Perceptual learning to reduce crowding effects in visually impaired children

Gepubliceerd: 19-05-2015 Laatst bijgewerkt: 15-05-2024

-Perceptual learning can reduce foveal crowding in children with albinism and idiopathic infantile nystagmus

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

Samenvatting

ID

NL-OMON21908

Bron
Nationaal Trial Register

Aandoening

Visual impairment

Ondersteuning

Primaire sponsor: Radboud University Medical Center
Cognitive Neuroscience, Huispost 126
P.O. Box 6500 HB, Nijmegen
Overige ondersteuning: Bartiméus
ODAS
LSBS

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

-Crowding ratio (distance and near)

Toelichting onderzoek

Achtergrond van het onderzoek

Children with visual impairment show stronger crowding than children with normal vision; they have more difficulty identifying a suprathreshold object in the presence of clutter. Children with visual impairment also show a lag in their reading skills and longer visual search times than age-matched peers with normal vision. Recent studies demonstrate the potential prospects of perceptual learning to improve visual functions. However, it is still unclear which mechanisms are responsible for these improvements.

The main objective of this study is to determine whether perceptual learning can reduce crowding in children with visual impairment. In addition, the study aims to extent our understandings about the mechanisms that underlie crowding and perceptual learning. In order to do so, the effect of training on oculomotor, sensory and cognitive aspects will be evaluated separately.

Doel van het onderzoek

-Perceptual learning can reduce foveal crowding in children with albinism and idiopathic infantile nystagmus

Onderzoeksopzet

N.A.

Onderzoeksproduct en/of interventie

A computerized perceptual learning training will be used to reduce crowding in children with visual impairment. Children in the experimental group train with target letters surrounded by distrators and children in the control group train with isolated letters.

Contactpersonen

Publiek

Department of Cognitive Neuroscience - Donders Institute for Brain, Cognition and Behaviour
Radboudumc
J. Goossens
Geert Grooteplein 21

Rotterdam 6525 EZ

The Netherlands
T: +31 243 613 699

Wetenschappelijk

Department of Cognitive Neuroscience - Donders Institute for Brain, Cognition and Behaviour
Radboudumc
J. Goossens
Geert Grooteplein 21

Rotterdam 6525 EZ
The Netherlands
T: +31 243 613 699

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

-Age 6-10 years

-Normal birth weight

-Birth at term

-No perinatal complications

-Normal development

-No motor or intellectual impairments

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

-children with normal vision: distance visual acuity <20/25 or 0.80

-children with visual impairment: distance visual acuity <20/400 or 0.05

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blindering:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	05-01-2015
Aantal proefpersonen:	80
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	19-05-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 40727
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5104
NTR-old	NTR5236
CCMO	NL49432.091.14
OMON	NL-OMON40727

Resultaten