Studie naar het werkgeheugen bij adolescenten met autisme in Nederland.

No registrations found.

Ethical review Positive opinion

Status Pending

Health condition type -

Study type Observational non invasive

Summary

ID

NL-OMON23771

Source

NTR

Brief title

SWAAN

Health condition

Neuropsychology Adolescents High Functioning Autism Working Memory

Neuropsychologie Adolescenten Hoog Functionerend Autisme Werk geheugen

Sponsors and support

Primary sponsor: Epilepsy Centre Kempenhaeghe, Heeze

Source(s) of monetary or material Support: Epilepsy Centre Kempenhaeghe, Heeze

Intervention

Outcome measures

Primary outcome

The neuropsychological WM parameters and behavioural WM parameters as obtained by the neuropsychological tasks and the questionnaires. The endpoints for the neuropsychological tasks and behavioural data as obtained by the questionnaires are standardized (z-) scores. This all will be processed in terms of:

- 1. Correlation between neuropsychological test results, and behavioural questionnaires data results;
- 2. Differences between adolescents with HFA and normal controls.

Secondary outcome

The study parameters of the Delphi procedure are the answers of the experts on questionnaires. These questionnaires will be made on the basis of the results of the main study. The endpoints of this procedure are the mean scores of the final round of the experts' forecasts.

Study description

Background summary

Autism spectrum disorder (ASD) is a heterogeneous neurodevelopmental syndrome. The aetiology of ASD is still unknown, and in spite of many studies the main cognitive theories of ASD - Theory of Mind deficit hypotheses, Weak Central Coherence account, and the Executive dysfunction theory - fail to explain the broad spectrum of symptoms found in ASD.

In the Netherlands a growing number of high average intelligent (HAVO/VWO) adolescents with autism is in the need for special secondary education due to their social, executive function (EF) and specific learning problems. Although these adolescents experience many problems in their everyday life, it is very difficult to objectify these problems in clinical or laboratory settings due to the compensation strategies these adolescents apply in these structured settings. This makes the need for finding new ways to objectify their problems and to target (educational) intervention specified to their needs, especially high.

Although there have been many studies that looked at working memory (WM) (a core domain of EF) in adolescents with high functioning autism (HFA), the results remain inconclusive. In these studies it is assumed that WM only processes abstract information. However our hypothesis is that WM plays a more central role in processing both 'cold' and 'hot' cognitive information. WM capacity problems therefore may play a leading role in the multiple

2 - Studie naar het werkgeheugen bij adolescenten met autisme in Nederland. 9-05-2025

symptoms displayed by adolescents with HFA.

This study will be a case-control study.

Study population: Adolescents with HFA aged 12-16 years, and a normal control group. The study will be performed at Epilepsy Centre Kempenhaeghe Heeze, Special Education School de Berkenschutse Heeze and at the Radboud University Nijmegen.

Study objective

In our view a proper functioning working memory (WM) is not only important for cognitive processes as language, memory etc. (i.e. 'cold' cognitive information), but is also essential for successfully navigating in the social world (i.e. 'hot' cognitive information).

Therefore our hypothesis is that WM plays a more central role in remembering, uploading and selecting social cues from the environment, hence in processing both 'cold' and 'hot' cognitive information. WM capacity problems therefore may play a leading role in the multiple symptoms (both 'cold' and 'hot' cognitive) displayed by intelligent adolescents with high functioning autism (HFA).

Study design

Adolescent, one of their parent(s)/ caregiver(s), and their teacher/mentor are asked to fill in at home two questionnaires. The neuropsychological assessment in the HFA-group will proximally take 4 hours. The neuropsychological assessment in the normal control group will proximally take 3 hours. One appointment will be made for the neuropsychological assessment.

Intervention

This study will be a case-control study.

Contacts

Public

Postbus 61
Evenlien M. Barendse
Epilepsie Centrum Kempenhaeghe, Building de Boondert
Heeze 5590 AB
The Netherlands
+31 (0)40 2279502

Scientific

Postbus 61

Evenlien M. Barendse

Epilepsie Centrum Kempenhaeghe, Building de Boondert Heeze 5590 AB The Netherlands +31 (0)40 2279502

Eligibility criteria

Inclusion criteria

For adolescents with HFA:

- 1. Age of 12 to 16 years;
- 2. Autism disorder or Asperger disorder diagnosis made conform the diagnosis criteria as formulated in the DSM-IV;
- 3. A signed informed consent (IC) from the adolescent and the parent/ caregiver;
- 4. A high average intelligence conform a HAVO/VWO education level.

For normal control adolescents:

- 1. Age of 12 to 16 years;
- 2. A signed IC from the adolescent and the parent/ caregiver;
- 3. A high average intelligence conform a HAVO/VWO education level.

Exclusion criteria

For adolescents with HFA:

- 1. A diagnosis for other (co-morbid) psychological disorders or psychiatric diseases as formulated in the DSM-IV, such as: Attention-deficit and disruptive behaviour disorders, anxiety disorders and mood disorders;
- 2. Appearance of additional variables that can influence cognitive functioning such as pathology of the Central Nervous System (CNS), significant hearing impairment, and medicinal treatment for epilepsy;

- 3. Use of Methylphenidate. In consultation with the responsible doctor, parent/caregiver and adolescent are asked if they are willing to not take the medicine on the day of the neuropsychological assessment. If all agree, the adolescent may participate in the study;
- 4. Inability to speak/understand the Dutch language;
- 5. Vision less than +4.5D or 4.5D.

For normal control adolescents:

- 1. A diagnosis for a psychological disorder or psychiatric disease as formulated in the DSM-IV, such as: Pervasive developmental disorders, attention-deficit and disruptive behaviour disorders, separation anxiety disorders, selective mutism, reactive attachment disorder of infancy or early childhood, anxiety disorders and mood disorders;
- 2. Appearance of additional variables that can influence cognitive functioning such as pathology of the CNS, significant hearing impairment, and medicinal treatment for epilepsy;
- 3. Use of Methylphenidate. In consultation with the responsible doctor, parent/caregiver and adolescent are asked if they are willing not to take the medicine on the day of the neuropsychological assessment. If all agree, the adolescent may participate in the study;
- 4. Inability to speak/understand the Dutch language;
- 5. Vision less than +4.5D or 4.5D.

Study design

Design

Study type: Observational non invasive

Intervention model: Parallel

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-11-2010

Enrollment: 108

Type: Anticipated

Ethics review

Positive opinion

Date: 16-09-2010

Application type: First submission

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 ID

NTR-new NL2411 NTR-old NTR2519

Other METC / CCMO : 10-3-055 / NL-32788.068.10

ISRCTN wordt niet meer aangevraagd.

Study results

Summary results

N/A