Can young visual impaired children learn to handle a magnifier.

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When young visual impaired children can participate in a training (game) in wich a magnifier is used, they learn to handle the magnifier (fine motor skills) they learn to observe small symbols (visual behaviour) and they become interested in the...

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

Samenvatting

ID

NL-OMON25532

Bron
NTR

Verkorte titel
N/A

Aandoening

training with/without magnifier

Ondersteuning

Primaire sponsor: Ergra
Overige ondersteuning: ZonMW (program InZicht)
Stichting Oogfonds Nederland

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Preliminary analysis revealed that the 12-session training had a positive influence on

children’s performance on the task. The number of correctly found end-points, attained by adequately following the corresponding path, increased for both training groups. There was however a difference in the amount of increase between the two groups. On average, the group that has trained without the magnifier performed twice as good. That is, in the post-test they found twice as much correct end-point figures as compared to the pre-test. In the group that has trained with the magnifier, this number was four times as high. Now we are studying the rich data we collected to uncover the relevant variables that determine children’s progression and the differences between the groups. In addition we are looking for a possible transfer of this progression to other domains of their development (e.g., fine-motor skills).

Toelichting onderzoek

Achtergrond van het onderzoek

In this project the effect of training (game) is studied, on the abilities and willingness to use a visual aid (magnifier), in 2.5- to 6-years-old visually-impaired children.

Before and after a 6-weeks training period, children's abilities in using the magnifier are determined, as well as their overall ophthalmologic status, gross and fine motor skills, and overall level of development. The training is given to all children included in the study, one group is trained with the magnifier, the other group without the magnifier. In the pre-test and post-test, the same material is used as in the training.

The material consists of eight different patterns, each with four pathways made out of small symbols (LH), somewhat like 'ant trails'. The pathways either go horizontal, vertical or round, and they can cross each other. By following the paths with the magnifier, movements are induced in all directions. The goal of the task is to find the symbol at the end of the pathway corresponding to the symbol at the start. The size of the symbols is adjusted to each individual child's visual acuity.

Doel van het onderzoek

When young visual impaired children can participate in a training (game) in wich a magnifier is used, they learn to handle the magnifier (fine motor skills) they learn to observe small symbols (visual behaviour) and they become interested in the world of small things and know how to visualize these things.

Onderzoeksopzet

N/A

Onderzoeksproduct en/of interventie

The experimental group trains with a magnifier. The control group trains without a magnifier. The training (game) is the intervention. It is given twice a week (20 minutes) during 6 weeks.

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Children, aged 2.5- to 6-years old, with visual impairment: visual acuity 0.3 or less. All children have normal development.
Children included will have an ophthalmologic examination, an examination of their gross and fine motor skills, and an examination of their overall level of development.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Developmental delay;

2. Impairment of motor skills;

3. Prematurity.

Onderzoeksopzet

Opzet

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

Deelname

Nederland

Status:	Werving gestopt
(Verwachte) startdatum:	01-02-2006
Aantal proefpersonen:	47
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum:	02-03-2006
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	NL559
NTR-old	NTR615
Ander register	: N/A
ISRCTN	ISRCTN84538122

Resultaten

Samenvatting resultaten
Dev Med Child Neurol. 2009 Jun;51(6):460-7. Epub 2009 Jan 21.