

Cognition 2 – Reading and Writing Disorders

This is when word recognition goes wrong

Reading disorders:

- Acquired dyslexia
- Developmental dyslexia
- Hyperlexia
- Dysgraphia

What do these disorders tell us about the brain?

Reading is complex and so susceptible to damage. Phonological awareness = PA is the awareness that words are made from sounds. Has a reciprocal relationship with orthographic awareness.

Dyslexia – general points

- Literally means 'difficulty with reading'
- Characterised by difficulties with accurate and/or fluent word recognition and poor spelling and decoding abilities
- Generally, unexpected in relation to other cognitive abilities (e.g. normal functioning in other subjects – maths)

Dual-route Model of Reading

Acquired Dyslexia

- Damage to the brain: ABI (Brain injury), TBI, Stroke
- Language is quite often affected: Aphasias (often experience reading problems)
- However, damage can lead to reading problems in isolation; Acquired Dyslexia
 - Surface dyslexia
 - Phonological dyslexia
 - Deep dyslexia

Surface Dyslexia

- Patients accurately read words and nonwords that comply with the letter-sound rules of the sub-lexical system but mistakenly pronounce exception words
- For example they will read the word 'flood' as if it rhymed with 'mood' or 'island' as 'is-land'
- Labelled phonic approximations – based on treating target word as regular or orthographically transparent
- Meaning comes from pronunciation i.e. begin is pronounced beggin