

Two Case Studies Of Self Monitoring Training Within A Neurobehavioural Setting

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Case Study 1 “CJ” – Background History

- 50 year old male
- Typical development - premorbid IQ reported as “high”
- Viral infection at 15 years of age
- “a marked change in personality, became disinhibited and sexually pre-occupied”
- Admissions to hospital

Case Study 1 – Background History

- Admitted to a high secure psychiatric hospital
- Behaviours included sexual disinhibition and verbal and physical aggression towards others,
- Admitted to a specialised neurobehavioural service
- Behaviour have included sexual comments, sexual touch and self touch, verbal and physical aggression towards others, and non co-operation

Neuropsychological Testing

- Extensive testing has been carried out with CJ
- Only recent neuropsychological testing shall therefore be reported

Neuropsychological Testing

- The Rivermead Behavioural Memory Test (RBMT) was administered

Standardised Profile Score 13/24

Scores are suggestive of a moderate memory impairment

Neuropsychological Testing

- The Behavioural Assessment of the Dysexecutive Syndrome (BADS) was administered

Age corrected standardised score 65

These scores fall with the impaired range and therefore are suggestive of difficulties with executive functioning

Neuropsychological Testing

- The Multiple Errands Test – Hospital Version (MET-HV) was administered

Scores are suggestive of difficulties with executive functioning

Rule Breaks	11
Task Failures	3
Interpretation Failures	1
Total	15

Verbal Output

- CJ was also presenting with high frequency verbal output across many settings
- This behaviour was most concerning during meal times where verbal output took the form of:

- singing/humming
- shouting
- talking
- muttering

This verbal output was occurring whilst CJ had food in his mouth

- It was thought that the verbal output was linked to choking incidents

Verbal Output

- A prompt card was put on CJ's dining table and verbal prompts were given following verbal output
- However staff reported there was no observable reduction in CJ's verbal output
- Therefore a more effective intervention needed to be implemented

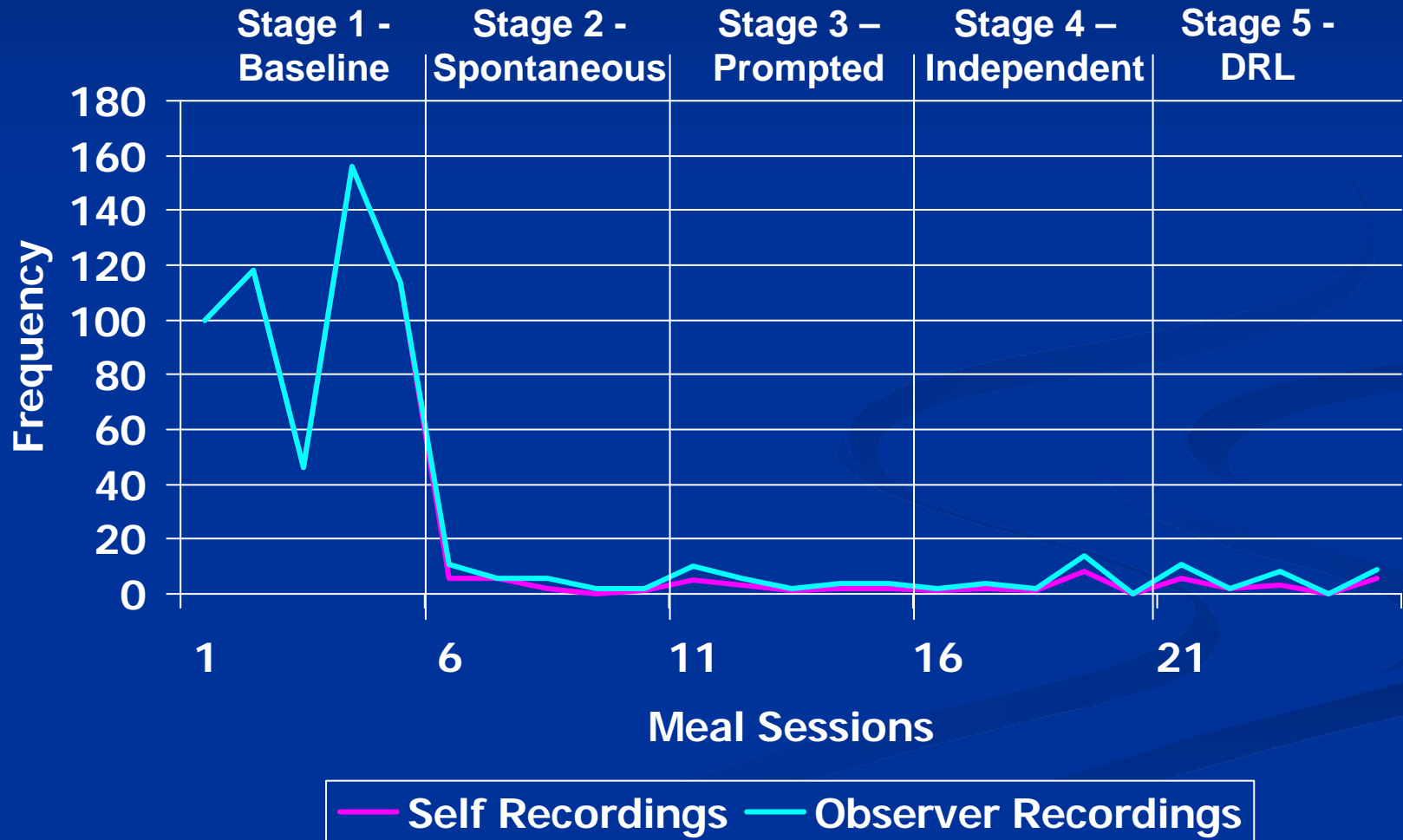
Formulation

- Neuropsychological testing suggested impairments in executive functioning
- Verbal output across all settings – suggested self-monitoring difficulties
- CJ not responded to the to prompt card
- Self-monitoring skills need to be assessed
- Non intrusive approach needed (meal times)
- Approach that will not place demands/expectations on executive functioning

Self Monitoring Training

- Self monitoring Training was administered over 25 meal sessions
- The target behaviour was:
 - singing/humming
 - shouting
 - talking *
 - muttering

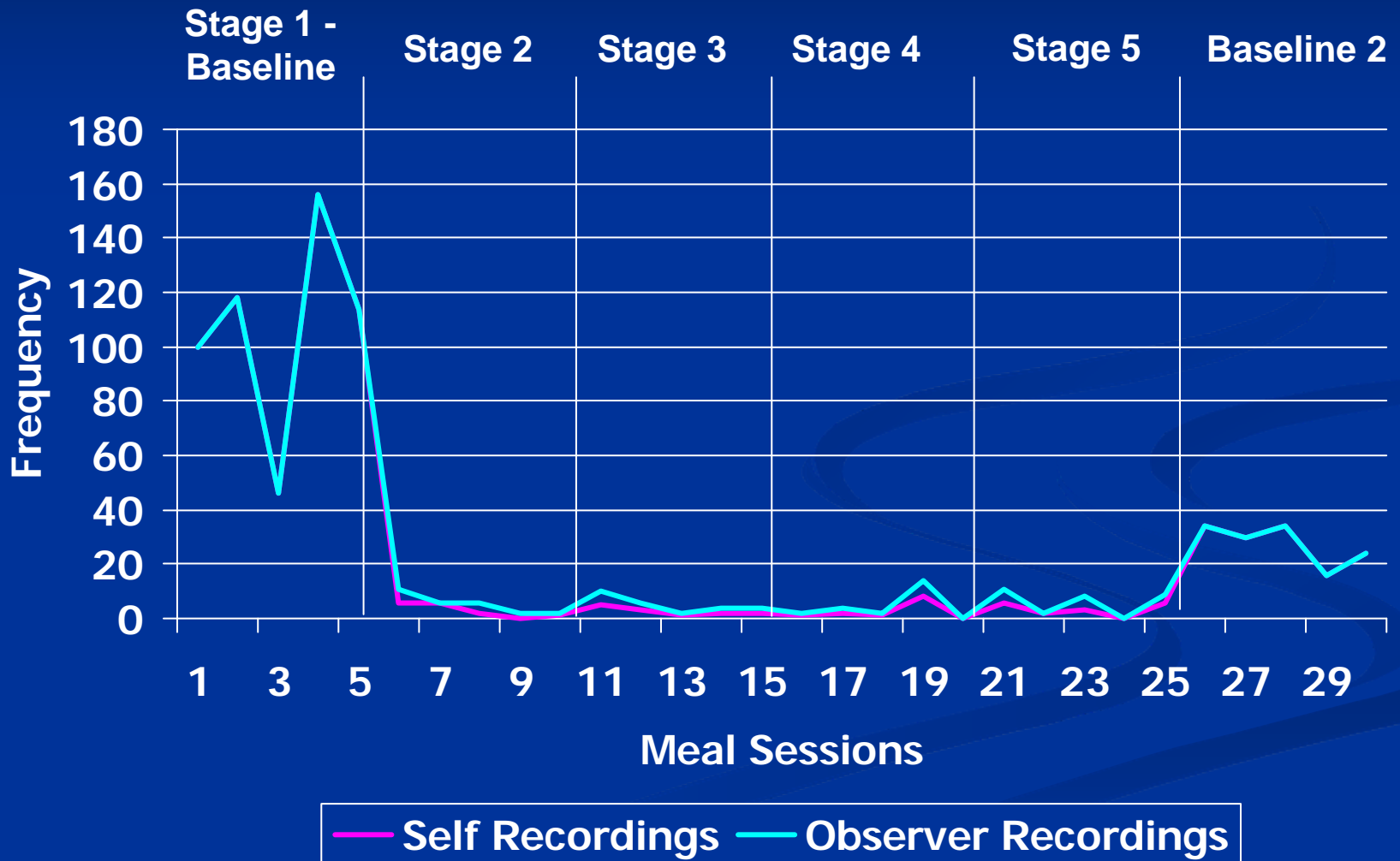
All Verbal Output Recorded During Meal Sessions Throughout A Self Monitoring Programme



Generalising

- Reported by staff that in those meal sessions without self monitoring verbal output increased, but not to the extent of the frequency observed during the baseline
- Therefore a second baseline was carried out

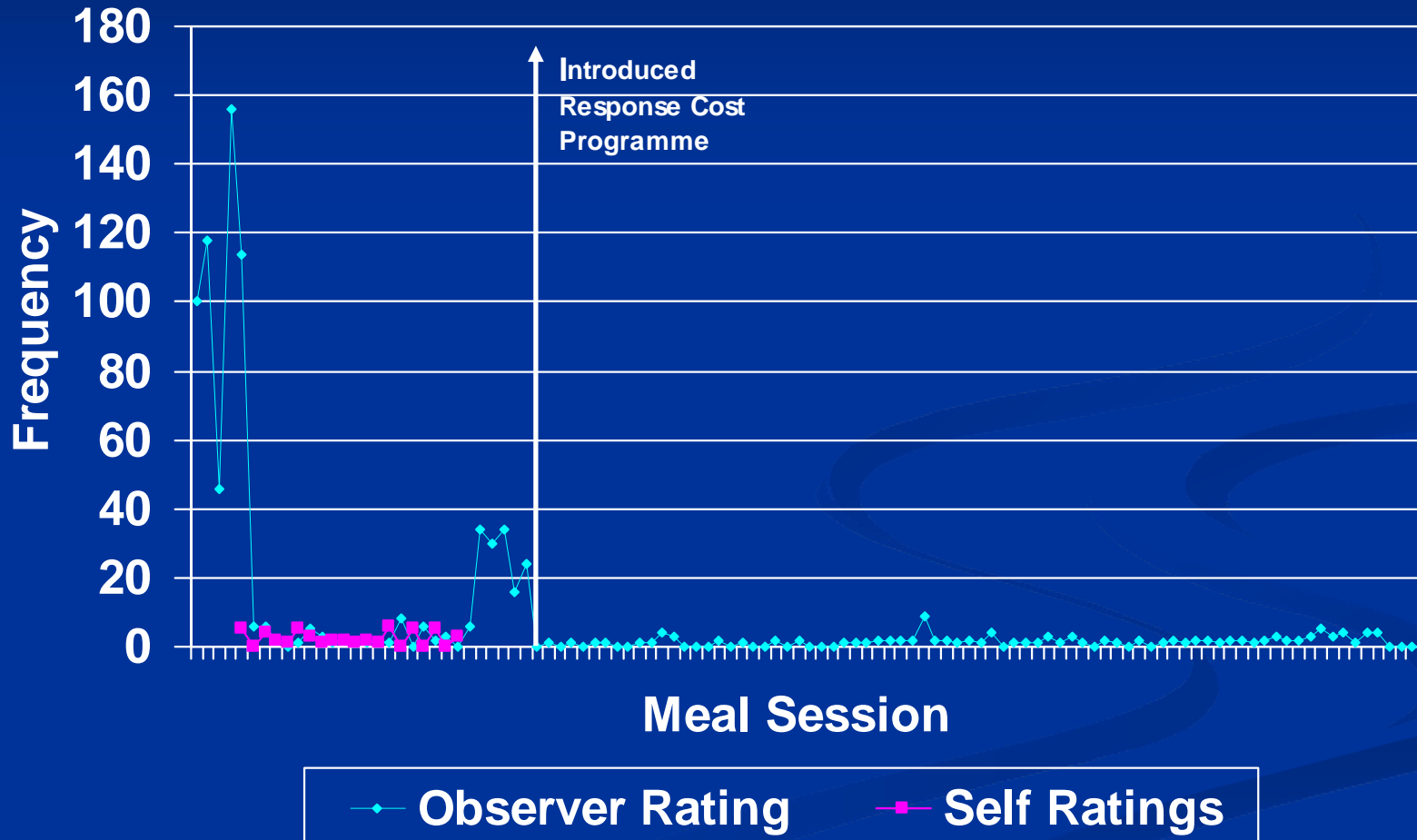
All Verbal Output Recorded During Meal Sessions Throughout A Self Monitoring Programme



Generalising and Maintenance

- CJ's progress needed to be maintained and generalised to all sessions.
- A response cost programme was implemented during meal times to maintain the low frequency behaviour.

Generalising and Maintenance



Reflections on the Intervention

- Did CJ learn self-monitoring skills or could he self-monitor already?
- Could have started with DRL or response cost?
- The SMT added to the assessment and formulation.
- SMT
 - facilitated a therapeutic way of engaging CJ
 - skill building approach, more inclusive way of letting CJ become aware of his behaviour.
- Assessment including the neuropsychological data did not necessarily serve as an accurate guide to the intervention.
- Influence of personality

Case Study 2 – MJ

Background History

- Sustained a traumatic brain injury aged 20 in 2002
- Attacked by a group of strangers on a night out
- MJ was in coma for three and half weeks

Background Information cont.

- After a short stay at a rehabilitation unit MJ was discharged home
- At home presented as a significant challenge to his family
- Challenging behaviours included:
 - physical aggression against others
 - self-harm and threats of suicide
 - bullying and intimidating behaviour
 - fire setting and damaging objects
- Admitted to a specialised neurobehavioural service

Neuropsychological Testing

- Premorbid Function:
 - The Wechsler Test of Adult Reading was administered
 - MJ's standard score was 92 which is indicative of premorbid 'average' intellectual functioning
- Intellectual Function:
 - Wechsler Adult Intelligence Scale III was administered
 - FSIQ score is 84 which falls in the 'low average' range
 - VIQ: 90 and PIQ: 79

Neuropsychological Testing - Memory

- The Adult Memory and Information Processing Battery was administered:
 - MJ's immediate recall of verbal and non-verbal information was within the 'average' range
 - However after a delay his recall was 'below average'
- The Rivermead Behavioural Memory Test was also administered:
 - MJ's Standardised Profile Score was 19/24 which is classified as 'Poor Memory'

Neuropsychological Testing - Executive Function

- Behavioural Assessment of Dysexecutive Syndrome
 - MJ's Age Corrected Standardised Score 113 which indicates an 'high average' performance
- The Hayling and Brixton Test was also administered
 - MJ's scaled score in the Hayling test was 6 which falls in the 'average' range
 - His scaled score in the Brixton Test was 9 which falls in the 'superior' range
- MJ also completed the Baddeley's Dual Task Paradigm
 - MJ achieved a scaled score of 9 which is in the 'average' range

Executive Function cont.

- The Multiple Errands Test (MET) was administered
 - MJ scored well outside the normal range suggesting difficulties with executive functioning. His performance was characterised by an inability to follow defined rules.
- Dysexecutive Questionnaire
 - Self ratings were inconsistent suggesting MJ does not have a consistent awareness of his deficits.

Rule Breaks	8
Task Failures	5
Interpretation Failures	1
Total	14

DEX Self	43/80	20/80
DEX Others	49/80	48/80

Inappropriate Behaviour

- Concerns were raised regarding MJ's poor table manners
- These included:
 - frequent verbal output
 - overfilling
 - inappropriate use of fingers
 - inappropriate use of cutlery
- MJ's poor table manners could potentially place him in a vulnerable position
- These are clear examples of social disability

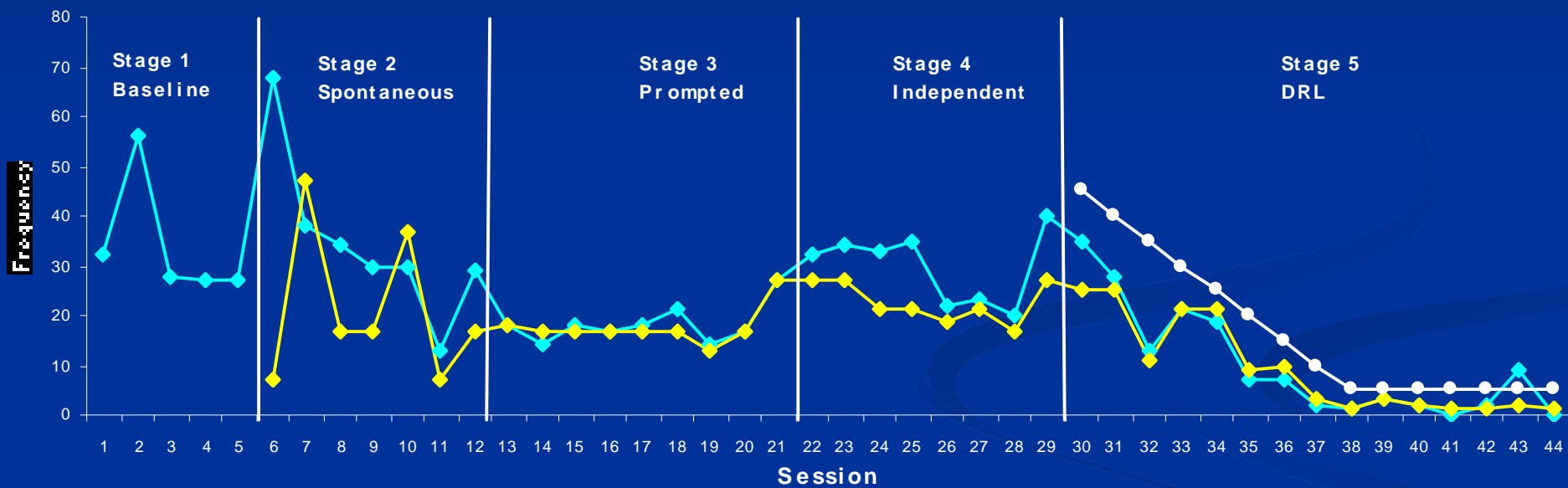
Formulation

- Able to understand communication
- Able to retain and recall information
- Inconsistent results on executive function tests
- Able to divide attention between two tasks
- Inconsistent in awareness
- Not responding to other neurorehabilitation programme focusing on verbal feedback
- Is he able to self monitor his behaviour?
- Self monitoring training as assessment and possibly an intervention

Self Monitoring Training

- SMT was carried out over 41 sessions
- SMT was introduced in order to target inappropriate use of fingers, since this was the most frequent inappropriate behaviour observed during meal times

Graph showing frequency of inappropriate use of fingers throughout self monitoring training



Results from Self-monitoring Training

- The results obtained demonstrate that MJ benefited from SMT.
- There was a clear improvement in his ability to accurately self-monitor the frequency of his inappropriate use of fingers during meals.
- MJ was also successful in acquiring a greater inhibitory control over this behaviour.

Summary

- MJ and CJ's behaviours reduced following SMT
- Neuropsychological assessment did not necessarily serve as an accurate guide to intervention outcome
- Therefore we should take caution on a over reliance on neuropsychological assessment
- Functional assessment may be more useful
- Both cases demonstrate SMT can add to assessment and formulation, as well as being an intervention approach