Changamoto: a serious game for therapy adherence of youngsters in addiction care.

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Ethical reviewApproved WMOStatusWill not startHealth condition typeOther conditionStudy typeInterventional

Summary

ID

NL-OMON41164

Source

ToetsingOnline

Brief title

Changamoto: therapy adherence game

Condition

- Other condition
- Impulse control disorders NEC

Synonym

addiction, impuls control, substance abuse

Health condition

verslaving

Research involving

Human

1 - Changamoto: a serious game for therapy adherence of youngsters in addiction care ... 4-06-2025

Sponsors and support

Primary sponsor: Technische Universiteit Delft

Source(s) of monetary or material Support: Fonds Economische Structuurversterking

(FES); NOW; Creative Industry Scientific Programme

Intervention

Keyword: addiction, motivation, serious gaming, therapy adherence

Outcome measures

Primary outcome

The main dependent variable is therapy adherence which we measure by 3 parameters: 1) the amount of diary reports in the Changamoto diary, 2) therapists' quality ratings of the diary reports and 3) presence at face-to-face contacts. The amount of diary reports determines the sample size.

Secondary outcome

To explore how play stimulates therapy adherence, the Changamoto app collects statistics on play behavior such as scores, duration, and choices. The relation between these data and the parameters of therapy adherence will be analyzed.

Study description

Background summary

Each year, Brijder Addiction Care treats hundreds of youngsters (age 12-24) for cannabis addiction. Cognitive behavioral therapy for cannabis addiction consists of a face-to-face contact a week and additional homework assignments, of which registration of triggers for cannabis use is an important aspect. It is difficult for the youngsters to adhere to therapy: they are absent in one out of of three face-to-face contacts and the (online) homework is seldom made. Game designers have expertise in the design of games that invite the player to keep returning to the game. Can we use their expertise to make therapy more attractive and enhance therapy adherence of youngsters in youth addiction

Study objective

In this project, professionals in mental health care, researchers and game designers collaborate on the design of a serious game that aims to improve adherence to therapy for cannabis addiction. The design process has resulted in Changamoto an application for the smartphone. Changamoto consists of two parts:

1) a game in the form of a battle between different types of robots and 2) a diary in which triggers for cannabis use can be registered. The game enhances therapy adherence in two ways. 1) Registration of triggers for cannabis use in the diary is rewarded. 2) The game is more difficult when the player is under the influence of cannabis because the game targets cognitive functions that are negatively affected by acute cannabis use. In the planned validation study we will investigate the hypothesis that the use of Changamoto enhances therapy adherence of youngsters in treatment for cannabis addiction. Secondary objective of the research project is to bring forth general knowledge on the application of serious games for behavioral change.

Study design

We will test whether Changamoto enhances therapy adherence in a random controlled intervention study among 130 youngsters (12-24) that come in treatment as of april 2014. The researcher will assign the clients of a therapist ad random to one of two conditions for the first two months of their treatment. In a game condition, the usual therapy is supplemented with the Changamoto game and diary. In a control condition, the usual therapy is supplemented with only the diary from the Changamoto app. Therapist and client will be allowed to discuss the use of Changamoto openly.

Intervention

The Changamoto app that we test in this study consists of two parts: a diary for the registration of triggers for cannabis use and a game in the form of a strategic battle between different types of robots. For a game group, the usual therapy is supplemented with the Changamoto game and diary whereas for a control group the therapy as usual is supplemented with the Changamoto diary only.

Study burden and risks

The burden of participating in the study is minimal: Changamoto is used voluntary next to the usual treatment and the parameters of therapy adherence are collected without giving the youngsters extra tasks. At the end of the study, participants will complete an extra substance use questionnaire.

Contacts

Public

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

Receives therapy for cannabis addiction as a primary problem by Brijder Addiction Care Age 12 - 24

Exclusion criteria

No diagnosis of problematic gaming or gambling

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Will not start

Enrollment: 130

Type: Anticipated

Ethics review

Approved WMO

Date: 14-05-2014

Application type: First submission

Review commission: METC Leids Universitair Medisch Centrum (Leiden)

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

CCMO NL47949.058.14

ID