Effectiveness of response restriction with prompting combined with overlearning in children and adolescents with day-time urinary incontinence/non-retentive faecal incontinence.

No registrations found.

Ethical review Not applicable Status Pending

Health condition type -

Study type Interventional

Summary

ID

NL-OMON22234

Source

NTR

Brief title

TBA

Health condition

Day-time urinary incontinence (DUI) and non-retentive faecal incontinence (NFI)

Sponsors and support

Primary sponsor: SeysCentra

Source(s) of monetary or material Support: SeysCentra

Intervention

Outcome measures

Primary outcome

self-initiated toileting and urinary/faecal accidents during treatment/post-intervention

Secondary outcome

self-initiated toileting and urinary/faecal accidents during follow-up.

Study description

Background summary

Children and adolescents with neurodevelopmental disabilities seldom attain continence for urine and faeces through maturation. One-to-one training is often needed to establish continence. There is international consensus about the use of least-to-most intrusive treatment procedures for children with Elimination Disorders (ED) with Standard Urotherapy (SU) being considered a first-line treatment. However, specific guidelines pertaining to additional low intrusive procedures, while still producing the desired effect of attaining continence, are lacking in the literature. Furthermore, few studies describe the content of SU interventions and the effectiveness of SU specifically pertaining to children and adolescents with neurodevelopmental disabilities (ND). This PhD study focusses on adhering to the least-to-most intrusive guidelines for treatment and determining the effectiveness of standard urotherapy, behavioural training procedures based on response restriction with prompting and overlearning for self-initiated toileting.

Research question

Is RR with prompting effective in attaining self-initiated toileting in children and adolescents with DUI/NFI? Does the addition of an overlearning component contribute to better maintenance of the new skills over time?

Participant characteristics and setting

Twelve participants (5-18 y) will participate in this study. Intervention sessions will be conducted in a therapy room, $3 \times 3m$, at SeysCentra. Adjacent to the therapy room is a toilet room, $1.5 \times 1.5m$. In the therapy room is a table, two chairs, and a cupboard.

Study design

A non-concurrent multiple probe design across participants (Kazdin, 2011) will be used to investigate the effectiveness of RR with prompting and overlearning on DUI/NFI in participants.

Procedures

Participants will visit the training centre for ten workdays (no weekends) from 9:00 AM to 3:00 PM for RR training with prompting. Protocolized RR will be using prompting and ABA

2 - Effectiveness of response restriction with prompting combined with overlearning ... 2-05-2025

procedures will be utilized during training. Participants who attain mastery based on a predetermined criterion, will receive protocolled overlearning for the remainder of the training. During post-intervention, parents will foster generalization in the natural environment (e.g., at home) of the participant. Parents will receive protocolled feedback and instruction. Post-intervention will end after a pre-set criterion will be reached or after ten weeks. Eight weeks following post-intervention, maintenance will be measured in the follow-up phase for three days. Parents will not receive any feedback or instructions during follow-up measurements.

Measures and materials

Parents will be asked to measure urinary and faecal accidents, self-initiated toileting habits at home for at least five probes during the baselines, post-intervention, and follow-up. Event recording during a morning session (9:00 AM-12:00PM) and afternoon session (12:00 PM – 3:00 PM) of urinary accidents and self-initiated toileting habits (rate per three hours) will be conducted.

Strategy of analyses

Visual analyses using the guidelines of Lane and Gast (2014) for trend, level and stability of time series data within and between conditions will be assessed. Effect sizes will be calculated by using the Tau-U (Parker & Vannest, 2012) or by using another statistical analysis for single case research. Tau-U examines nonoverlap of data between phases and controls for a positive baseline trend (Parker, Vannest, & Davis, 2011; Parker, Vannest, Davis, & Sauber, 2011).

Power calculation

In this study, a single case design (SCD) will be used.

Study objective

RR with prompting results in a higher rate of self-initiated toileting and a decrease in urinary/faecal accidents. The addition of overlearning will result in better maintenance of the acquired skills over time.

Study design

Rate of self-initiated toileting and urinary/faecal accidents at the end of:

- Baseline 1
- SU
- Baseline 2
- Intervention
- Post-intervention
- Follow-up

Intervention

3 - Effectiveness of response restriction with prompting combined with overlearning ... 2-05-2025

Response Restriction (RR) with prompting Standard Urotherapy (SU) Overlearning

Contacts

Public

Radboud Universiteit/SeysCentra Maayke van Galen

0634030491

Scientific

Radboud Universiteit/SeysCentra Maayke van Galen

0634030491

Eligibility criteria

Inclusion criteria

All participants meet the following inclusionary criteria: They (a) have DUI, assessment and diagnosis using ICCS criteria (von Gontard, 2013b; Austin et al., 2016), and/or (b) have NFI, assessment and diagnosis using Rome IV criteria (von Gontard, 2013a; Hyams et al., 2016), (c) underwent a paediatric examination (d) have an IQ \geq 35, (e) have ability to stand and walk, (f) have no visual impairment, and (g) SU training at SeysCentra has already been conducted, and did not result in continence.

Exclusion criteria

Participants will be excluded from this research study based on the following exclusion criteria: They (a) have an IQ \leq 34, (b) are unable to stand or walk, (c) have a visual impairment, (d) received a completed SU training according to the ICCS criteria (von Gontard, 2013b) at a different facility, or (e) completed an SU training which was effective in attaining continence.

Study design

Design

Study type: Interventional

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: N/A , unknown

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-02-2021

Enrollment: 12

Type: Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Not applicable

Application type: Not applicable

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

NTR-new NL8970

Other ECSW Radboud University: ECSW-2021-151R2

Study results