

Using interactive virtual reality to treat aggressive behavior problems in youth

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON26967

Source

Nationaal Trial Register

Brief title

Virtual reality intervention

Health condition

Aggressive behavior problems

Sponsors and support

Primary sponsor: Utrecht University

Source(s) of monetary or material Support: The study described in this study protocol is funded by The Dutch Research Council (NWO). The funding body had no role in the study design, writing the manuscript, or the decision to submit the paper for publication.

Intervention

Outcome measures

Primary outcome

Aggressive behavior problems: CBCL, TRF, IRPRA, and 3 items of a weekly questionnaire
Treatment motivation: 3 items of a weekly questionnaire

Secondary outcome

Emotion regulation: FEEL-KJ and 3 items of a weekly questionnaire

Social information processing: SIV interview and 3 items of a weekly questionnaire

Study description

Background summary

A large proportion of children and youth in the mental health care shows externalizing problem behavior, such as aggression (Nederlands Jeugdinstuut, 2015). The prevention and treatment of these problem behaviors is necessary, since this is a serious risk factor for the development of adverse outcomes later in life, such as behavior problems later in life, internalizing problem behavior, substance abuse, and school failure (Sukhodolsky, Kassinove, & Gorman, 2004; Weisz & Kazdin, 2001). Over the past years, knowledge regarding the effectiveness of interventions for aggressive behavior problems has increased (Weisz & Kazdin, 2017). Several (group) interventions are found to effectively decrease aggression, even on the long term (Nederlands Jeugdinstituut, 2015). However, the effects of current evidence-based cognitive behavioral treatments (CBT) on children's aggressive behavior problems are modest at best and do not work for all children (McCart, Priester, Davies, & Azen, 2006). Therefore, it is necessary to examine whether the effectiveness of Intervention for children with aggressive behavior problems can be enhanced. CBT Interventions are expected to be most effective when children's aggressive cognitions are challenged in emotionally involving social situations, because these are the situations that trigger their aggression in real life (Suveg, Southam Gerow, Goodman, & Kendall, 2007). Virtual reality allows for such exposure within a controlled treatment context. In addition, virtual reality has been found to enhance treatment motivation, which may foster intervention adherence as well as effectiveness. However, it is yet unknown if virtual reality can enhance treatment effects for children with aggressive behavior problems. A randomized controlled trial will be conducted to examine the effectiveness of interactive virtual reality treatment. Children will be randomized into three groups:

1. The virtual reality intervention. This is an individual cognitive behavior therapy (CBT) intervention consisting of 10 sessions. Children practice skills in the VR environment.
2. An active control group. This is the same individual cognitive behavior therapy (CBT) intervention consisting of 10 sessions. Children practice the skills within role plays with the therapist.
3. A passive control group (care-as-usual). These boys will receive care-as-usual.

Study objective

The goal of the present study is to test the effectiveness of an interactive virtual reality intervention for children with aggression problems. Moreover, it is expected that (1) the VR-intervention and the active control group will decrease aggressive behavior problems more than care-as-usual, (2) in addition the VR-intervention will be more effective in treating

aggressive behavior problems than current treatments (active control group; in which cognitions and skills are being practiced in role plays), and (3) that children in the VR-intervention will have more treatment motivation than the active control group.

Study design

Three: pre-intervention, post-intervention and 6 month follow-up

Intervention

The current intervention is based on principles of cognitive behavior therapy to enhance emotion regulation and social information processing of boys with aggressive behavior problems. The intervention start with an intake with parents and ten 45-minute sessions with the child will follow. The current intervention will be delivered individually, since earlier research showed larger reductions in children's aggression for individual delivered therapy compared to group delivered therapy. During the intervention children will learn to recognize their anger and train skills to cope with anger. Examples of those skills are taking a time-out, do relaxation exercises and use coping statements. Participants receiving the virtual reality intervention will practice the skills during the therapy in a virtual reality environment. Participants in the active control group will practice in role plays with the therapist. Participants in the passive control group will receive care as usual.

Contacts

Public

Utrecht University
Sophie Alsem

0302538272

Scientific

Utrecht University
Sophie Alsem

0302538272

Eligibility criteria

Inclusion criteria

Boys between 8 and 12 years old with aggressive behavior problems.

Exclusion criteria

Absence of aggressive behavior problems, an IQ below 80 and/or severe Autistic Spectrum Disorder. Children who are deaf/blind/have epilepsy will also be excluded from the study.

Study design

Design

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

Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-09-2019
Enrollment:	200
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion	
Date:	15-08-2019
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 46240

Bron: ToetsingOnline

Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL7959
CCMO	NL67139.041.18
OMON	NL-OMON46240

Study results