

Traumatic Brain Injury (TBI)

A Traumatic Brain Injury (TBI) can result from numerous causes: a slight concussion received in a rugby game, a building accident, an assault, falling off a horse/bike, whiplash or a major car accident.

When people suffer a traumatic brain injury many changes occur in the brain. The brain has been disrupted in a number of ways, often brain cells have been killed off, damaged or bruised and this impacts on the person's ability to function in daily activities.

A significant change is often observed with cognitive communication skills. These are the skills required to talk, listen, read or write. Cognitive skills are **thinking skills**.

By the time the client is ready to go back to work they have already made significant improvements to their cognitive communication abilities. Therefore, it becomes important to maintain these gains when they are re-entering the workforce, one of the best ways to do this is through gradually returning to work so that burn out is avoided.

The following pages list the possible functional deficits that a person may experience as a result of a traumatic brain injury.

Possible Functional Deficits Resulting From A Traumatic Brain Injury

- Lack of stamina
- Headaches
- Fatigue
- Sleep dysfunction i.e. insomnia, day and night confusion
- Problems planning, organising and initiating tasks
- Difficulties with multi-tasking and sequencing i.e. keeping track of two things at once
- Need for structure and direction to accomplish tasks
- Poor concentration, attention and memory
- Problems retrieving information from memory
- Intelligence usually remains intact, however there is slowness in processing information, particularly new information, especially if fatigued or over stimulated
- Problems with pacing activities
- Difficulty with judgment and decision-making
- Perseveration i.e. the mind gets stuck on one issue
- Distractibility, confusion
- Irritability
- Impulsivity
- Difficulty dealing with change



- Socially inappropriate behaviour
- Isolating self as feeling different, and therefore treated differently
- Hard to "keep up" in social situations
- Poor coping strategies, which impact on interpersonal and vocational efforts
- Vertigo (dizziness) light headed feeling
- Tinnitus (ringing in the ears)
- Light sensitivity
- Smell and taste alterations
- Visual, speech and hearing disturbances
- Stress related disorders; depression; frustration
- Emotional liability i.e. crying for no apparent reason
- Emotional /behavioural outbursts
- Changes in sexuality(disinhibition, high/low libido)
- Compulsive talkativeness
- Balance and coordination problems (motor coordination)
- Personality change
- Chronic pain, including headache
- Inability to return to work, or if able, at reduced capacity and with great effort
- Possible misdiagnosis as, for example, psychiatric illness or malingering

Each brain injury is different. A person may experience any combination of symptoms or none at all. Severity of symptoms may vary with each individual and may change over time.

Note: A person with a TBI will usually look totally normal and colleagues/employers will often make the mistake of perceiving that they have made a total recovery and are capable of working at preinjury capacity.

Difficulties you might notice in the work place

- Difficulty with long or complex instructions
- Becoming tired towards the end of the day e.g. find it difficult to do more than one task at once, talk less at the end of the day than at the beginning
- Become confused when topics change rapidly
- Find communicating with several people at once difficult to follow
- Organization and planning for the day's tasks may be difficult
- Find it difficult to focus and concentrate when there are lots of background distractions
- Prioritisation and time management for daily tasks
- Forgetting information



Return To Work Following Traumatic Brain Injury (Tbi)

When considering rehabilitation for someone with a brain injury, it is important to remember that this process must be conducted on a case-by-case basis with input from the individual.

Each person's individual abilities and limitations should be considered and problematic tasks must be identified. Brain injury, in particular, may result in the affected person having a combination of disabilities. The limitations resulting from each of these disabilities may need to be effectively accommodated. Limitations may range from short-term memory problems to difficulties prioritising job tasks.

Keep in mind that functional limitations caused by brain injury vary among individuals and depend upon the condition and limitations the person is experiencing. Even persons with the same disability may experience different limitations and be affected to varying degrees.

The following pages provide basic information about common limitations, useful questions to consider and examples of strategies for persons with brain injuries to use in order to compensate for their difficulties/deficits (compensatory strategies).

Questions to Consider when Determining, Implementing, and Maintaining Compensatory Strategies

- 1. What are the limitations the individual with the brain injury is experiencing?
- 2. To what degree do these limitations affect the person and their job performance?
- 3. What specific job tasks are problematic as a result of these limitations?
- 4. Has the individual with the disability been consulted regarding their needs?
- 5. What compensatory strategies are available to reduce or eliminate these problems?
- 6. Are regular meetings being held with the person with the brain injury to evaluate the effectiveness of existing compensatory strategies and to determine if others are needed?
- 7. Has the individual with the disability been consulted regarding the education of supervisory personnel and other employees about brain injury?

Compensatory Strategies

Examples for Persons with Brain Injury

Note: People who have brain injuries will develop some of these limitations, but seldom develop all of them.

Also, the degree of limitation will vary among individuals. Be aware that not all people who have brain injuries will need compensatory strategies to perform their job and many others may only need a few compensatory strategies.



The following is only a sample of the possibilities available. Numerous other compensatory strategies exist as well.

Maintaining Stamina during the Workday:

- Flexible scheduling
- Allow longer or more frequent work breaks
- Provide additional time to learn new responsibilities
- Provide self-paced workload
- Provide backup coverage for when the employee needs to take breaks
- Allow for time off for counselling
- Allow for use of supportive employment and job coaches
- Allow employee to work from home during part of the day
- Provide for job sharing opportunities
- Part-time work schedules

Maintaining Concentration:

- Reduce distractions in the work area
- Provide space enclosures or a private office
- Allow for use of white noise or environmental sound machines
- Allow the employee to play soothing music using a cassette player and headset
- Increase natural lighting or provide full spectrum lighting
- Reduce clutter in the employee's work environment
- Plan for uninterrupted work time
- Divide large assignments into smaller tasks and steps
- Restructure job to include only essential functions

Difficulty Staying Organised and Meeting Deadlines:

- Make daily TO-DO lists and check items off as they are completed
- Use several calendars to mark meetings and deadlines
- Remind employee of important deadlines via memos or e-mail or weekly supervision
- Use a watch or pager with timer capability
- Use electronic organizers
- Divide large assignments into smaller tasks and steps
- Assign a mentor to assist employee determining goals and provide daily guidance
- Schedule weekly meetings with supervisor, manager or mentor to determine if goals are being met

Memory Deficits:



- Allow the employee to tape record meetings
- Provide type written minutes of each meeting
- Use notebooks, calendars, or sticky notes to record information for easy retrieval
- Provide written as well as verbal instructions
- Allow additional training time
- Provide written checklists
- Provide environmental cues to assist in memory for locations of items, such as labels, colour coding, or bulletin boards
- Post instructions over all frequently used equipment

Problem Solving Deficits:

- Provide picture diagrams of problem solving techniques, i.e. flow charts
- Restructure the job to include only essential functions
- Assign a supervisor, manager or mentor to be available when the employee has questions

Working Effectively with Supervisors:

- Provide positive praise and reinforcement
- Provide written job instructions
- Write clear expectations of responsibilities and the consequences of not meeting them
- Allow for open communication to managers and supervisors
- Establish written long term and short term goals
- Develop strategies to deal with problems before they arise
- Provide written work agreements
- Develop a procedure to evaluate the effectiveness of the compensatory strategies

Difficulty Handling Stress and Emotions:

- Provide praise and positive reinforcement
- Refer to counselling and employee assistance programmes
- Allow telephone calls during work hours to doctors and others for needed support
- Provide sensitivity training to co-workers
- Allow the employee to take a break to use stress management techniques to deal with frustration

Attendance Issues:

- Provide flexible leave for health problems
- Provide a self-paced work load and flexible hours
- Allow employee to work from home
- Provide part-time work schedule



Issues of Change:

- Recognise that a change in the office environment or of supervisors may be difficult for a person with a brain injury
- Maintain open channels of communication between the employee and the new and old supervisor in order to ensure an effective transition
- Provide weekly or monthly meetings with the employee to discuss workplace issues and production levels

Visual Problems:

- Provide written information in large print
- Change fluorescent lights to high intensity, white lights
- Increase natural lighting
- Provide a glare guard for computer monitors
- Consult a vision specialist particularly with someone who has lost part of or all of their vision

Hearing Problems:

- Consult an Audiologist specialised in hyperacusis (hypersensitivity to noise) and hearing deficits following TBI
- Reduce all background noise
- Use earplugs/musicians earplugs
- Provide a quiet work environment

Physical Limitations:

- Install ramps, handrails, and provide handicap parking spaces
- Install lever style door handles
- Clear pathways of travel of any unnecessary equipment and furniture

Examples of Compensatory Strategies in Use

A police officer who was returning to work following surgery for a brain aneurysm: He had partial paralysis to the left side and could no longer use both hands for word processing. Transferring to a vacant position that involved computer research accommodated him and he was provided a one handed keyboard.

A professional whose work required the use of a computer returned to work following a brain injury: As a result of his injury he was unable to read past the midline when reading from left to right. Compensatory strategies included: changing the margin settings of his word processing programme from 80 to 40 to limit right side reading or to purchase software that can split the computer screen left to right and black out the right side; redesign his workstation to place equipment on the left; and provide task lighting.



A therapist who had short-term memory deficits had difficulty writing case notes from counselling sessions: Compensatory strategies included: allowing the therapist to tape record sessions and replay them before dictating notes, to schedule 15 minutes at the end of each session to write up hand written notes, to schedule fewer counselling session per day.

A labourer working in a noisy factory had difficulty concentrating on job tasks: Compensatory strategies included: erecting sound absorbing barriers around his work station, moving unnecessary equipment from the area to reduce traffic, allowing the employee to wear a headset or ear plugs.

For further information on TBI and links: www.lfbit.co.nz