

Visual Thinking Strategies, applied as treatment for people with chronic acquired brain injury.

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Investigate whether critical thinking of people with executive function deficits as a result of brain damage can improve by VTS.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Structural brain disorders
Study type	Interventional

Summary

ID

NL-OMON34357

Source

ToetsingOnline

Brief title

VTS in patients with chronic acquired brain injury

Condition

- Structural brain disorders
- Cognitive and attention disorders and disturbances

Synonym

abstract thinking, and selecting relevant sensory information., cognitive flexibility, executive function deficits; brain processes which are responsible for planning, initiating appropriate actions and inhibiting inappropriate actions

Research involving

Human

Sponsors and support

Primary sponsor: Revalidatiecentrum Amsterdam

Source(s) of monetary or material Support: Revalidatiecentrum Amsterdam

Intervention

Keyword: brain injury, Cognitive rehabilitation, executive functions, Visual Thinking Strategies

Outcome measures

Primary outcome

Both in describing a painting (Aesthetic Development Interview, ADI) and in describing an unknown object (Material Object Interview, MOI): the number of different observations, the number of times that there are different observations (interpretations) about the same thing, the number of times that an observation is corrected, the number of observations that are based by the patient on evidence from the painting.

Secondary outcome

finding different solutions (Wordfluency and Design fluency) and critical thinking and reasoning logically (WAIS-III picture sequencing and Comprehension) and a questionnaire for social communicative skills (filled in by both the patient and a proxy).

Study description

Background summary

Many people with chronic acquired brain injury suffer from executive function deficits. They may be impulsive, have difficulty with initiating actions or finding different solutions, or draw conclusions that are not supported by the facts. Treatments for people with executive function deficits mainly aim at teaching strategies to make plans, solve problems and keep working purposeful. There is some evidence that this approach leads to improvement on a practical executive function task and on a questionnaire filled in by a proxy (Miotto

e.a. 2009)

Visual Thinking Strategies (VTS) is originally a method to teach children with little experience with art to look at art longer and more intensive, in order to improve esthetical growth. There is some evidence that VTS can improve critical thinking in children, also in domains other than art (Housen, 2002) and that VTS makes medical students observe their patients more critically during assessment (Naghshineh et al. 2008).

René ter Horst, psychologist in Rehabilitationcenter Amsterdam (RCA), Department Acquired Brain Injury, wondered whether this method would improve critical thinking in people who have a deficit in this area as a result of brain damage. VTS was tried out as small part of a broader cognitive rehabilitation program and seemed effective, but as it was not given in isolation, its effect was difficult to investigate.

Study objective

Investigate whether critical thinking of people with executive function deficits as a result of brain damage can improve by VTS.

Study design

Cross-over design. There are two groups. One group is treated with VTS while the second group has no treatment. Subsequently the second group is treated with VTS and the first group has no treatment. Patients are assigned to one of the groups at random.

Intervention

VTS. Participants look at an object of art. They are asked three questions. First they are asked: "What do you see on this painting?" Next: "You say (...), what makes you say that?" And last: "What else can we find?" This way participants learn to take time before responding and to base their observations on evidence. As VTS is given in a group and participants observe the paintings in different ways, they are taught that more than one answer is correct.

Study burden and risks

There are no risks attached to the treatment or the assessments. The participant is asked to come to the rehabilitation center three times for assessments (each time about one hour to one and a half hour) as well as for treatment. Treatment involves four weeks twice a week a one hour treatment session (i.e. eight treatment sessions in total).

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

acquired brain injury
at least one year post onset
executive function deficits
age 18-65

Exclusion criteria

serious visual or hearing deficits
serious cognitive (eg. attention deficit) or behavioural deficits interfering with
group participation
speaking and understanding Dutch insufficiently

other cognitive rehabilitation at the same time as the intervention

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Treatment

Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	26-04-2010
Enrollment:	14
Type:	Actual

Ethics review

Approved WMO	
Date:	12-04-2010
Application type:	First submission
Review commission:	METC Slotervaartziekenhuis en Reade (Amsterdam)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register

CCMO

ID

NL32038.048.10