

What is dyslexia?

Dyslexia literally means the inability to master language. In practice, however, the term refers to people who have extreme difficulty acquiring the ability to read and spell. People with dyslexia have trouble learning the code for written language. Difficulty in sounding out words and spelling words persists, despite efforts on part of teachers and the learner. The generally accepted definition of dyslexia that has been adopted by the Institute for Child Health and Human Development is:

Dyslexia is one of several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing. These difficulties in single word decoding are often unexpected in relationship to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifest by difficulty with different forms of language, often including, in addition to problems with reading, a conspicuous problem with proficiency in writing and spelling (The Orton Dyslexia Society Research Committee, April 1994).

What causes dyslexia?

Dyslexia is a consequence of the way a person's brain is organized. Learning to read requires making the association between printed symbols and spoken words and spoken sounds. These associations must become firmly fixed in memory for reading to be fluent. People with dyslexia have great difficulty establishing these associations. The exact cause of the difference in the brain is not known, but recent research and new technology make it possible to identify some of the differences in the brains of people with dyslexia. Also, recent genetic research suggests that dyslexia runs in families.

There is no evidence that dyslexia is a visual problem. People with dyslexia see letters, numbers, and everything else the same way as others do. Current research indicates that individuals with dyslexia have difficulty processing the sounds in words, and that is what makes it difficult for them to read and spell.

The following diagrams illustrate how dyslexia affects the brain:

Diagram A

Major area-: of difference between the right and led brain

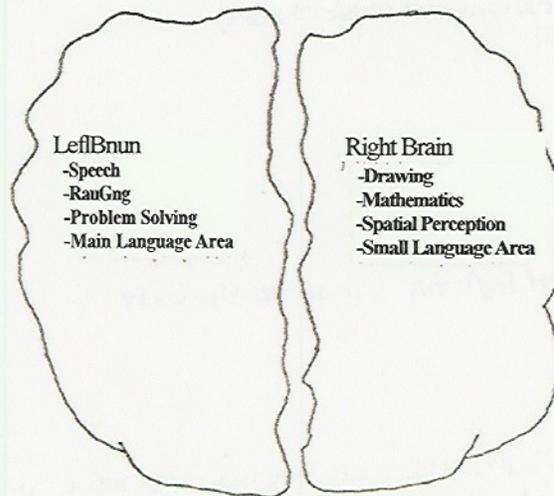
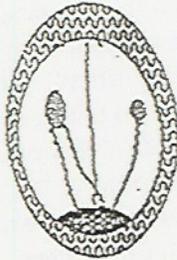


Diagram B

Difference between dyslexic and non-dyslexic brain

Non-Dyslexic



Visual cortices sending messages to language areas for interpretation

Dyslexic



Confusion of nerve message the two large language

How is dyslexia diagnosed?