

NeuroRehab Evidence Database

Target Area: Challenging Behaviour

Neurological Group: Traumatic Brain Injury

Quearry and Lundervold (2016). Functional analysis and intervention for perseverative verbal behaviour of an older adult with traumatic brain injury. *Brain Inj.*, 30(10): 1276-1278.

RoBiNT score - 14/30

Method / Results

Design

- Study Type: SCD. ABAB withdrawal design (A

 functional analysis condition, B –
 intervention).
- Population: n=1. 60 year old female with history of brain injury post motor vehicle accident.
- **Setting:** Private office.

Target behaviour measure/s:

- Perseverative verbal behaviour (PVB):
 Context irrelevant, repetitive (more than once) overt verbal behaviour.
- Termination of PVB when 5 seconds of silence or context relevant verbal behaviour was observed.

Primary outcome measure/s:

• No other standardised measure.

Results: Intervention demonstrated a functional relation between PVB and social contingencies. Participant showed PVB was maintained by social reinforcement regardless of antecedent stimulus conditions (casual and technical talk) during functional analysis conditions. This was further demonstrated during intervention which involved reversal of antecedent stimulus conditions.

Rehabilitation Program

Aim: To determine controlling or maintaining variables related to perseverative verbal behaviour (PVB) through functional analysis of behaviour.

Materials: Specific materials used for tutoring unclear.

Treatment Plan:

- **Duration**: 12 weeks.
- Procedure: 12 60-minute weekly tutoring sessions. Experimental manipulations happened in 5-minute intervals during the 60-minute observation period. PVB was recorded using timing device.
- Content:

<u>Functional analysis conditions:</u> Antecedent/consequence:

- <u>Casual talk/attention</u>: Tutor engaged in everyday social interaction. Contingencies for PVB provided through eye contact, orienting head, nod, engaging in reciprocal verbal responses.
- <u>Casual talk/extinction:</u> When PVB occurred in social interaction, tutor would avert eyes and turn head away till PVB ceased for 10 seconds.
- <u>Technical talk/attention</u>: Tutor engaged in technical language of behaviour, psychology, and modelled correct responses. Contingencies given similarly to casual talk/attention condition.
- <u>Technical talk/extinction:</u> Tutor engaged in technical language. Similar contingencies as casual talk/extinction condition.

Intervention condition occurred by implementing technical talk (attention and extinction) condition to show relation between PVB and social reinforcement.