

ABSTRACT FACULTY INFO

ACQUIRED BRAIN INJURY (ABI)

OVERVIEW AND DEFINITION

ABI is characterized by moderate changes in one, or all, of an individual's level of cognitive, emotional, behavioral, or physiological functioning. These changes can take a number of forms, but will most likely include a combination of:

impaired memory
trouble expressing thoughts
decreased tolerance for frustration
dizziness and loss of balance
frequent headaches or nausea

difficulty solving problems
increased fatigue
poor coordination of movements
lack of emotion
an inaccurate assessment of ability

depression
poor judgement
impulsivity
tendency to overreact

An ABI can be the result of a number of causes, e.g., brain tumor, a stroke or aneurism, seizure activity, infectious disease, a loss of oxygen to the brain, or substance abuse. However, the most common cause of ABI is a traumatic injury to the brain as a result of either a blow to the head or a violent whipping action of the neck.

EDUCATIONAL IMPLICATIONS

Cognitive Functions	Educational Implications
Memory	Difficulty committing information to memory
Organizational skills	May experience difficulty organizing their time, breaking large tasks down to smaller parts, following the train of thought of an instructor, completing assignments on time or preparing for exams.
Attention/concentration	May find it difficult to learn new material and complete exams or assignments, particularly when faced with competing stimuli, such as noisy classrooms or exam room.
Other cognitive functions	<i>Visual processing:</i> may have difficulty recognizing objects, picking out details or completing tasks requiring visual-spatial abilities. <i>Decrease in executive functions:</i> reasoning and judgement may be affected. <i>Communication difficulties:</i> clear speech can be difficult to generate. The brain may also have difficulty transferring thoughts into speech or interpreting incoming speech, a phenomenon known as aphasia.

Behavioral Functions	Educational Implications
Following an ABI, individuals may exhibit a change in behavior patterns.	Individuals with an ABI may not only lack the work habits and social skills to function effectively as a student, but they may not realize when they are behaving inappropriately. They may lack initiative or may have difficulty following through on tasks.

Physical Functions	Educational Implications
Fatigue	Students may find that they run out of energy part way through a long class or later in the day. Fatigue may be particularly evident when high levels of concentration are needed, such as taking an exam.
Chronic pain	May take the form of headaches, neck or back pain, or other physical discomforts. Additionally, medication given to reduce pain or prevent seizures can cloud thinking.

