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Investigating the effects of cognitive training on attention

Submission date 23/10/2014	**Recruitment status** No longer recruiting	[X] Prospectively registered [_] Protocol
Registration date 23/10/2014	**Overall study status** Completed	[_] Statistical analysis plan [X] Results
Last Edited 29/09/2026	**Condition category** Circulatory System	[X] Individual participant data

Plain English summary of protocol

Background and study aims
Cognitive problems, including in attention and working memory, are common consequences of a stroke. Studies have suggested that progressive computerized training (i.e. training exercises that become more challenging as performance improves) can enhance cognitive function not simply on the exercises that people have practiced, but more generally.

Who can participate?
People aged over 18 years who have had a stroke

What does the study involve?
Participants are randomly allocated to one of three groups: home-based online working memory training, a similar training programme focused on attention skills, or a waiting list control group. All participants are first assessed on a range of cognitive tasks and questionnaires about everyday function. These assessments are repeated after the 4 weeks of training and again at a 3-month follow-up. Participants in the training groups are asked to try to complete 20 minutes per working day over the 4 weeks. Participants in the waiting list control group are allocated to one of the active training programmes after the follow-up. In addition to the relative effectiveness of the training programmes, this study examines the feasibility of recruiting participants, the acceptability of the interventions to participants, and other factors that will inform a larger study if the results are positive.

What are the possible benefits and risks of participating?
Not provided at time of registration

Where is the study run from?
MRC Cognition and Brain Sciences Unit (UK)

When is the study starting and how long is it expected to run for?
November 2014 to September 2017

Who is funding the study?
Stroke Association (UK)

Who is the main contact?
Dr Polly Peers
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Contact information

Type(s)
Scientific

Contact name
Dr Polly Peers

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-
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Additional identifiers

Protocol serial number
17621

Study information

Scientific Title
Progressive home-based working memory and attention training following stroke, implications for spatial bias: a preliminary study

Study objectives
In addition to the relative efficacy of the training programmes compared with the waiting list condition, the study will examine the feasibility of recruitment, the acceptability of the interventions to participants and other factors that will inform a definitive trial if the results are positive.

More details can be found at: http://public.ukcrn.org.uk/Search/StudyDetail.aspx?StudyID=17621

Ethics approval required
Old ethics approval format

Ethics approval(s)
14/EE/0149

Primary study design
Interventional

Study design
Randomized; Interventional; Design type: Treatment

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Topic: Stroke; Subtopic: Rehabilitation; Disease: Therapy type

Interventions
In this study we aim to recruit people who have had a stroke and randomly allocate them to one of three conditions: home-based online working memory training, a similar training programme focused on attention skills; or a waiting list control group. All participants will be first assessed on a range of cognitive tasks and questionnaires about everyday function. These assessments will be repeated after the 4 weeks of training/waiting list and again at a 3 month follow-up. Participants in the training groups will be asked to try to complete 20 minutes per working day (MonFri) over the 4 weeks. Participants in the waiting list study will be allocated to one of the active training conditions after the followup.

Intervention Type
Other

Primary outcome(s)
Spatial Bias measure derived from Theory of Visual Attention paradigm

Key secondary outcome(s)
Not provided at time of registration

Completion date
01/09/2017

Eligibility

Key inclusion criteria
1. Over 18 years old
2. Able to give informed consent
3. Ability to interact with the computer with either hand or via the mouse

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
100 Years

Sex
All

Total final enrolment
80

Key exclusion criteria
1. Medical problems likely to prevent participation
2. Language problems likely to prevent comprehension of consent or the training instructions.

Date of first enrolment
01/11/2014

Date of final enrolment
01/09/2017

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
MRC Cognition and Brain Sciences Unit
-
Cambridge
England
CB2 7EF

Sponsor information

Organisation
Medical Research Council (MRC) (UK)

ROR
https://ror.org/03x94j517

Funder(s)

Funder type
Charity

Funder Name
Stroke Association

Alternative Name(s)
TheStrokeAssociation, TheStrokeAssoc

Funding Body Type
Private sector organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
Open access data will be available through the University of Cambridge sympletic repository. They will become publically available on publication of the paper at the link: https://doi.org/10.17863/CAM.66310. The data is currently under embargo and will become available once the paper is accepted for publication. The data is fully anonymised and the anonymised data along with copies of the analyses will be available in the repository. At the time of consent patients gave consent for anonymised data to be made freely available to other researchers.

IPD sharing plan summary
Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		10/09/2021	29/09/2026	Yes	No
Dataset		14/09/2021	29/09/2026	No	No
HRA research summary			28/06/2023	No	No
Preprint results		01/07/2013	08/04/2021	No	No