Brain Injury Training Manual

Memory and Brain Injury Session

NeuroTriage CIC















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Materials Required:

* Sign-in sheet
* Feedback sheets
* Flipchart and pens
* Power-point presentation
* Laptop
* Speakers
* Decks of cards
* Handouts:
  + Power-point slides
  + Memory Diagram

Welcome, Session Overview and True or False Quiz (5 minutes)

*Introduce facilitators, ask people’s names and hand around sign-in sheet.*

*Go over aims and overview of the session.*

Session Aims

* To gain an understanding of memory and how this can be affected by brain injury.
* To gain knowledge about what causes memory difficulties.
* To gain an understanding of the different ways that memory difficulties can impact an individual.
* To gain an understanding of what services can do to help someone experiencing memory difficulties.

Overview of the Session

* This is a one-hour long memory and brain injury training session.
* This aims to give you an overview of the different processes of memory, how this can be affected by brain injury, how this can impact individuals and how we can help.
* This will cover:
  + What is memory and how does it work?
  + How is memory affected by brain injury?
  + How do memory difficulties impact an individual?
  + How can services help someone experiencing memory difficulties?
  + Resources and further sources of information.

*Does anyone have any questions before we get started?*

True or False Quiz

* It is possible to lose your memory – False, memory is not an object that can be lost or found. It is an ability that can be influenced by numerous factors.
* Memories are like photographs, accurate in every detail – False, memories are not like a camera shot, everything that has happened to you during the time since the experience can influence and change the memory. Even the mood you were in at the time will affect how you will remember the occasion. Our perspectives are always changing.
* With memory it is ‘use it or lose it’ – True, memory is a skill that can be improved with practise.
* You can either have a ‘good’ or ‘bad’ memory – False, memory consists of several different skills which work in different ways. Some parts of memory can be affected whilst others aren’t.
* There are more than five different types of memory – True, there are at least fifteen different types of memory (including sensory, short-term, long-term, working, prospective and autobiographical to name a few)!

Introduction to Memory and Brain Injury (15 minutes)

What is memory?

Memory can be defined as a mental ability to store and retrieve information. This information can be from any source, e.g. visual, auditory, sensory or emotional and can be stored for differing lengths of time i.e. short-term, long-term or for immediate manipulation (e.g. mental maths).

There are many different types of memory, these include:

* Sensory memory
  + The way our brain processes sensory information we continually receive. This is held for less than a second and much information is filtered out at this stage.
* Short-term memory
  + System for keeping information in mind before discarding it or transferring it to long-term memory. There is a limit to the amount of information that can be held here.
* Working memory
  + A type of short-term memory that is used to manipulate information e.g. mental maths.
* Long-term memory
  + System for storing, managing and retrieving information. There appears to be no capacity to the amount that can be stored here.
* Auditory memory
  + Memory for things we’ve heard.
* Visual memory
  + Memory for things we’ve seen.
* Prospective memory
  + Memory for future events.
* Retrospective memory
  + Memory for past events.
* Topographical memory
  + Memory for places and orientation.
* Autobiographical memory
  + Memory for life experiences.
* Semantic memory
  + Memory for the meaning of words and abstract information.
* Episodic memory
  + Memory for specific events.
* Explicit memory
  + Process of consciously recalling memories.
* Implicit memory
  + Process of unconsciously recalling memories.

The areas of our brain that are thought to be associated with memory are the temporal lobe and some parts of the frontal lobe. The main parts of the brain associated with memory are the hippocampus and amygdala which are both located in the temporal lobe. These parts of the brain are used to process sensory information (sight, sound, smell and touch) and decide whether this needs to be stored in our long-term memory or whether this information should be discarded. Therefore, any damage that occurs to these areas of the brain can lead to a disruption in this process, resulting in difficulties either storing new memories or retrieving existing memories.

Impacts of brain injury on memory

The effects that a brain injury has upon an individual’s memory will depend upon the type of injury the individual has sustained. As with any brain injury, the effects will be different for different people, however, there are some similarities.

Individuals who have sustained a traumatic brain injury (TBI) are more likely to have difficulties in storing new memories, meaning their short-term memory has been affected. Whereas, their long-term memory retrieval may still be intact. Alternatively, individuals who experience a progressive brain injury, i.e. dementia, may also experience difficulty with their short-term memory, however, this is likely to progress to the retrieval of long-term memories as well.

*What do you think the impacts of memory difficulties may be on someone’s life? - Ask group members to shout out answers and add these to flipchart.*

Experiencing memory difficulties can cause different impacts for an individual. It can affect different aspects of individual’s life such as:

* Emotions – depression, anxiety, anger etc.
* Relationships – due to irritability, frustration etc.
* Self-esteem – due to their sense of self-worth.
* Identity – due to loss of memories and abilities.
* Social life – due to anxiety, self-esteem and practicality.
* Perceptions of others – due to misinterpretations, frustration etc.
* Activities of daily living – ability to action tasks, drive, manage medication and self-care etc.
* Finances – ability to manage money, remember pin numbers etc.
* Health – missed appointments, self-care and medication management etc.

*Introduce video clip on experiences of memory difficulties resulting from a traumatic brain injury:*

<https://www.youtube.com/watch?v=I8eqal2q-uY>

*Start at beginning and finish at 5.05*

*Discuss any reactions to the clip:*

* *Did you notice any ways in which memory difficulties have impacted the lives of the individuals in the clip?*
* *Were the individuals aware of these impacts?*
  + *How did that make them feel?*
* *Both the examples in the clip were of individuals experiencing a TBI, do you think the impacts would be different for someone experiencing dementia?*

Small Group Discussion (10 minutes)

*Ask group members to get into pairs or small groups to discuss their responses to the following questions: - 5 minutes*

* *Are there any assumptions people may make regarding an individual’s memory difficulties?*
* *In what ways do people usually react based on these assumptions?*
* *Are there any factors that can affect our own memory and make it difficult to remember things?*
* *Do you think that the above factors will have the same effect for individuals experiencing memory difficulties and brain injury?*
* *How would you feel if you were unable to process and store new memories – especially if other people made the same assumptions as discussed above?*

*Then ask group to come together to feedback as a larger group. - 5 minutes*

*Prompts for questions:*

* *That they’re choosing not to remember or could try harder!*
  + *I.e. “she’s doing this on purpose” or “he’s been here a thousand times, he must know where it is”.*
* *Usually try to ‘make’ an individual remember or put them under pressure.*
  + *I.e. using a patronising tone of voice or saying, “you know the answer, just tell me”; “how can you not remember your address, you’ve lived there for 10 years!”*
* *Yes – our memory is usually affected when we are tired, stressed, under pressure or anxious.*
  + *I.e. during tests/ interviews or ‘put on the spot’.*
* *Yes – this is the same for individual’s experiencing memory difficulties and brain injury. Their difficulties can be exacerbated by tiredness, stress, pressure and anxiety.*
* *Most commonly people would feel frustrated, not being able to remember if we have completed daily tasks can be annoying and time consuming. Most importantly losing some of our independence can alter our sense of identity and reduce our self-esteem leading to feelings of depression, anxiety and social isolation.*

How can we help with memory difficulties? – 10 minutes

How should we respond?

*How do you think it would be helpful to respond to an individual who is experiencing memory difficulties? - Ask group members to shout out answers and add these to flipchart.*

*The way in which we respond can make a big difference to someone who is experiencing difficulties with their memory. By adapting our communication, we can reduce frustration, improve understanding and remove barriers that may be preventing someone from engaging with the service.*

*Some useful tips for responding to someone experiencing memory difficulties include:*

* Being patient – allowing the individual time to retrieve the information if they can. Note that it is not that they will not remember, but that they cannot remember.
* Being supportive – understanding the difficulty they are experiencing and not putting the individual under pressure or causing anxiety about the situation.
* Being empathetic – how would you feel if you could not remember the requested information? Treat the individual as you would like to be treated in that situation.

*Some memory difficulties can improve over time as the brain injury recovers and some strategies can be used to assist this. However, there is no ‘cure’ or medication that can be used to restore these abilities.*

*How do you think we can help an individual with memory difficulties to try to retain information? - Ask group members to shout out answers and add these to flipchart.*

*Some useful tips for helping an individual with memory difficulties to try to retain information.*

* Simplify
  + Simply the information that you want the individual to remember, particularly written materials.
* Reduce
  + Ask the individual to remember one thing rather than three.
* Understanding
  + Make sure the individual has understood the information by asking them to repeat it back to you.
* Associate
  + Ask the individual to link the information to something they already know.
* Don’t overload
  + ‘Little and often’ is key – a few minutes several times a day is better than an hour once a day.
* Organise
  + Ask the individual to organise the information into groups rather than randomly listing them.
* Rehearsal
  + Ask the individual to repeat the information and keep practising this to improve retention.
* Setting
  + By teaching an individual information in different settings and social situations, they are more likely to be able to retrieve that information in those different settings.

*How do you think we can help an individual with memory difficulties to try to retrieve information? - Ask group members to shout out answers and add these to flipchart.*

*Some useful tips for helping an individual with memory difficulties to try to retrieve information.*

* Prompts
  + Providing a cue or prompt may help someone to retrieve information, i.e. first letter of a name, first line of an address.
* Similarities
  + Individuals with memory difficulties and brain injury are more likely to retrieve information when they are in the same environment in which they learned it.
* Mood
  + The emotion that the individual is experiencing at the time they ate trying to retain information is important, as they are more likely to retrieve this information when in a similar mood state. Therefore, trying to teach information when an individual is in different mood states will enhance the chances of retrieving this.

Activity - 15 minutes

*Ask group members to get into pairs. Give out decks of cards and ask group members to lay all the cards out on the table face down to play a game of pairs (each take turns at turning two cards over to find a pair that match) - 5 minutes.*

*After five minutes state that we are playing a new game of pairs but we are changing the rules slightly. After each turn all the cards have to be shuffled round on the table – 5 minutes.*

*Feedback to larger group – reflections on how they found the activity and how his relates to memory and brain injury. – 5 minutes.*

* *Even without the change in rules we don’t always remember everything! The change in rules represents an inability to store new memories as experienced by individuals with a brain injury. Everyday tasks become much more difficult when your ability to store memories has been affected, just as the game did.*

Summary and Close - 5 minutes

What we covered today

Today we have looked at:

* What is memory and how does it work?
* How is memory affected by brain injury?
* How do memory difficulties impact an individual?
* How can services help someone experiencing memory difficulties?

Further Resources

Further sources of information:

* Headway website: <https://www.headway.org.uk/>
  + Information library: <https://www.headway.org.uk/about-brain-injury/individuals/information-library/>
  + Factsheet on memory: <https://www.headway.org.uk/media/3996/memory-problems-after-brain-injury-e-booklet.pdf>
* Brain Injury Toolbox Guide: <http://www.braininjurytoolbox.com/bi/Brain%20Injury%20101%20Guidebook.pdf>

Further sources of support:

* Health:
  + GP services
  + Adult Neuro/ Community Rehab Services
* Local Authority:
  + Social Services
  + Housing
* Carer’s Support:
  + Carer’s Trust

Questions

*Ask group members if they have any questions.*

Feedback

*Give out feedback questionnaires regarding today’s session and ask group members to provide feedback on what they found helpful/ unhelpful and ask if there is anything they would change. Highlight the importance of feedback as this is how training can be shaped and improved for future sessions.*

Session End