Toilet training with response restriction

A rapid procedure to establish diurnal bladder control

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Who are eligible for the training?

- those who show willingness to become continent
- those who can stand for longer periods of time
- those who failed to attain control beyond 12 yrs of age
- those who have an adaptive age $\geq 1 \text{yr}/2 \text{mnth}$
- those who can be rewarded
- those who have no urinary tract infection
psychologists, who are familiar with the concepts of:

- positive/negative reinforcement, shaping, least-to-most/most-to-least prompting, progressive time-delay, positive practice, stimulus overselectivity, stimulus/response discrimination/generalization and who have experience with one-to-one training sessions with the target group. Others, e.g. teachers and care staff, can be taught to conduct the procedure if supervision is available.
There are the following phases to the training baseline, which takes at least 3 days,

- Phase 1: training, which mostly takes 4/5 days
- Phase 2: extending procedure into natural setting
- consultation to parents/teachers if relapse might occur
Which measures are taken during the baseline and why?

- while the trainee remains in her/his natural environment of the classroom, family or living group, he/she is devoid of a diaper to assess the effect of the training. Also, approx. 10% of the trainees appear to have bladder control, but still wear a diaper. Finally, the trainee can be taught to lower his/her pants on instructions, a skill to be used during training sessions.
Place trainee in a standing position with his/her back-side to the toilet bowl in such a way that the bowl can be felt to the calf and be seen. Put shirt or blouse in trainee’s underpants. Assist, if needed, the trainee with prompts in a least-to-most fashion to lower pants if s/he bends knees (=>135 degrees) to sit on the bowl. Never allow trainee to sit on the toilet bowl with underpants.
While trainee stands in front of the toilet bowl the trainer stands at a distance of 20-30cm from the trainee. **Response Restriction** is now administered: the trainer refrains from eye contact, ignores verbal behaviors and physically blocks all trainee’s motoric responses, such as flapping, smelling at own hands, jumping, sitting on the floor, turning around, flushing the toilet, etc. **This is supposed to have trainee to attend to her/his bladder pressure.** The trainer simultaneously monitors trainee’s genital area in decent way to detect an urine accident.
Which responses may occur in this situation and how to react?

Trainee may lower pants and takes place on the toilet.

Let trainee sit until urination occurs (detected by a device) or 5 min elapses. If urination begins in the toilet bowl, refrain from enthusiastic reactions as the flow may then stop. Urination is rewarded with (a) attention, (b) to conduct a favourite activity in a sitting position for 10 min, and (c) a cup of drink. Then, see Table 1. If no urination occurs, trainee is brought to the standing position again, without (a),(b).
Trainee may have a trainer-detected urine accident.

Say “no” if you see a darkening of the (coloured) underpants (which signals an accident) and assist, if necessary, the trainee in lowering the underpants and to sit on the toilet. Refrain from any negative comment, disappointment, and show no anger or irritation. If urinating re-occurs or not refrain from giving attention to it. Give a cup of drink and re-start the training.
Trainee may have a trained-undetected accident.

Apply **positive practice**: trainee (a) is physically guided to a corner in the bathroom, (b) is sent to the toilet using l-to-m prompting, (c) lowers pants, (d) remains seated for 3 sec, (e) raises pants and is guided to another corner. Sequence of steps is repeated 4 times following each accident.
Which difficulties may occur during training?

During Response Restriction and Positive Practice trainee may become irritated or aggressive. Trainer may inadvertently prompt the trainee to have sit on the bowl, espec. if trainee is supposed to have a well-filled bladder.

Trainee may become overhydrated/have nausea during the training.
## Training Steps of Phase 1

<table>
<thead>
<tr>
<th>Step</th>
<th>Accessible Space for Trainee in cm</th>
<th>Number of Voidings in Toilet to Proceed to Next Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
<td>1</td>
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<tr>
<td>4</td>
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<tr>
<td>7</td>
<td>200</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>300</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Whole Bathroom</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Whole Bathroom</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Whole Bathroom</td>
<td>2 in a row</td>
</tr>
</tbody>
</table>
What to do during Phase 2: extending the procedure into the natural setting

- No diaper, no extra fluids, no positive practice for toileting accidents. Trainee is sent with 1-to-m prompting to the toilet at increasing time intervals from 30 min on 1st day to 120 min on 4th day. Caretakers are discouraged to diaper trainee if incidental urinary accidents occur. Positive reinforcement for prompted and self-initiated voidings.
Has the Response Restriction procedure been validated?


The Future

- Training of bowel response to control defecation
  
  * we have recently conducted a small study (n=5) with 60% effect

- Training focused on trainees with autism/DD

  * We found that people with autism/DD showed lesser maintenance than those with Down syndrome