2026

Locations

Countries of recruitment
Nigeria

Study participating centre

Lagos State University Teaching Hospital (LASUTH)
1-5 Oba Akinjobi Way. Ikeja
Lagos
Nigeria

Study participating centre
Federal Neuro-Psychiatric Hospital
Harvey Road . Yaba
Lagos
Nigeria

Study participating centre
Neuropsychiatric Hospital
Aro
Abeokuta
Nigeria

Sponsor information

Organisation
Lagos State University College of Medicine

Funder(s)

Funder type

Funder Name
Wellcome Trust

Alternative Name(s)
Wellcome, WT

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request from Prof Abiodun Adewuya (abiodun.adewuya@lasucom.edu.ng)

IPD sharing plan summary
Available on request