

NeuroRehab Evidence Database

Target Area: Challenging Behaviour

Neurological Group: Traumatic Brain Injury

Strohmeier et al. (2016). Brief functional analysis of repetitive verbal behaviour (vocal stereotypy) for an adult with acquired brain injury. *Int J Disabil Hum Dev*, 15(1): 19-22.

RoBiNT score - 16/30

Method / Results

Design

- **Study Type:** SCD. Alternating treatment design with 4 sets of sequences.
- Population: n=1. Male, age 48, history of anoxic encephalopathy and subdural hematoma secondary to seizure fall.
- **Setting:** Outpatient program. Computer and two chairs present in room.

Target behaviour measure/s:

 Repetitive verbal behaviour: vocalization about leaving rehabilitation program, winning sweepstakes and getting married.

Primary outcome measure/s:

• No other standardised measure.

Results: Visual analysis of graphed data showed that the participant demonstrated increased repetitive vocal behaviour in test conditions that focused on continued attention; and fewer occurrences in ignore and free interaction conditions. This suggests that environmental/contextual factors may maintain repetitive verbal behaviour. No statistical analysis was performed.

Rehabilitation Program

Aim: To identify environmental or contextual influences on repetitive verbal behaviour using functional analysis.

Materials: Computer (for clinician).

Treatment Plan:

- **Duration**: Unclear from report.
- Procedure: 16 sessions, 4 sessions per condition, each lasting 5 minutes. Sessions conducted between 9am-3pm on weekdays.
 3-4 conditions conducted during each session,
 1-2 times per week until 4 sessions per condition were completed.
- **Content**: 4 conditions were randomly alternated:
 - 1. Attention condition: Clinician stated he had to work on the computer, and worked on the computer throughout session. He only provided responses by nodding the head. No eye contact or vocalizations in response to non-target behaviour. Responses to target behaviour was brief verbal attention (e.g. "that's interesting, let's talk about something else").
 - 2. <u>Ignore condition:</u> Format similar to attention condition except all participant behaviour (target or otherwise) was ignored.
 - 3. <u>Demand condition:</u> Clinician presented cognitive rehabilitation to participant (e.g. worksheets). Response to target behaviour included removal of task stating "okay, we don't have to do it now." If task was completed, brief praise provided, and another task presented.
 - 4. Free interaction condition: Target behaviour ignored, clinician and participant interacted with items preferred by participant (preference reported by staff).