

Evolving Concepts of Dyslexia and Their Implications for Research and Remediation

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A crucial development is evident in understanding dyslexia, moving from its conceptualisation as a discrete identifiable condition toward the realisation of continuity with the general population with no clear boundaries and no qualitative differences. This conceptual evolution amounts to a transition from considering dyslexia to be some entity that causes poor reading toward considering the term dyslexia as simply labelling poor reading performance. This renders obsolete any searches for abnormalities and directs efforts toward understanding reading skill as a multifaceted domain following a complex multifactorial developmental course.

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Why define dyslexia?

- Once we know exactly what something is and is not, we can construct a definition that distils our understanding into a clear, concise statement of who belongs to the category and who does not.
- With regard to research, we need to know how to form our research groups.
- A definition also dictates what we should measure to document group inclusion and to examine the features of the classification.
- In education, we need to know which children are selected for remedial services, a decision of the utmost importance given that poor literacy is associated with poor academic, social, behavioural, emotional, professional, financial and health outcomes.
- The definition also directs our assessment and educational programmes, by highlighting what needs to be assessed to justify the selection, to document the relevant educational needs and also to guide the setting of specific objectives to be achieved by remedial education.

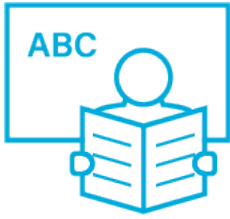
Elements of dyslexia definitions

- Dyslexia is seen as a difficulty or inability regarding learning to read in a situation where success was expected.
- The first element contributing to expectation is age and experience.
- A second element concerns limitations arising from sensory perception.

- A third element concerns educational opportunity.
- Finally, general cognitive ability is an element commonly seen as related to expectations in terms of reading competence.

Progress in understanding dyslexia

- The present approach means that the concept of dyslexia is not defined against an IQ reference, and instead, it is applied across ability ranges.
- The only skills that are relevant to the concept – and therefore the definition – of dyslexia are reading skills, at the word level.
- Word-level skills are not exhausted with accurate single-word decoding but also encompass reading fluency, which refers to the speed, or efficiency, of processing and, crucially, involves word sequences rather than isolated words.
- It seems to be increasingly accepted that there is no distinct group and that dyslexia concerns the low end of the distribution of reading skill.
- The roots of dyslexia are traced to many interacting factors at different levels of description and the idea that different routes can lead to similar outcomes so that even a common difficulty is not necessarily attributable to a common history.
- There is a strong genetic component in the propensity to acquire reading skills and in family risk with regard to reading difficulties, but this should not be interpreted as implying that one is doomed by their genes.
- Estimates of the heritability of reading in less homogeneously supportive environments are lower.
- It is increasingly understood that the final behavioural outcomes depend on a multitude of interacting factors, only some of which concern genetics.



Implications

- Research should stop trying to answer the question 'what causes dyslexia?' and instead put more effort into understanding the observed range of reading development trajectories and the extent to which different factors affect learning to read at different ages and in distinct genetic and environmental contexts and instructional situations.
- A wider cognitive and learning profile may be necessary for the special educator or educational psychologist to identify the weak and strong areas for any given child, because the individualised educational plan will have to be based on strengths and build on these to address weaknesses.
- So, the specialist will consider and may have to support the development of phonological processing, phonological memory, phonological awareness, a knowledge of the alphabet and conventions of print, before reading itself can be addressed.