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

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON23366

Source
Nationaal Trial Register

Health condition

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.

Sponsors and support

Primary sponsor: Radboud University, Behavioural Science Institute
Source(s) of monetary or material Support: N.A.

Intervention

Outcome measures

Primary outcome

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

Secondary outcome

1. Eating behaviour

a. Caloric intake.

b. Ratio of nutrient-dense versus energy-dense snacks consumption

Study description

Background summary

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.

Study objective

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 (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).

Study design

1. Baseline (impulse inhibition);

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

Intervention

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’.

Contacts

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Eligibility criteria

Inclusion criteria

1. Children between 10 to 13 years of age;

2. Informed consent from the adolescents and one of their parents/ caregivers.

Exclusion criteria

1. No informed consent from the adolescents and one of their parents/ caregivers;

2. Adolescents with very limited knowledge of the Dutch language.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	Active

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	10-07-2017
Enrollment:	140
Type:	Anticipated

Ethics review

Not applicable
Application type: Not applicable

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	NL6279
NTR-old	NTR6453
Other	Radboud University, Behavioural Science Institute : Game On project Eva E. Alblas, study 4

Study results

Summary results
N.A.