

# Development of an online, group-based, clinical neuropsychology rehabilitation programme

<b>Submission date</b> 30/08/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 15/09/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 02/04/2024	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Acquired brain injury (ABI) is caused by medical conditions (e.g., stroke) or injuries (e.g., traffic accidents). In the UK, 1.4 million people live with the consequences of ABI, which can be lifelong, costing the economy £15 billion annually (10% NHS annual budget). Approximately 20% of ABI survivors experience emotional and/or thinking skills problems. These can impact return to hobbies and work, increasing risk of isolation and resulting in distress and reduced quality of life. Neuropsychological rehabilitation is useful in treating such problems but is typically delivered face-to-face. However, due to the lack of NHS resources, not all ABI survivors get the help they need. Furthermore, limited clinic space and other restrictions mean group sessions cannot always be provided safely, if at all.

The study aims to test whether people with ABI find a newly developed online, group-based neuropsychological rehabilitation programme useful and acceptable.

### Who can participate?

Adults who have experienced an acquired brain injury and left hospital at least three months prior to the study commencing.

### What does the study involve?

To test the intervention participants will:

1. Complete questionnaires at the start of the study
2. Take part in a session to find out more about their presenting strengths and challenges and adjustments that could be helpful with the Clinical Neuropsychologist
3. Take part in 8 weekly, online, group sessions
4. Complete questionnaires at the end of the study, and provide feedback in an interview with a researcher

### What are the possible risks and benefits of participating?

The risk of serious harmful effect due to participating in the study is considered low. Participants will be completing questionnaires and talking about topics, and they may experience some

distress if they find they are not performing as well as they think and/or if sensitive topics are raised. To minimise risk all members of the research team will be trained to identify and respond to signs of distress in a sensitive manner, and a risk protocol will be in place.

Whilst there is no guarantee of benefit, the neuropsychological rehabilitation programme could potentially improve participants' emotional wellbeing, quality of life, and ability to 'live well' with ABI by offering education and strategies.

Where is the study run from?

The study is run from the University of Nottingham, in collaboration with Nottinghamshire Healthcare NHS Trust and Midlands Partnerships University NHS Foundation Trust (UK).

When is the study starting and how long is it expected to run for?

March 2022 to March 2024

Who is funding the study?

This project is funded by the National Institute for Health and Care Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number NIHR202753).

Who is the main contact?

Kim Fletcher, kimberley.fletcher@nottingham.ac.uk

## Contact information

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Scientific

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# Additional identifiers

## EudraCT/CTIS number

Nil known

## IRAS number

316145

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

CPMS 55258, NIHR202753, IRAS 316145

# Study information

## Scientific Title

Development and refinement of an online, group-based, clinical neuropsychology rehabilitation programme to improve psychological well-being and quality of life after acquired brain injury

## Acronym

NeRO Work Package 3

## Study objectives

To examine preliminary acceptability and fidelity of a new, online, group-based, clinical neuropsychology rehabilitation programme. To determine (preliminary) promise of the intervention.

## Ethics approval required

Ethics approval required

## Ethics approval(s)

Approved 23/03/2023, London Harrow (Level 3, Block B, Whitefriars, Bristol, BS1 2NT, United Kingdom; +44 207 104 8154; harrow.rec@hra.nhs.uk), ref: 23/LO/0149

## Study design

Interventional non-randomized

## Primary study design

Interventional

## Secondary study design

Non randomised study

## Study setting(s)

Internet/virtual, Other therapist office

## Study type(s)

Treatment

## **Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet.

## **Health condition(s) or problem(s) studied**

Acquired brain injury

## **Interventions**

Baseline assessment

All participants at the baseline stage will complete questionnaires online with the study Research Support Fellow. Questionnaires will assess well-being, mood, anxiety, suicide risk, acceptance, compassion, living towards values, self-perceived cognitive deficits and quality of life.

If thought to be eligible for the study, the research support fellow will also check availability to attend intervention sessions and schedule an initial individual session with the clinical neuropsychologist.

Clinical Neuropsychology session

Once baseline measures have been completed, and the participant is determined as eligible to take part, the participant will meet with the clinical neuropsychologist to complete an initial formulation session. This will develop an understanding of the participants presenting challenges and strengths, and consider helpful adaptations. Eligibility criteria will also be reconsidered at this stage.

Neuropsychological rehabilitation

The intervention group will involve weekly online group-based neuropsychological rehabilitation (NPR) sessions for 8 consecutive weeks. The sessions will last approximately 1 hour each and will involve two groups with 4-6 participants each.

All intervention sessions, screening assessments and outcome assessments will be conducted online via MS Teams video conferencing or alternative HS Compliant platform. All participants will be given instructions on how to use MS Teams (or alternative) if needed.

Outcome assessment

The outcome assessment will take place 2- weeks after intervention completion. This will be completed online directly with the participants. The participant will complete a change and feedback interview, and complete outcome measures.

Assessments will be completed by the research support fellow who will not be involved in delivering the intervention.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

1. Mood/Depression measured using Patient Health Questionnaire 9 at baseline, and 2-weeks post intervention completion.
2. Risk of suicide using the Columbia Suicide Severity Rating Scale at baseline, and 2-weeks post intervention completion.
3. Anxiety using the Generalised Anxiety Scale-7 at baseline, and 2-weeks post intervention completion.

4. Acceptance using the Acceptance and Action Questionnaire at baseline, and 2-weeks post intervention completion.
5. Living towards values using the Valued Living Questionnaire at baseline, and 2-weeks post intervention completion.
6. Self-compassion using the Self-Compassion questionnaire at baseline, and 2-weeks post intervention completion.
7. Cognition using the ACE-III (mini) at baseline, and 2-weeks post intervention completion.
8. Goal attainment using the GAS-Lite at baseline, and 2-weeks post intervention completion.
9. Quality of life measured using the QOLIBRI at baseline, and 2-weeks post intervention completion (awaiting confirmation from ethics as submitted as an amendment)

### **Secondary outcome measures**

There are no secondary outcome measures

### **Overall study start date**

01/03/2022

### **Completion date**

31/03/2024

## **Eligibility**

### **Key inclusion criteria**

1. Acquired brain injury experienced as an adult (>18 years), at least three-months prior to joining the study
2. Age >18 years
3. Self-reported sense of being 'stuck' and/or emotional difficulties related to ABI rehabilitation (screened during initial interview)
4. English-speaking
5. Able to access the online platform
6. Ability to give informed consent and complete outcome measures

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Lower age limit**

18 Years

### **Sex**

Both

### **Target number of participants**

Planned Sample Size: 12; UK Sample Size: 12

### **Total final enrolment**

11

**Key exclusion criteria**

1. Pre-existing intellectual disability
2. Severe psychiatric disorder (at time of screening or in previous year), and/or factors (e.g., suicidal intent or ideation) indicating alternative treatment may take priority
3. Comorbid neurodegenerative condition
4. Indication that group intervention may not be appropriate (screened during baseline and initial interview)

**Date of first enrolment**

30/05/2023

**Date of final enrolment**

31/08/2023

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre****Midlands Partnership NHS Foundation Trust**

Trust Headquarters  
St Georges Hospital  
Corporation Street  
Stafford  
United Kingdom  
ST16 3SR

**Study participating centre****Leicestershire Partnership NHS Trust**

Riverside House  
Bridge Park Plaza  
Bridge Park Road  
Leicester  
United Kingdom  
LE4 8PQ

**Study participating centre****University Hospitals of Derby and Burton NHS Foundation Trust**

Royal Derby Hospital  
Uttoxeter Road

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## Sponsor information

### Organisation

University of Nottingham

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### Sponsor type

University/education

### Website

<http://www.nottingham.ac.uk/>

### ROR

<https://ror.org/01ee9ar58>

## Funder(s)

### Funder type

Government

### Funder Name

NIHR Central Commissioning Facility (CCF)

## Results and Publications

### Publication and dissemination plan

Planned publication in peer-reviewed journals.

### Intention to publish date

01/03/2025

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository.

The datasets generated and/or analysed during the current study will be available upon request from Kim Fletcher (kimberley.fletcher@nottingham.ac.uk)

### IPD sharing plan summary

Stored in non-publicly available repository, Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">HRA research summary</a>			20/09/2023	No	No