

Thinking, Learning and Emotions After Acquired Brain Injury

The Child Brain Injury Trust is a national charity supporting anyone affected by childhood acquired brain injury. The following information has been developed to help the reader understand more about brain injury and some of the associated issues. Every effort has been taken to ensure the information is accurate and up to date. If you require more immediate support or assistance please contact our **Helpline 0303 3032248** or email helpline@cbituk.org where we will be able to respond to your specific enquiry and or offer support.

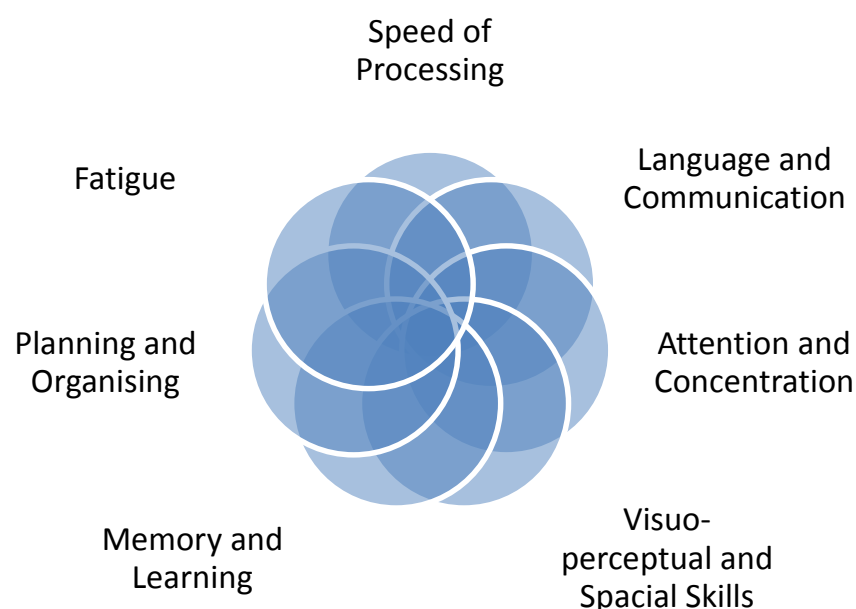
Thinking, Learning and Emotions After Acquired Brain Injury

How a child thinks, feels and behaves can change after an acquired brain injury (ABI) and these changes may occur either as a direct or indirect result of brain injury. A child and their family may find their present behaviour seems different in relation to for example, their friends or siblings. Also, if a child has a difficulty in one area, then this may affect how they respond in another. For instance, a child who is working at a slower pace than before may not have time to take in everything that is said. This sort of difficulty can easily be confused as a language, memory or attentional problem when the major difficulty is in fact the speed that information is being processed. If a child's difficulties are not understood, then they may become anxious or frustrated. For this reason it is crucial that children are thoroughly assessed by a child clinical neuropsychologist or an educational psychologist after an acquired brain injury.

Thinking and Learning

There may be subtle changes in the way a child thinks and learns after a brain injury. It may be some time before these changes become noticeable and is often when a child returns to school.

The main difficulties a child is likely to face are detailed below:



- **Speed of Processing Information:** It may take longer to think about, absorb or respond to information.ⁱ The speed at which information is processed can also affect a child’s physical activities and play. These physical difficulties are likely to be much more obvious to the parents than changes in classroom learning.
- **Attention and Concentration:** Children may pay attention to an activity, such as playing a game or watching TV, only for a short time. They might then appear to lose interest, or say they want to do something else.ⁱⁱⁱ Sometimes after a brain injury children have difficulty focusing on anything for more than a few minutes. They may become easily distracted by something else going on around them or look like they’re day-dreaming.
- **Language and Communication:** Children may have difficulties finding the right words, meaning speech does not flow as well as it did, which may cause frustration. ⁱⁱⁱ The extent of the difficulties with language and communication often depends on the standard of these skills before the brain injury.ⁱⁱ So younger children may have difficulties understanding even simple language and may use words and sentences (grammar) incorrectly. Slightly older children may appear to cope well when talking on a one-to-one basis but struggle to follow group conversations, where there are many conversations to follow at once. Teenage children may have difficulties with conversations involving complex ideas, or words that have more than one meaning. Following brain injury, children may also struggle with the pragmatic language using language inappropriately in social situations.
- **Visuo-perceptual and Spatial Skills:** Even though eyes and vision may not be affected following a brain injury, a child’s understanding of what is seen can alter. ⁱⁱⁱ For example, brain injury can lead to a loss of awareness of things on the right or left side, and people may end up neglecting one side of their body.ⁱⁱⁱ These difficulties tend to show themselves in changes in handwriting, drawing, work presentation, and doing activities such as dressing, puzzles or crafts. It can also affect their ability to play sports and their “social distance” (how close they stand to someone). Children may also struggle to recognise everyday objects and faces, and read and use maps correctly.
- **Memory and Learning:** Children often remember most of what they learnt and experienced before the brain injury, but find it more difficult to learn and remember new information. Even when new information is learnt, children can have problems combining it with what they knew before or remembering it consistently. Sometimes memory problems are worse in one area than another. ⁱⁱⁱ For example, a child may be good at remembering things they see, but find it difficult to remember and repeat back things that they have heard, and vice versa.
- **Planning, Organising, Thinking Flexibly and Problem-solving:** Children may find it difficult to make long-term plans, set goals and initiate steps to achieve these goals; ⁱⁱⁱ plan, initiate and complete activities; adapt to changing demands; find alternative solutions to problems in

everyday life and generate ideas independently. Difficulties in these skill areas mean that children may also have difficulty judging situations or understanding other people's feelings or point of view, leading them to act inappropriately.

- **Fatigue** - Children may suffer with tiredness (physical or cognitive) following ABI. Fatigue levels may change across the day or the week depending on the types of activity undertaken, and may be associated also with an experience of fluctuations in thinking and learning skills depending on levels of tiredness.

It is rare for a child to experience all of these difficulties, although it does occasionally happen. Any one of these difficulties can affect school performance, friendships and family life.

If a child is experiencing any difficulties in these areas they can be referred (usually by your GP) to a child clinical psychologist or neuropsychologist for assessment and advice on what plans can be put into place.

Useful websites include www.aboutbraininjury.org.uk (a website for young people with acquired brain injury)

You may also want to view our “Understanding and Managing.....” series of webinars (online learning/information presentations) where we explore each of these areas in more depth, looking at the impact and providing strategies to support.

<https://www.cysalesteam.com/childbraininjurytrust/category/webinar-recorded?embed=1>

Feelings

It is not surprising that some children struggle to manage their feelings when you consider the challenges that they face after a brain injury. Emotional difficulties may include:

- **Sadness and Depression:** Children may be highly aware of the way in which they have changed and the differences when compared to their friends or siblings, and feel a real sense of loss. Following a brain injury a child may do less well at school and spend a considerable amount of time away from home and school, therefore missing important social and educational experiences. Children may also find that friendships and their role within their family changes. If a child has a physical weakness or difficulty, then they may be less able to go out alone or play certain sports as well as before. Parents and teachers may also become more protective and cautious of the activities they participate in. This can cause feelings of loss and sadness.
- **Anxiety:** Feelings of anxiety can result from being unable to cope with daily tasks as well as the expectation that he or she can “catch up” at school provided they work hard enough. It can also result from an awareness of ‘difference’ when compared to their peer.

- **Fear:** Fear for the future can be very real, and children may be reluctant to talk about this with their family.
- **Grief:** If the brain injury has been caused by an accident where other family members or friends were killed, a child may not only feel grief but also “survivor guilt” arising from the question “Why did I survive when they did not?”
- **Post-traumatic stress disorder (PTSD):** A near-death experience, or remembering some of what happened during a medical emergency can result in PTSD, even when a child was not always conscious.

The above feelings are natural for your child. Accepting this and identifying ways of managing these emotions, such as reducing the pressures of school and encouraging your child's friends to visit, can make a big difference. However, if difficulties continue, it is important to talk to your GP and ask for a referral to Child and Adolescent Mental Health Services. Clinical psychologists can offer a wide range of help, and a child psychiatrist may need to get involved if the problem is serious and long lasting.

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ⁱ <http://www.headway.org.uk/Cognitive.aspx>

ⁱⁱ Ylvisaker M. Communication outcome following traumatic brain injury. *Seminars in Speech and Language*, 1992. 13; 239-250.

ⁱⁱⁱ Antonakos CL., Giordani BA, Ashton-Miller JA. Wayfinding with Visuo-Spatial Impairment from Stroke and Traumatic Brain Injury. *Disability studies quarterly*, 2004. 24; 3.

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2. D Steadman-Pare et al. Factors Associated with Perceived Quality of Life Many Years After Traumatic Brain Injury. *J Head Trauma Rehabilitation*: 2001;16(4) 330-342