

Memory following an Acquired Brain Injury

Memory is the ability to encode, retain and recall information. It is something that we use constantly in our daily lives from recalling faces, names, and appointments, to the taste of coffee, the smell of a rose or how to make dinner.

Following a brain injury, the embedded and long-term memories usually remain intact while short-term memory is significantly affected. While there is no “treatment” for memory there are strategies that can make your life a lot easier.

Types of memory

Immediate or working memory

This is the initial state of memory in which information is initially taken in through the five senses. This type enables a person to remember a piece of information for a short time e.g. remembering a phone number long enough to dial it.

Short-term or recent memory

This processes information long enough for it to be used for a few minutes, hours or days such as appointments, birthdays etc. There may be slow and gradual improvement of short-term memory over the years.

Long term or remote memory

Episodic memory

This includes memory for personal information and events in one’s life e.g. getting married.

Semantic memory

Refers to memory for factual things e.g. the Shannon is the longest river in Ireland.

Procedural memory

This type relates to memory for how to do things like skills e.g. driving a car, making dinner.

Prospective memory

Refers to memory to do something in the future and involves planning e.g. remember an appointment or birthday.

How does our memory work?

It is widely agreed that our memory system can be divided into three main areas:

- Encoding – this includes processing the information that is to be remembered
- Storage – this is when the information is filed away and stored in a location where we can find it again
- Recall – this involves the retrieval of the information

People with brain injury can have difficulties with any of these three areas.

There are a number of useful strategies that can be used in order to aid memory difficulties. These include internal and external memory strategies.

Memory Problems following brain injury

Problems with memory are one of the most common consequences of an acquired brain injury. These can include problems with remembering faces, skills or even events in our lives. For the majority of people, semantic memory and procedural memory are generally

maintained following brain injury. However, short and prospective memories are generally affected, e.g. forgetting to pass on a telephone message or an upcoming appointment.

Other memory problems

Post-traumatic amnesia

This is a temporary state, immediately after the injury, during which the person is conscious but his/her everyday memory is not working. The person will have no memory of their time in post traumatic amnesia.

Retrograde amnesia

This is a form of amnesia resulting from brain injury in which the individual loses memories for the time period just prior to the injury. This time period may stretch from a few minutes to several years, and typically it is worst for events that occurred just before the injury.

Problems related to specific areas of injury

Depending on exactly where in the brain an injury has occurred, a person might have difficulties remembering either verbal (word-related) or non-verbal (pictorial) information.

For example, damage to the left hand side of the brain can result in a difficulty with words and language and damage to the right hand side of the brain can affect recalling pictures or images.

Common memory problems in daily life

- Difficulties with remembering things when distracted or a delay has occurred.
- Difficulties with learning new information

- Remembering things from the distant past better than events that occurred a short time before the accident
- Having words on the tip-of-the-tongue and not being able to remember them

Memory Strategies

Memory strategies can be external, using aids and the environment, or internal, used by the person themselves.

External Strategies

Routine – A well ordered daily and weekly routine is very helpful for someone with a brain injury. It can help to write out a weekly routine at the start of each week and tick off events when done.

Diary – This should be used regularly and at set time to record important information such as appointments and things to do. It can also be used to record your activities e.g. taking medication. Other aids include an alarm clock, calendar, wall chart, tape recorder or electronic organiser.

Well being – It is important to look after yourself and ensure you get time to relax

Internal strategies

- Prioritise information to be remembered
- Repeat and rehearse information
- Use visual images and verbal cues to learn new information
- Use acronyms / mnemonics that are easy for you to recall
- Categorise information into groups