Gaming as Gateway to Reading INnovation

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27708

Source
NTR

Brief title
GAGARIN

Health condition

Reading disabilities, dyslexia

Sponsors and support

Primary sponsor: Rudolf Berlin Center, Amsterdam, the Netherlands
Source(s) of monetary or material Support: Regio Gooi en Vechtstreek - Innovatiebudget Jeugd

Intervention

Outcome measures

Primary outcome

The primary outcome of this study is Word Reading Fluency, as measured by:

3DM Word Reading Fluency Test (Blomert & Vaessen, 2009).

Secondary outcome

(1) Word Reading Accuracy as measured by the 3DM Word Reading Accuracy Test (Blomert & Vaessen, 2009)

(2) Letter-speech sound integration, as measured by the Letter-Speech Sound Association Test (LKAT; Van der Kluft & Vercouteren, 2016); only for grade 2 subjects.

(3) Letter knowledge, as measured by the Letter Naming task (Smits, 2002); only for grade 1 subjects.

Study description

Background summary

The main goal of the present study is to improve reading fluency in children with reading disabilities. We will therefore deliver a game-based intervention focussed on developing automatic letter-speech sound integration to children with reading disabilities, in order to attack their dysfluent reading.

The study is a single-blind randomised controlled trial comparing an intervention addressing letter-speech sound integration to a waiting list control group. The study consists of two trials:

(1) Intervention for children with reading disabilities in grade 2.

(2) Early intervention for children at risk of reading disabilities in grade 1.

Children with (a risk of) reading disabilities are randomly assigned (1 : 1) to either an immediate intervention group or a waiting-list control group by a method of simple randomisation. Participants will be randomised using a computerised random number generator. Subjects will be randomized after stratification for school. The target sample size is n = 120 children at risk of reading disabilities in grade 1, and n = 120 children with reading disabilities in grade 2

Children in the intervention condition will receive intervention during a 14 week period. These children will be provided with three intervention sessions a week for 20 minutes per session.

Children allocated to the waiting-list control condition will receive the intervention program after the waiting period had elapsed.

Behavioural measures of reading, and letter-speech sound mapping are measured at baseline and at the end of the 14 week (intervention) period for both intervention group and control group.

Study objective

The main objective of study is to determine whether a game-based intervention focussed on intensively training automation of letter-speech-sound associations can improve reading fluency in children with reading disabilities (grade 2) and in children at risk of reading disabilities (grade 1).

Study design

Pretest

Posttest

Intervention

The intervention tested in this study is a cognitive, (serious) game-based intervention focused on the training of letter-speech sound associations. The goal of the intervention is to improve reading fluency in children with reading disabilities. In a series of experimental, proof-of-concept studies we previously showed that the guiding principle of using gaming techniques to intensively train letter-speech sound associations can be effective in improving reading fluency.

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Eligibility criteria

Inclusion criteria

Inclusion Criteria for children with reading disabilities (grade 2)

I. Suffering from specific and persistent problems with reading at school

II. Percentile score ≤ 25% on a standard reading test (Drie-minuten-test (DMT; three-minute-test)

III. In grade 2 of primary education

IV. Native Dutch speaker

Inclusion Criteria for children at risk for reading disabilities (grade 1)

I. Percentile score ≤ 25% on a letter knowledge test (Screeningsinstrument Beginnende Geletterdheid, CITO, 2009)

II. In grade 1 of primary education

III. Native Dutch speaker

Exclusion criteria

Exclusion Criteria (for all participants)

I. Diagnosis of AD(H)D, autism spectrum disorder, (specific) language impairment

II. Neurological impairment

III. General cognitive impairment

IV. Uncorrected sight problems

V. Significant bilateral hearing loss

Study design

Design

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

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	23-09-2016
Enrollment:	240
Type:	Anticipated

Ethics review

Positive opinion

Date:	12-09-2016
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	NL5898
NTR-old	NTR6086
Other	: Ethical Committee nr. 2016-DP-7127

Study results