

Video gaming as an add-on intervention in emotion regulation therapy among adolescents with internalizing disorders: a preliminary study.

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This study assesses the feasibility of adding a serious game to treatment as usual (CBT) in ameliorating emotion regulation skills. 1) When (number of sessions) are adolescents losing their interest in the game? Are they satisfied with the game in...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Observational non invasive

Summary

ID

NL-OMON48494

Source

ToetsingOnline

Brief title

Serious gaming in emotion regulation therapy.

Condition

- Other condition
- Anxiety disorders and symptoms

Synonym

anxiety, depression

Health condition

depressieve stoornissen

Research involving

Human

Sponsors and support

Primary sponsor: ProPersona (Nijmegen)

Source(s) of monetary or material Support: Ministerie van OC&W, Door de opdrachtgever (zie vraag B6/B7)

Intervention

Keyword: Adolescents, Emotion regulation, Gaming, Internalizing

Outcome measures

Primary outcome

Emotion regulation strategies:

FEEL-KJ:

Adaptive strategies are problem solving, distraction, evoke a positive mood, acceptance, forgetting, cognitive problem solving and reevaluation. Maladaptive strategies are giving up, aggression, withdrawal, self devaluation and rumination. External regulation strategies are also measured: social support, expression and emotional control.

The DERS (Difficulties in Emotion Regulation Scale) is a scale to assess emotion regulation difficulties within the following dimensions (1) awareness and understanding of emotions, (2) acceptance of emotions, (3) ability to engage in goal-directed behavior when experiencing negative emotions and (4) access tot emotion regulation strategies perceived as effective.

Homework/hours playing dojo

Personal game data (logs Dojo):

- times they play Dojo.
- duration of time they play Dojo.

Negative effects

- Have you experienced negative effects while playing Dojo?
- How did the game affect your homework/school, social contacts and hobbies?

Functioning in daily life

The Kidscreen-52 is a questionnaire of 52 questions that measures the quality of life of youth (8-18 years old) for physical, emotional, social and cognitive functioning.

Satisfaction

Satisfaction with the game will be measured with the question (after treatment of 12 weeks):

- Satisfaction (between 0-10, 0 not all satisfied, 10 is very satisfied).

Secondary outcome

Anxiety

Anxiety will be measured with the Youth Anxiety Measure for DSM-5 (YAM-5). The YAM-5 is a self report questionnaire to assess anxiety disorder symptoms in children and adolescents (8-18 years old). The scale to measure anxiety consists of two parts: major anxiety disorders (28 items) and specific phobias

(22 items).

Depression

Depressive symptoms will be measured with the Children Depression Inventory, CDI-2. This is a self report questionnaire to screen depressive symptoms for children between the age of 7 to 21 years old.

Study description

Background summary

Research suggest that incorporating adaptive emotion regulation strategies into effective treatments of internalizing problems is important, needs more attention and can increase efficacy of the treatment (Braet & Bögels, 2014). This seems even more important for adolescents with internalizing problems. Cognitive behavioral therapy (CBT) is the most used and evidence-based approach for therapy of adolescents with symptoms of anxiety and depression (Hannesdottir & Ollendick, 2007), but there are limitations; (1) children and adolescents can be inconsistent in their motivation to change and may find the sessions boring, and (2) there is a large gap between what they actually learn from the CBT and what they practice in everyday live (Kazdin & Blase, 2011). Therefore, other models of treatment are being developed to deliver healthcare that is more attractive for younger patients and make a sound translation to their daily life. One of these novel approaches is gamification (Kazdin & Rabitt, 2013). Video games hold immense potential to teach new forms of thought and behavior, because youth is already motivated and used to play videogames (Granic, Lobel & Engels, 2014). Therefore, serious games can possibly support the learning of new techniques if traditional CBT methods are too boring. They provide knowledge as well as elements of play and increasing engagement (Girard, Ecalle & Magnan, 2012). Serious games also provide opportunities to practice new regulatory skills until they are automatized and form new neural patterns for generalization (Schoormans et al., 2015). Another relevant advantage of a serious game is that it costs less time then a regular CBT and this may have an impact on the number of drop-outs. Schoneveld and colleagues (2018) also suggest that it is an advantage when youth has access to the serious game at home. Earlier research on serious gaming for improvement of ERS has focused mostly on youth with externalizing psychopathology and anxiety in a residential setting, but emotion regulation problems also occurs within youth with internalizing

psychopathology. The present study aims to test the feasibility of a serious game for emotion regulation problems (Dojo) and will assess the initial effectiveness of the serious game as add on to treatment as usual (TAU) among youth with internalizing psychopathology in an ambulatory setting, more specific adolescents with anxiety or depression.

We hypothesize that adolescents who play a serious game as add on to the regular CBT stay more interested to play the game, are satisfied with the game, do more homework and are able to apply the learned strategies in real-life. We expect little negative effects. We also expect an improvement in their adaptive emotion regulation strategies and a decrease in their maladaptive emotion regulation strategies. Finally, we hypothesize a decrease in their anxiety/depression symptoms.

Study objective

This study assesses the feasibility of adding a serious game to treatment as usual (CBT) in ameliorating emotion regulation skills.

- 1) When (number of sessions) are adolescents losing their interest in the game? Are they satisfied with the game in general?
- 2) What is the duration and frequency that adolescents spend on their homework (play the game)?
- 3) Are there negative effects (on their homework/school, social contacts and hobbies)?
- 4) Is there a decrease in the use of maladaptive emotion regulation strategies?
- 5) Is there an improvement in the use of adaptive emotion regulation strategies?
- 6) Is there a decrease in the anxiety/depression symptoms?

Study design

This study is an open clinical trial. Emotion regulation strategies are investigated with self-report questionnaires (quantitative data) pre-post-treatment and during follow up after 3 and 6 months. The amount/duration of homework, interest in the game and satisfaction are being measured with a short questionnaire (qualitative data) and personal game data, such as time and duration they play the game. Negative effects (on their homework/school, social contacts and hobbies) are being measured with questionnaires (quantitative and qualitative data).

Study burden and risks

Burden:

Emotion regulation strategies are investigated with self-report questionnaires pre- post-treatment and during follow up after 3 and 6 months (1: 55-60 min, 2: 55-60 min, 3 & 4: 45 min).

Playing the serious game: minimum of 20 minutes a day in 12 weeks (total: minimum of 1680 minutes).

Possible benefits: improvement of emotion regulation strategies.

Possible risks: little risk of development of a game-addiction.

Contacts

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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

Adolescents are being included when there is internalizing psychopathology (a depressive or anxiety disorder is measured with the Dutch translation of the

Mini International Neuropsychiatric Interview for children and adolescents (MINI-KID) and emotion regulation difficulties, which are measured with the FEEL-KJ (an instrument to measure emotion regulation strategies in children and adolescents).

- Cut off score FEEL- KJ:

o Adaptive emotion regulation strategies < 40 (low use of adaptive emotion regulation strategies), and/or

o Maladaptive emotion regulation strategies > 60 (high dysfunctional use of emotion regulation strategies).

Exclusion criteria

Adolescents are excluded from the study if there is an other mental disorder diagnosed, such as ADHD, autism or substance abuse.

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 18-02-2020

Enrollment: 25

Type: Actual

Ethics review

Approved WMO

Date: 16-10-2019

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
CCMO	NL70123.091.19