

Artificial neglect can be induced in normal people with Prism Adaptation. Prism to the left improved neglect patients, prism to the right produced moderate neglect-like behaviour in normal. (review, see Michel, 2006)

IMPAIRMENTS OF EXECUTIVE FUNCTIONING

Anterior parts of the brain

FRONTAL LOBE DAMAGE

What about higher level functioning? Executive function is an umbrella term for many abilities including: planning and organising, flexible thinking, multi-tasking, self-awareness, learning rules, social behaviour, making decisions, motivation

Pre-frontal lobe damage (TBI) often brings about impaired executive functioning in a number of domains.

These can be classified into 5 general groups:

1. Problems starting (inertia)
2. Perseveration
3. Disinhibition
4. Deficient self-awareness
5. Inflexibility

PROBLEMS STARTING (INERTIA)

Apathy, unresponsiveness, have problems initiating behaviour, needs to be prompted

Superior (above) medial damage

Patient example: only ate when food put in front of them, only initiated going to toilet and bed (autonomous function), yet, on questioning reported plans for Christmas, New Year, holidays but never carried them out.

PERSEVERATION

Refers to repetitive prolongation or continuation of an act or activity sequence

Unable to break a cycle of behaviour – almost get stuck in a behaviour (will keep buttering bread)

Cannot task switch easily – look for a number then quickly change to looking at a letter – unable to suppress the number memory in order to start the letter memory. – very debilitating

Dorsolateral Lesions

Seen as difficulty suppressing on-going activities or attention to prior stimulation

DISINHIBITION

Disinhibited behaviour – impulsive

Behavioural problems:

- Aggressive outbursts, sexual promiscuity
- Inability to be guided by future consequences
- Poor decision making