Alderman and Knight (1997). The effectiveness of DRL in the management and treatment of severe behaviour disorders following brain injury. *Brain Inj*, 11(2): 79-101.	RoBiNT score - 14/30
Method / Results	Rehabilitation Program

Design
- **Study Type:** SCD. Multiple baseline across behaviours, replicated across participants.
- **Population:**
  - Participant 1 (described in this summary): male, age 58 years, brain injury from motor vehicle accident, 2 years post-trauma, coma approximately 3 months, mild left hemiplegia, poor memory and executive functions, severe behavioural dyscontrol.
  - Participant 2: female, age 35 years, with ruptured posterior communicating artery aneurysm, 3 years post-trauma. Wechsler Adult Intelligence Scale (Revised) score fell into the "impaired range", severe impairment on verbal and nonverbal memory tests, as well as executive tasks. Presented with episodes of agitation and disinhibition.
- **Setting:** Inpatient behavioural unit.

Target behaviour measure/s:
- Frequency of throwing things.
- Frequency of shouting (above normal conversational tone).

Primary outcome measure/s:
- No other standardised measure.

Results: Graphed data presented, supported by statistical analysis. Significant reduction of the target behaviours, which by the end of the program were almost absent, but reduction in these behaviours were substituted by other undesirable behaviours (increased swearing and sexual comments to female staff members). These latter behaviours also successfully treated using the intervention. All behaviours maintained at 18 month follow-up.

See Erratum (1997) Erratum (Brain Injury, 11:7, 541-542, DOI: 10.1080/bij.11.7.541.542) for correctly reproduced Figures 3 and 4 with the correct legends.

Aim: To increase independence in learning and performing daily showering routine in a patient with traumatic brain injury by using differential reinforcement of low rates of responding (DRL).

Materials: Not specified.

Treatment Plan:
- **Duration:** 12 weeks (total hours not reported).
- **Procedure:** 5 sessions per week during morning hygiene (showering) routine. Duration of sessions not specified.
- **Content:**
  - Differential reinforcement of low rates of responding (DRL) program. After baseline was taken of both target behaviours (throwing and shouting), a DRL program was introduced for throwing (while shouting continued to be baselined).
  - A target of 16 occasions of throwing things per session was set as the upper limit not to be exceeded. This was easily achievable given previously collected data. At the end of the hygiene program, he earnt a reinforcer of his choice if the frequency of target behaviours did not exceed criterion. This information was presented to him in verbal and written form immediately before he entered the bathroom.
  - Additionally, he was given feedback approximately every 5 minutes regarding his frequency of the target behaviour and reminders of the target behaviours and reward. Praise also given if target behaviours were below the target. When the target was met, it was reduced by 2 for the next session.
  - After he met criterion of less than 2 throws on several occasions, the program included the next target behaviour, shouting, using a similar DRL procedure.

Note that these rehabilitation summaries reflect the current literature and the treatments are not necessarily endorsed by members of the NRED Team.