Can young visual impaired children learn to handle a magnifier.

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON25532

Source
NTR

Brief title
N/A

Health condition

training with/without magnifier

Sponsors and support

Primary sponsor: Ergra
Source(s) of monetary or material Support: ZonMW (program InZicht)
Stichting Oogfonds Nederland

Intervention

Outcome measures

Primary outcome

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).

Secondary outcome

1. How do young visual-impaired children work with a visual aid?

2. Can they perform the complex task of training and magnifier, and do they have a dominant hand and dominant eye?

Study description

Background summary

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.

Study objective

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.

Study design

N/A

Intervention

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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Eligibility criteria

Inclusion criteria

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.

Exclusion criteria

1. Developmental delay;

2. Impairment of motor skills;

3. Prematurity.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-02-2006
Enrollment:	47
Type:	Actual

Ethics review

Positive opinion

Date:	02-03-2006
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	NL559
NTR-old	NTR615
Other	: N/A
ISRCTN	ISRCTN84538122

Study results

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