# Traumatized youths in residential care: Exploring the dysregulation of biological stress systems and testing a gamified relaxation intervention.

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Study I aims to explore dysregulation of biological stress systems among traumatized youths with and without ID in residential care, and compare them with a healthy control group. Study II aims to conduct a randomized controlled trial (RCT) to test...

**Ethical review** Approved WMO

**Status** Recruitment stopped

**Health condition type** Other condition **Study type** Interventional

### **Summary**

#### ID

NL-OMON43297

#### **Source**

ToetsingOnline

#### **Brief title**

Traumatized youths in residential care.

### **Condition**

- Other condition
- Psychiatric and behavioural symptoms NEC

### **Synonym**

trauma; cardiovascular activity; cortisol activity

### **Health condition**

autonomic nervous system activity; hypothalamic-pituitary-adrenal system activity

### Research involving

Human

### **Sponsors and support**

Primary sponsor: Radboud Universiteit Nijmegen

Source(s) of monetary or material Support: Pluryn; Couvee fonds; Innovatie fonds

### Intervention

**Keyword:** biological stress systems, gamified interventions, residential care, trauma

### **Outcome measures**

### **Primary outcome**

The focus of this project is on the one hand on the parameters of the HPA axis (i.e. cortisol) and ANS activity (i.e. RSA and PEP), both under resting and social stress conditions. On the other hand, we focus on posttraumatic symptoms, stress, depression, anxiety, and aggression.

### **Secondary outcome**

nvt

# **Study description**

### **Background summary**

Many youths in residential institutions have posttraumatic symptoms that interfere with their development and functioning, but that remain untreated. Their traumatic experiences may have resulted in alterations of their biological stress systems (i.e. the hypothalamic-pituitary-adrenal [HPA] axis and autonomic nervous system [ANS] activity) that are likely to play a role in the development and maintenance of psychological and behavioural problems.

### Study objective

Study I aims to explore dysregulation of biological stress systems among traumatized youths with and without ID in residential care, and compare them with a healthy control group. Study II aims to conduct a randomized controlled

trial (RCT) to test the effectiveness of a gamified relaxation intervention on posttraumatic symptoms, stress, and biological stress systems.

### Study design

This project consists of (study I) a cross-sectional study to examine biological stress systems among traumatized youths with and without ID, and healthy controls, and (study II) a RCT with treatment as usual (TAU) as a control group.

#### Intervention

The intervention consists of twee biweekly 15-minute sessions during which participants in the experimental condition play Muse. Participants in the control condition receive TAU; the kind of treatment that is normally being delivered in their situation.

### Study burden and risks

The study comprises several assessments: questionnaires, psychophysiological tasks, saliva and hair collection. There are no risks associated with participation.

### **Contacts**

#### **Public**

Radboud Universiteit Nijmegen

Montessorilaan 3 Nijmegen 6525 HR NL

### Scientific

Radboud Universiteit Nijmegen

Montessorilaan 3 Nijmegen 6525 HR NL

### **Trial sites**

### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

### Age

Adolescents (12-15 years) Adolescents (16-17 years) Children (2-11 years)

### Inclusion criteria

Both clinical and control sample:

- age between 10 and 18 years
- being able to speak the Dutch language, to ensure that participants can understand the task instructions and questionnaires, are able to give informed consent or assent, and can participate in the diagnostic interview; Clinical sample:
- admitted to residential treatment within youth mental health care, the youth welfare system or care for youth with intellectual disability (ID)
- score of 30 or higher on the CRIES-13, a questionnaire to screen for posttraumatic symptoms

### **Exclusion criteria**

Both clinical and control sample:

- current or recent (within the last 3 months) EMDR or CBT treatment specifically targeting post-traumatic symptoms
- simultaneous participation in another clinical intervention study
- psychotic symptoms
- negative clinician advice, for example the clinician fears that participation in the study would have negative effects on the participant or that the participants has not the capacities to take part in the study (we have no exclusion criteria based on IQ, to promote external generalizability); Control sample:
- presence of any Axis I disorder
- current or recent (withing the last 3 months) psychological treatment

# Study design

### **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

### **Recruitment**

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 08-01-2018

Enrollment: 135

Type: Actual

# **Ethics review**

Approved WMO

Date: 15-11-2017

Application type: First submission

Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

Approved WMO

Date: 11-06-2018

Application type: Amendment

Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

Approved WMO

Date: 03-01-2019

Application type: Amendment

Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

# **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 NL58674.091.16