Adventurous Dreaming Highflying Dragon: A Randomized Control Trial (RCT) testing the Effectiveness of a FullBody Video Game on Decreasing Attention Deficit Hyperactive Disorder (ADHD) Symptoms

Gepubliceerd: 20-01-2015 Laatst bijgewerkt: 18-08-2022

This study will test the effectiveness of Dragon in improving ADHD related symptoms, specifically in the areas of selective attention, impulsivity, hyperactivity/motor inhibition and motor skills in children with elevated ADHD-symptoms. It is...

Ethische beoordeling Niet van toepassing **Status** Werving gestart

Type aandoening

Onderzoekstype Interventie onderzoek

Samenvatting

ID

NL-OMON23695

Bron

NTR

Aandoening

ADHD, school-aged children, intervention, videogame

Ondersteuning

Primaire sponsor: Radboud University Nijmegen, Behavioural Science Institute **Overige ondersteuning:** Radboud University Nijmegen, Behavioural Science Institute

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

- -Selective attention & Impulsivity (Go-No-Go task) < br>
- -Motor inhibition (Statue sub-test of the NEPSY; Korkman, Kirk, & Kemp, 1998) < br >
- -Motor skills (MOVEMENT ABC-2 NL; Smits-Engelsman, 2010)
-

<
- 2. Pre-post scores on the AVL questionnaire assessing teacher-observed ADHD symptoms (Scholte & Ploeg, 2005).

Toelichting onderzoek

Achtergrond van het onderzoek

In this randomized controlled trial (RCT with 2 conditions, intervention and control condition), the effectiveness of the full-body driven videogame Adventurous Dreaming Highflying Dragon will be tested in a Dutch sample of school-aged children (6-12) with elevated ADHD symptoms. Children are randomly assigned to one of two conditions. Children in the intervention condition will play Adventurous Dreaming Highflying Dragon, children in the control condition will play a comparable full-body driven game without ADHD-focused components. Both groups will have 6 play sessions of 15 minutes spread over three weeks at school during school hours. Measurements of primary outcomes will be conducted before the first play-session and after the last play-session. Secondary measurements will be conducted during the treatment phase (play-sessions).

Doel van het onderzoek

This study will test the effectiveness of Dragon in improving ADHD related symptoms, specifically in the areas of selective attention, impulsivity, hyperactivity/motor inhibition and motor skills in children with elevated ADHD-symptoms. It is expected that this game will lead to a greater improvement in these areas than a comparable full-body driven game which does not possess the ADHD-focused training components.

Onderzoeksopzet

- 1. Screening on ADHD-symptoms
- 2. Pre-measure (primary outcomes on neuro-psychological tasks);
- 3. Play-sessions/Treatment phase (secondary outcomes. In all sessions: in-game data. Directly after final session: game evaluation)
 - 2 Adventurous Dreaming Highflying Dragon: A Randomized Control Trial (RCT) testing ... 13-05-2025

4. Post-measure (all primary outcomes)

Onderzoeksproduct en/of interventie

- 1.Children of special education schools between the ages of 6-12 with elevated ADHD symptoms are randomly assigned to the intervention or control condition.
- 2. Children in the intervention condition will play the full-body driven video game "Adventurous Dreaming Highflying Dragon" for 6 sessions of 15 minutes spread over three weeks. Children in the control group will play a comparable full-body driven game which does not possess any ADHD-focused training components.

Both groups will play the game during school hours in a seperate room at their school.

3. Before the first play-session children will be completing three neurospcyhological tasks, each assessing a specific skill that is trained in the intervention game, specifically: selective attention, impulsivity, motor inhibition/hyperactivity and motor skills.

After the last play-session, evaluative questions about the game will be asked and the three neuro-psychological tasks will be repeated to assess improvement. In addition, the screening questionnaire (AVL) will again be filled out by teachers, to assess observable changes in symptoms.

- 4. During gameplay, some additional data will be saved in the game e.g. duration of play, correct-incorrect responses and response times.
- 5. Additional information from the school or parents will be acquired on diagnoses, medication, treatment and IQ-scores, so that this can be controlled for/taken into account.

Contactpersonen

Publiek

[default]
The Netherlands

Wetenschappelijk

[default]
The Netherlands

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- 1. Children of special education schools between the ages of 6-12;
- 2. Screening participation: passive consent from parents;
- 3. Elevated ADHD symptoms. Participants with a subclinical to clinical score on the teacherrated AVL (Scholte & Ploeg, 2005), which is 36 or above, will be included;
- 4. After screening: active consent from parents

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

No passive or active consent from adolescents and parents

Onderzoeksopzet

Opzet

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Open / niet geblindeerd

Controle: Geneesmiddel

Deelname

Nederland

Status: Werving gestart

(Verwachte) startdatum: 02-02-2015

Aantal proefpersonen: 90

Type: Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort: Niet van toepassing

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 NL4944 NTR-old NTR5048

Ander register : ECSW2014-1310-260

Resultaten