Investigating the impact of a health game targeting children's impulse control towards food and eating behaviour

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The effectiveness of a health game based on a Go/No-Go (GNG) paradigm compared to a GNG control game and a double control game will be tested in a Dutch sample of children between 10 and 13 years of age. It is expected that the children in the...

Ethische beoordeling Niet van toepassing

Status Werving nog niet gestart

Type aandoening -

Onderzoekstype Interventie onderzoek

Samenvatting

ID

NL-OMON23366

Bron

Nationaal Trial Register

Aandoening

Health Game, Serious Game, Children, Treatment, Overweight, Obesity, Impulse control, Inhibition, Go/No-Go paradigm.

Kinderen, Behandeling, Overgewicht, Obesitas, Impulsecontrole, Impulsebeheersing Go/No-Go paradigma.

Ondersteuning

Primaire sponsor: Radboud University, Behavioural Science Institute

Overige ondersteuning: N.A.

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

A change over time in impulse inhibition, measured with a modified Go/No-Go paradigm

Toelichting onderzoek

Achtergrond van het onderzoek

Proposed study will investigate the effectiveness of a health game employing the mechanism of a Go/No-Go (GNG) paradigm, targeting impulse inhibition towards food, which has been shown to induce more healthful behaviour. Suggested mechanisms for this effect are learning through modification of the stimulus-response association and an influence on implicit liking. The effect of the game will be investigated in a sample of Dutch children from 10 to 13 years of age. The main goal of this study is to investigate whether the GNG food (health) game can influence impulse inhibition towards (energy dense) food by comparing baseline to post-test assessed impulse inhibition.

The participants will be playing either the GNG food game or the GNG control game. This GNG control game is identical to the GNG food game, except now without any food cues. By removing food cues, it can be investigated whether training impulse inhibition using a game overcomes the automatic approach behaviour that is often observed due to mere exposure to food. Additionally, to further explore the influence of a general GNG training on impulse control, a third condition will be added. Participants in this condition will play a unrelated game (Tetris), which functions as a double control condition, given that this game will neither have food cues nor a GNG mechanism.

The secondary aim of this study is to investigate whether the GNG food game also influences subsequent eating behaviour. Even though the impulse inhibition effects of this game may be attenuated due to the second GNG measurement session, some (residual) inhibitory effects might still be present. To test this hypothesis, eating behaviour will be investigated using an ad libitum access, where calorie consumption between the three conditions will be compared.

Doel van het onderzoek

The effectiveness of a health game based on a Go/No-Go (GNG) paradigm compared to a GNG control game and a double control game will be tested in a Dutch sample of children between 10 and 13 years of age. It is expected that the children in the intervention condition will show increased impulse inhibition towards energy-dense food after playing the game

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(H1). Impulse inhibition at baseline is expected to moderate the effect of condition on impulse inhibition (H2). Furthermore expected is that the children in the intervention condition will eat healthier compared to the control conditions (H3), an effect moderated by impulse inhibition at baseline (H4).

Onderzoeksopzet

- 1. Baseline (impulse inhibition);
- 2. Post-test (impulse inhibition and eating behaviour)

Onderzoeksproduct en/of interventie

Children are randomly assigned to one of three conditions;

- 1. GNG food game 'Castle Invaders Food'.
- 2. GNG non-food game 'Castle Invaders Control'.
- 3. Non-GNG non-food game 'Tetris'.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- 1. Children between 10 to 13 years of age;
- 2. Informed consent from the adolescents and one of their parents/ caregivers.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- 1. No informed consent from the adolescents and one of their parents/ caregivers;
- 2. Adolescents with very limited knowledge of the Dutch language.

Onderzoeksopzet

Opzet

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: N.v.t. / één studie arm

Blindering: Open / niet geblindeerd

Controle: Geneesmiddel

Deelname

Nederland

Status: Werving nog niet gestart

(Verwachte) startdatum: 10-07-2017

Aantal proefpersonen: 140

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 NL6279 NTR-old NTR6453

Ander register Radboud University, Behavioural Science Institute : Game On project Eva E.

Alblas, study 4

Resultaten

Samenvatting resultaten

N.A.