

# Can brain training lead to short term and sustained improvements in cognitive function?

<https://neurodegenerationresearch.eu/survey/can-brain-training-lead-to-short-term-and-sustained-improvements-in-cognitive-function/>

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### Country

United Kingdom

## Title of project or programme

Can brain training lead to short term and sustained improvements in cognitive function?

## Source of funding information

Alzheimer's Society

## Total sum awarded (Euro)

€ 281,404

## Start date of award

01/09/2009

## Total duration of award in years

7.6

## Keywords

### Research Abstract

The concept that 'brain training' may help cognitive function is extremely attractive, but there is very limited evidence to support the value of commercially available products. One large study of "brain training" for healthy older people, several small pilot studies of older people with early cognitive deficits and several studies in younger people have indicated that this approach can confer benefit. However, we cannot assume that "all brain training" is effective based upon several intense studies. The best study indicates that brain training focussing on reasoning and planning is the most effective and the most likely to generalize benefits to everyday activities. Most "brain training" has been delivered in person. To be available to a large number of people

brain training needs to be available through the internet.

Brain training will be tested in a randomized clinical trial to determine whether internet “reasoning and problem solving brain training” (RBT) can successfully improve cognitive function over 6 weeks and sustain improvements in cognition over 12 months in comparison to a dummy/placebo treatment. We will additionally test whether General Brain Training (GBT), similar to the type of non-reasoning training tasks provided by commercial brain training packages, confers benefit in comparison to the dummy/placebo treatment and whether RBT confers greater benefit than GBT. Between 75,000 and 100,000 participants will be randomized in equal proportions to one of the 3 treatments for the study period. Participants will be advised to do 10 minutes of training a day. The main outcomes will be (1) Overall performance on cognitive tasks at 6 weeks and 12 months in all participants comparing RBT and dummy/placebo treatment. (2) Every day activities at 12 months in participants over 60 comparing RBT and dummy/placebo treatment. Key secondary outcomes will include the comparison of RBT to GBT and GBT to placebo/dummy treatment. Findings from this project could provide the first cheap and easily accessible treatment to minimize or delay cognitive decline, with enormous potential benefits for public health.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

United Kingdom

**Diseases:**

N/A

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

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