

# Computer based cognitive flexibility training after stroke

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Main: We expect that cognitive flexibility training will result in a larger improvement in objective executive functioning compared with those who receive mock training or those who are in the waiting list group. Secondary: It is predicted that...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON22908

### Bron

NTR

### Verkorte titel

Training Project Amsterdam Seniors and Stroke (TAPASS)

### Aandoening

Stroke patients

## Ondersteuning

**Primaire sponsor:** University of Amsterdam

**Overige ondersteuning:** National Initiative Brain & Cognition, Netherlands Organization for Scientific Research (NWO).

University of Amsterdam, department of Brain & Cognition

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Executive functioning as measured by neuropsychological tasks (category and letter fluency, Tower of London, D-Kefs TMT number-letter switching, Wechsler Adult Intelligence Scale Letter-Number Sequencing). <br>

The groups will be compared immediately before training and immediately after training.

## Toelichting onderzoek

### Doel van het onderzoek

Main: We expect that cognitive flexibility training will result in a larger improvement in objective executive functioning compared with those who receive mock training or those who are in the waiting list group.

Secondary: It is predicted that cognitive flexibility training will be more effective in stroke patients compared with healthy adults and more effective in the post-acute phase than in the chronic phase post-stroke. Moreover, we expect that cognitive improvement will be related to changes in brain activity. In particular, we expect that resting-state brain activity of stroke patients who receive cognitive flexibility training will converge more to “normal” than of those who did not receive this training.

Explorative: We will explore which lesion characteristics (e.g. type of stroke, size of lesion, brain regions), and other variables (e.g. IQ, age, comorbidities, cognitive flexibility at baseline) predict good outcome.

### Onderzoeksopzet

The groups will be compared immediately before training, after 6 weeks of training, immediately after, and 4 weeks after training.

### Onderzoeksproduct en/of interventie

Online cognitive flexibility training, online mock training (active control), or waiting list. The training duration is 12 weeks, five times per week for 30 minutes per session.

The cognitive flexibility training includes tasks that train attention, reasoning, and working memory. The participants will frequently switch between these tasks to assure that cognitive flexibility is needed. The mock training consists of tasks that do not train cognitive functioning and no frequent switches between tasks.

Uva.braingymmer.com is used for both training groups.

## Contactpersonen

## **Publiek**

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## **Wetenschappelijk**

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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Key inclusion criteria: 1) Suffered from stroke and referred to rehabilitation; 2) Presence of cognitive dysfunction due to stroke; 3) Age between 30 and 80 years; 4) Daily access to computer with internet connection and able to use mouse; 5) Informed consent for study participation.

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

Key exclusion criteria: 1) Any disease other than stroke which results in severe cognitive impairments 2) Severe psychological, psychiatric, or somatic comorbidity which could strongly influence the performance on the neuropsychological assessment and training possibilities 3) Mentally (TICS score < 26) and physically (medically unstable) not fit enough to complete training protocol. 4) Aphasia, neglect, paresis or paralysis of the preferred hand, colorblindness, invalidating vision or hearing problems, or severe computer fear.

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Geneesmiddel

### Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-09-2013
Aantal proefpersonen:	120
Type:	Werkelijke startdatum

## Ethische beoordeling

Positief advies	
Datum:	22-05-2015
Soort:	Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 40530  
Bron: ToetsingOnline  
Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL5028
NTR-old	NTR5174
CCMO	NL44685.029.13
OMON	NL-OMON40530

## Resultaten