

Definition of Dyslexia Orton Dyslexia Society Research Committee (1992)

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 abilities. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental disability or sensory impairment. Dyslexia is manifest by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling.

Summary of Research Findings (Lyons, 1996)

- One in five children is affected by deficits in reading.
- Reading disability reflects a persistent deficit rather than a developmental lag.
- LD readers differ from one another and from normal readers along a continuous distribution and do not aggregate together in a distinct "hump" at the tail of the distribution as previously thought.
- The gender ratio among disabled readers is no different than the gender ratio within the population as a whole.
- Accurate and fluent reading ability is dependent upon rapid and automatic recognition and decoding of words. Therefore, reading disability is best studied at the single-word level.
- Slow and inaccurate decoding and recognition of single words is a robust predictor of deficient reading comprehension.
- The etiological basis for LD readers' deficient word recognition and decoding skills appears to be a specific deficit in phonological processing. This deficit appears to be heritable and is further characterized by a distinct neurophysiological signature in the left temporal (perisylvian) region of the cortex.
- Phonological deficits appear to impede the development of basic reading abilities (decoding and word recognition) irrespective of the level of general intelligence. Poor readers, with and without IQ-reading achievement discrepancies, demonstrate impairments in the ability to segment words and syllables into abstract constituent phonemes.
- Disorders of attention and reading disability often co-occur, but the two disorders are distinct and separable.
- Intervention programs that capitalize on "code-emphasis" methodologies are superior to meaning-based "whole language" approaches.

Lyon, G. R. (1996). Learning Disabilities. In E. Mash and R. Barkley (Ed.), *Child Psychopathology* (pp 418-419). New York: Guilford Press.