# The effectiveness of behavioral teacher training techniques for children with (symptoms of) attentiondeficit/hyperactivity disorder.

No registrations found.

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

# **Summary**

### ID

**NL-OMON20729** 

**Source** Nationaal Trial Register

**Brief title** PAINT-T (Psychosocial ADHD Interventions - Teacher training)

#### **Health condition**

Attention-deficit/hyperactivity disorder (ADHD), Behavioral problems at school, Teacher Training, Children.

### **Sponsors and support**

**Primary sponsor:** Vrije Universiteit Amsterdam **Source(s) of monetary or material Support:** ZonMw, Vrije Universiteit Amsterdam.

### Intervention

### **Outcome measures**

#### **Primary outcome**

The primary outcome of this study will consist of daily assessments of problem behaviors. Teachers will be asked to select four target behaviors in specific situations. During baseline, post measurement 1 and 2, during five consecutive school days, daily phone calls will be made by the investigational team, in which teachers will be asked if the target behaviors were present in the past school day in the specific situations and, if yes, to provide severity ratings of these behaviors on a 5-point scale.

#### Secondary outcome

- Inattentive and hyperactive/impulsive behaviors (Strengths and Weaknesses of ADHD Symptoms and Normal behavior rating scales [SWAN; Swanson et al., 2012]).

-Oppositional defiant behavior of the child (ODD scale of the Disruptive Behavior Rating Disorder Scale-Teacher Version [DBD; Pelham, Gnagy, Greenslade, & Milich, 1992; Oosterlaan, Scheres, Antrop, Roeyers, & Sergeant, 2008]).

- Behavioral and emotional functioning of the child (Strengths and Difficulties Questionnaire [SDQ; Goodman, 1997]).

- Behavioral observations of inattentive, hyperactive and disruptive behaviors and teacher behavior by independent raters (GUCCI coding system [Imeraj, Antrop, Sonuga-Barke, Deboutte, Deschepper, Bal, & Roeyers, 2013; Imeraj, Antrop, Roeyers, Deboutte, Deschepper, Bal, & Sonuga-Barke, 2016]).

- Impairment of the child at school (Impairment Rating Scale "C Teachers [IRS-T-NL; Fabiano et al., 2006])

# **Study description**

#### **Background summary**

Behavioral training for parents or teachers is one of the most studied psychosocial interventions for children with ADHD-symptoms and has considerable empirical support. However, meta-analyses into the effectiveness of psychosocial teacher interventions show inconsistent results. Moreover, when only RCT<sub>1</sub><sup>-</sup>s are included, effect sizes are small (DuPaul et al., 2012). There are many variants of behavioral teacher training programs, with diversity in content, duration, and format. In terms of content, behavioral teacher training programs contain a great variety of techniques (Pieterse et al., 2013). Despite this diversity, all teacher training programs share similar underlying behavioral principles, e.g., changing behaviors by manipulating their antecedents (e.g., providing structure, giving clear instructions) and by managing their consequences (e.g., reinforcement techniques, planned ignoring, punishment). Usually these behavioral teacher training programs are studied as a whole (Evans et al., 2016) and studies about the effectiveness of the isolated techniques are scarce.

In the current study, we compare the effects of antecedent techniques including psychoeducation (n=30), consequent techniques including psychoeducation (n=30) and a waiting list condition (n=30) in a randomized controlled microtrial on four selected target behaviors in specific situations (primary outcome) for children 6 through 13 years old with (symptoms of) ADHD. We also aim to determine the effects of the techniques on a number of secondary outcome measures (behavioral and emotional functioning, including ADHD and ODD symptoms, and impairment) and to identify which child, teacher and classroom factors (e.g., cognitive functioning, child-teacher interaction, class size) may influence the effectiveness of treatment.

The active study arms consist of a baseline measurement followed by two manualized training sessions with homework assignments to practice learned skills in class. The waiting list condition includes a baseline measurement followed by no intervention. Two post-training measurements will take place, the first immediately after the training or waitlist and the second two weeks later. Three months after the start of training or waitlist, or at the second last week of a school year, follow-up assessment will take place.

The study will include teachers of non-medicated children (6 through 13 years old) with (symptoms of) ADHD (as rated by the teacher) without a diagnosis of autism or conduct disorder, and an estimated IQ  $\geq$  70.

#### **Study objective**

The aims of the study are:

To investigate the short-term effectiveness of antecedent and consequent behavioral teacher training techniques for teachers of children attending regular primary school (class 3 to 8, six to thirteen years old) with (symptoms of) attention-deficit/hyperactivity disorder (ADHD) on primary outcomes (target problem behaviors) and secondary outcomes (behavioral and emotional problems).

To identify child, teacher and classroom factors that may moderate the effectiveness of these antecedent and consequent techniques.

To exploratory compare the consumption of psychosocial care and medication between three study arms (i.e. antecedent techniques training, consequent techniques training, waiting list) three months after completion of the teacher training or at the end of a school year.

#### Study design

There will be four measurement points. Teachers will fill out questionnaires at all measurement points, parents will fill out questionnaires at baseline, post-training assessment 2 and follow-up. For teachers, all dependent variables are assessed at these time points, except the GUCCI ratings and the IRS (assessed at baseline and post 2 measurement). For

parents at baseline and post-training assessment 2 all dependent variables are assessed. At follow-up only consumption of care is assessed for parents.

1) Baseline assessment: before randomization

2) Post-training assessment 1: after the end of the training/waitlist

3) Post-training assessment 2: two weeks after the end of the training/waitlist

4) Three month follow-up assessment. This measurement takes place three months after the start of the training/waitlist. If the three month follow-up assessment for teachers will be during summer holidays or in the next school year, follow-up assessment will take place in the second last week of a school year. Follow-up assessment of parents will always be three months after the start of the training/waitlist.

#### Intervention

This study has three arms: an antecedent techniques training, a consequent techniques training, and a waiting list.

- The antecedent techniques training consists of two sessions (one face-to-face session of two-and-a-half hours and one Skype session of one hour) with the teacher(s), spread over two weeks, in which the teacher(s) will be given psycho-education and will be trained in antecedent techniques that are common in behavioral teacher training (e.g., providing structure, giving clear instructions). After the first training session, teachers will implement these techniques in the classroom for four weeks.

- The consequent techniques training consists of two sessions (one face-to-face session of two-and-a-half hours and one Skype session of one hour) with the teacher(s), spread over two weeks, in which the teacher(s) will be given psycho-education and will be trained in consequent techniques that are common in behavioral teacher training (e.g., reinforcement techniques, planned ignoring). After the first training session, teachers will implement these techniques in the classroom for four weeks.

- A waiting list control condition of five weeks without training. After post-training assessment two, teachers will get treatment as usual.

# Contacts

**Public** A.I. Staff Amsterdam The Netherlands Scientific A.I. Staff Amsterdam The Netherlands

# **Eligibility criteria**

### **Inclusion criteria**

1. The child has a DSM-5 or DSM-IV-TR based (sub)clinical classification (e.g. at least three out of nine clinical symptoms on one of the two scales) of ADHD at school, confirmed with the Teacher Telephone Interview for attention-deficit/hyperactivity disorder and related disorders, "C DSM-IV version (TTI-IV; Tannock, Hum, Masellis, Humphries & Schachar, 2002) and a (sub)clinical classification on the Inattention and/or Hyperactivity/Impulsivity scale of the Disruptive Behavior Rating Disorder Scale "CTeacher version (DBD; Pelham, Gnagy, Greenslade, & Milich, 1992; Oosterlaan, Scheres, Antrop, Roeyers, & Sergeant, 2008).

- 2. The child attends a regular primary school and is six to thirteen years old (group 3 to 8).
- 3. The teacher is willing and able to participate in the training and study.
- 4. The child has an (estimated)  $IQ \ge 70$ .

5. The child is not taking (psychotropic) medication or has been off medication for at least one month.

6. Parents/caregivers have given their informed consent for participation.

### **Exclusion criteria**

1. There are problems with the child at school that require immediate intensive intervention.

2. The teacher(s) received behavioral teacher training (individual or group) aimed at ADHD or behavioral problems of the child in the past year.

3. It is not a suitable period for the family, teacher and/or the child to participate in the study (e.g. moving, divorce, holidays or vacation).

4. The child has a DSM-5 or DSM-IV-TR based diagnosis of conduct disorder.

5. The child has a DSM-5 or a DSM-IV-TR based diagnosis of an autism spectrum disorder.

# 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):	01-04-2017
Enrollment:	90
Туре:	Anticipated

# **Ethics review**

Positive opinion	
Date:	20-10-2017
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** NTR-new NTR-old Other

**ID** NL6616 NTR6800 METc UMCG : 2016.198

# **Study results**