

Effectiveness of auditory training in children with (central) auditory processing disorders.

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Auditory training will enhance auditory processing in children with auditory processing disorders.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21982

Bron

Nationaal Trial Register

Verkorte titel

N/A

Aandoening

auditiële verwerkingsproblemen - auditory processing disorders; effectstudie - effectiveness; gerandomiseerde interventie studie - randomized controlled trial; kind - child

Ondersteuning

Primaire sponsor: UMC Utrecht

Overige ondersteuning: Stichting Kinderpostzegels Nederland

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The proportion of children below normal performance in at least one of three domains of auditory processing: word recognition in noise, binaural fusion, dichotic listening.

Toelichting onderzoek

Achtergrond van het onderzoek

Children with (central) auditory processing disorders can be distinguished from children with peripheral hearing loss by using an auditory processing assessment battery. The effect of training to enhance auditory processing capabilities in these children has however not been proven in a RCT. We therefore perform a RCT into the effectiveness of four training programs and compare them with a control group that did not receive training.

108 children were included.

Inclusion criteria are:

1. Age between 5 and 9 years;
2. APD-diagnosis based on standard auditory processing tasks;
3. Normal hearing (thresholds below 15 dB);
4. Normal intelligence (Raven).

Exclusion criteria are:

1. Speech and language developmental disorders;
2. Learning and behavioural disorders.

Children were randomly assigned to one of four training groups (n=18 each) or a control group (n=36). Training consists of 2x10 weeks daily training, with a 10-weeks training-free interval. Training programs:

1. Computerized auditory training;
2. Computerized auditory training including noise;
3. FM-system in the classroom;
4. High-frequency-lateral training.

The primary outcome measure is auditory processing skills as measured by standard auditory processing tasks. Secondary outcome measures are attention, parental and teacher's report, and developmental on a subset of auditory processing tests over 4 measurement points.

Doel van het onderzoek

Auditory training will enhance auditory processing in children with auditory processing disorders.

Onderzoeksopzet

1. M1: Randomisation - baseline measurements;
2. M2: after 10 weeks training;
3. M3: after a 10 week break, just before second stage of 10 weeks training;
4. M4: after second stage of 10 weeks training.

Onderzoeksproduct en/of interventie

Randomized assignment to one of the following training programs:

1. Computerized auditory training;
2. Computerized auditory training with noise;
3. FM-system;
4. Lateral trainer.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Children aged between 5-6 and 9-11 years;
2. Normal peripheral hearing acuity;
3. Below normal performance in at least one of three domains of auditory processing: word recognition in noise, binaural fusion, dichotic listening.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Below normal intelligence ($IQ < 85$);
2. Language comprehension and/or language production disorder;
3. Diagnosis of learning difficulties;
4. Below normal peripheral hearing acuity (high Fletcher index below 25 dB (at 1, 2, and 4 kHz) in the better hearing ear).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-04-2006
Aantal proefpersonen:	108
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies	
Datum:	27-02-2009
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL1606

Register

NTR-old

Ander register

ISRCTN

ID

NTR1688

METC UMC Utrecht : 05-161

ISRCTN wordt niet meer aangevraagd

Resultaten

Samenvatting resultaten

N/A