

NeuroRehab Evidence Database

Target Area: Challenging Behaviour

Neurological Group: Traumatic Brain Injury

Guercio et al. (2012). Behavioural treatment for pathological gambling in persons with acquired brain injury. <i>J Appl Behav Anal</i> , 45(3): 485-495.	RoBiNT score - 15/30
Method / Results	Rehabilitation Program

Design

- **Study Type:** SCD. Concurrent multiple baseline.
- **Population:** n=3 who had suffered ABI and were engaged in pathological gambling.
 - o Participant 1: female, age 31, frontal lobe injury (all-terrain vehicle accident).
 - o Participant 2: male, age 40, ABI (vehicle vs. pedestrian accident).
 - o Participant 3: male, age 49, ABI (boating accident).
- **Setting:** University Gambling Intervention Program simulated gambling room.

Target behaviour measure/s:

 Monetary expenditures during gambling opportunities – the amount of poker chips or lotto tickets.

Primary outcome measure/s:

 Gambling Symptom Assessment Scale (G-SAS).

Results: Visual analysis of graphed data showed all participants wagered less as they were exposed to the intervention package during clinic sessions. The scores on the G-SAS for all participants decreased in both clinic sessions and generalization probes following the introduction of treatment. Follow-up data suggest a moderate reduction in gambling behaviour and self-reports from baseline levels.

Aim: To reduce urges to gamble and actual gambling.

Materials: Specific protocol (a CBT package) based on the text and accompanying training materials of Petry (2005).

Treatment Plan:

- **Duration:** 8 weeks.
- **Procedure:** 1-hour sessions being held weekly.
- **Content:** Week:
 - 1. Review of gambling history; weekly graphing of gambling behaviour; self-reinforcement established.
 - 2. Situational analysis of gambling behaviour; antecedent events review; functional analysis of gambling behaviour.
 - **3.** Alternative replacement behaviour reviewed via 50-item leisure list.
 - **4.** Review of alternative activities; antecedent management.
 - **5.** Analysis of urges associated with cravings; relaxation strategies; systematic desensitization.
 - **6.** Role of negative reinforcement and personal conflict; assertiveness training; role play.
 - 7. Role of covert rules; "cognitive" bias; review of odds; exercises to depict odds prediction.
 - **8.** Management of positive and negative future life events; 1- to 10-year plan for handling future life events.

Participants were also instructed to self-record various behaviours each week and to bring these assignments to therapy the next week (including gambling behaviour, self-reinforcement, activity list).