



WS 4.1

Case Study A: 16-year-old boy

This 16-year-old male suffered a severe traumatic brain injury and facial fractures in a motor vehicle accident. His rehabilitation progressed well and he returned to live in the family home. A year after his injury he planned to return to school to do his HSC and eventually go to University, as he had always intended to do.

A review neuropsychological assessment was conducted around the same time.

On interview the young man complained that he forgets things he has been told, needs to go over and over information to remember it, needs to reread paragraphs to be able to understand what he is reading, and has difficulty following conversations.

The assessment found:

- he had a very short span of attention
- he could not divide attention (unable to follow more than one thing at a time)
- his processing speed was slow
- new learning was poor, information needed to be repeated
- he did not recall much after a delay
- he had difficulties remembering if his learning was interrupted by another task or different information
- he was disorganised and did not plan how to work things out
- some concrete reasoning
- rapid fatigue when maintaining mental effort.

He also demonstrated:

- general problem solving skills at an appropriate level
- excellent arithmetical ability
- good adaptive skills, so could modify what he was doing to meet change and utilise feedback
- he was able to recognise more information than he was able to recall
- some insight towards his cognitive difficulties
- an eagerness to get into University (which may be good or bad).

Questions

What strategies could you suggest to assist this young man with managing his HSC studies?

Think about what he could do himself, what the school might be able to provide, and what changes may be needed at home.



Case Study B: 40-year-old man

This 40-year-old man suffered a traumatic brain injury in a motor vehicle accident. He is married with a family and had maintained full time employment for a number of years as a lecturer. He complained that since his injury he is forgetful, loses things, has difficulty finding the right word to say, and feels uncomfortable in social situations but manages better in one-to-one situations. During the interview this man sometimes seemed a bit vague although was very talkative and his conversation often went off topic. At the time of assessment he was keen to return to some form of employment due to increasing financial concerns at home. In his eagerness he was applying for a variety of part time positions, which he could get but could not sustain.

Findings from a neuropsychological assessment indicated:

- he had difficulties concentrating over time and difficulty keeping track of more than one thing at a time
- it was taking him much longer to complete things
- he was only able to learn small amounts of new information
- he was disorganised
- he had difficulty thinking of new ideas
- his reasoning skills were concrete
- his self monitoring was poor (verbose, off-track conversation)
- he was experiencing a high level of anxiety.

However he also showed:

- that his memory for old knowledge is intact
- he could remember the small amount of information he had learnt
- he has a good attention span
- he is able to problem solve at quite a complex level.

Questions

What could be recommended to help this man find and maintain employment? (Is he able to work?)

In reference to a work environment, what strategies might assist this gentleman to compensate for his cognitive weaknesses?



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Case Study C: 20-year-old man

This 20-year-old man suffered a hypoxic brain injury* as a result of attempted hanging. At the time of his injury he had been working full-time as a truck driver and was living on his own. When seen for assessment he was very polite, friendly and cooperative. He answered questions simply, followed instructions precisely, and sometimes needed additional prompting to continue with a task. (Essentially he did exactly what he was told to do without question). This man wanted to get better and believed that rehabilitation was helping him a lot.

A neuropsychological assessment indicated that he:

- had significant and generalised cognitive impairment
- had a very short attention span
- could not keep track of things
- was very slow
- registered only a small amount of information and repeating things did not help him to learn more
- was very poor problem solving
- was disorganised
- had a concrete thinking style
- had severe executive dysfunction (cognitive inflexibility, poor self-monitoring eg. rule breaking, limited generation of new ideas)
- was poor at initiation
- had limited insight about his cognitive difficulties.

However he:

- was able to follow simple, direct instructions
- could remember the very small amount of information that he initially registered
- could complete simple problem solving and simple calculations.

Questions

What strategies could be suggested to assist therapy staff with this man's rehabilitation?

His goal is to eventually live independently. What could you suggest to help him achieve this goal?

**Hypoxic Brain Injury occurs when the brain has been deprived of oxygen to some degree. The person would be likely to suffer memory impairment and severely slowed processing speed, with executive and visuo-perceptual impairments. They might also have a global or generalised dulling of cognitive functioning with an inert or flat presentation.*



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Case Study A: Strategies

Complete HSC studies over two to five years. Part-time study program at TAFE.

Individual

- write all important information down
- make use of a diary – aid with memory and organising self
- follow a weekly timetable – classes, breaks, study, travel, leisure time
- review small amounts of work/information often
- keep subject notes well organised
- ask questions
- study one subject at a time and have a break between changing topics
- prepare before classes, complete set readings
- limit distractions when trying to study (fatigue, hunger, drugs and alcohol).

Environment

- keep study space tidy and well organised
- have 'special places' for items (pens, rulers, keys, wallet, phone, diary)
- have a quiet place to study, somewhere interruptions are unlikely
- limit distractions when trying to study (TV, radio, other people, mobile phone).

School/TAFE (dependent upon availability)

- sit at front of class to keep focus
- use a note taker or a tape recorder in classes (sometimes class notes are available)
- tutor to assist with interpreting assignments and developing a framework for generating and organising answers
- extra time during examinations to allow for slow processing or rest breaks
- possibly splitting up an exam over two sessions
- having a separate room for examinations so won't be interrupted.



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Case Study B: Strategies

This man could possibly manage some form of work closely related to his previous occupation. He'd be unlikely to manage a whole classroom or administrative duties, but may be able to cope with one to one tutoring on a topic that he is highly familiar with.

Useful strategies

- use a diary to record all important information and organise activities/appointments
- keep a simple work environment where there are limited distractions
- have a well organised and tidy work space – everything has its place
- use a computer to work from and store information
- maintain well structured lessons
- sessions might need to be short
- could use CD Rom courses which are structured and sequential
- deal with one student at a time with a reasonable break between students
- prepare in advance for each lesson including a review of what was previously achieved
- weekly plan to assist with preparation and organisation.

Individual

- journal/diary to keep record of events
- make use of special places, avoid putting items down
- use of a bag to hold necessary items when going out (these need to become habits)
- might benefit from learning strategies of turn-taking in conversations or having another person to signal to him when he is talking too much.



Case Study C: Strategies

To assist with his rehabilitation

- tasks will need to be short and simple
- the ultimate goal, or end point, should be broken down into smaller components
- repetitive activities to assist learning (procedural learning)
- allowances made for slow speed of processing
- he can only engage in one activity at a time (don't ask him questions during meal preparation)
- keep instructions short, or pause after specific points to ensure he is following
- frequent reminders may be necessary
- have a daily timetable which needs to be checked regularly
- he is likely to require prompting to initiate a task and also intermittent prompting to persist with an activity (need will probably decline with time)
- have clear guidelines, or plan, for each activity that he can easily follow
- possibly a period of assessment and rehabilitation with a Transitional Living Unit.

Once home he will need:

- some ongoing assistance (meals, house keeping, carer hours)
- a regular daily/weekly timetable of activities so a routine is established
- names of people involved and location of activity written on timetable
- a white board for important information and reminders
- a well organised household – everything has its place
- a system for paying bills (automatic, family, guardian)
- a system for taking medication (e.g. blister packs, alarm, part of daily routine, pill box).