

Dyslexia explained

Dyslexia is a type of specific learning difficulty (SLD) in which the person has difficulties with language and words. The term dyslexia, although still used by some, is generally felt to be too narrow and SLD is often used to describe these learning difficulties. This is because the learning difficulties are usually broader than just reading difficulties; most children with SLD also have difficulty with spelling.

The most common characteristic is that people have difficulty reading and spelling for no apparent reason. The person may be intelligent, able to achieve well in other areas and exposed to the same education as others, but is unable to read at the expected level. Common problem areas include spelling, comprehension, reading and identification of words. Estimates vary, but up to five per cent of the population are thought to have dyslexia.

Despite intensive research, the exact causes remain unknown. While most people affected eventually learn to read, they may have severe spelling problems unless they get support and specialised education. Dyslexia isn't a symptom of low intelligence. For example, Leonardo da Vinci and Thomas Edison - both highly intelligent and creative people - had dyslexia.

Symptoms in preschoolers

Some of the symptoms of dyslexia or SLD in a preschooler could include:

- Delayed speech.
- Problems with pronunciation.
- Problems with rhyming words and learning rhymes.
- Difficulty with learning shapes, colours and how to write their own name.
- Difficulty with retelling a story in the right order of events.

Symptoms in primary school children

Some of the symptoms in a primary school age child could include:

- Problems with reading a single word.
- Regularly confuses certain letters when writing, such as 'd' and 'b' or 'm' and 'w'.
- Regularly writes words backwards, such as writing 'pit' when the word 'tip' was intended.
- Problems with grammar, such as learning prefixes or suffixes.
- Tries to avoid reading aloud in class.
- Doesn't like reading books.
- Reads below their expected level.

Symptoms in high school children

Some of the symptoms in a high school student could include:

- Poor reading.
- Bad spelling, including different misspellings of the same word in one writing assignment.
- Difficulties with writing summaries.
- Problems with learning a foreign language.

Symptoms in adults

Some of the symptoms in an adult could include:

- Reading and spelling problems.
- Doesn't like reading books.
- Avoids tasks that involve writing, or else gets someone else to do the writing for them.
- Better than average memory.
- Often, a greater than average spatial ability - the person may be talented in art, design, mathematics or engineering.

Phonological coding explained

Written words represent spoken words. In order to read and write, a child has to link the sound of a letter with its written symbol. This is known as phonological coding. The ability to grasp the 'sound structure' of words in this way is crucial to reading and writing. Learning to read and write is a slow process, because written letters have no direct and obvious correlation with their sounds. For example, you can't guess how to pronounce the symbol 'b' just by looking at it - you have to rely on your memory. It is thought that dyslexia could be a problem with phonological coding. One of the early symptoms may be the child's inability to learn or understand rhyming words.

A range of theories

The exact causes of dyslexia remain unknown, but theories include:

- Problems with phonological awareness (distinguishing the meaning of contrasting speech sounds).
- A person with poor phonological awareness has trouble with their short-term memory for spoken words, which means they tend to forget instructions or word lists.
- Problems with the visual, auditory, linguistic or neurological processes that are involved with recognising the written word.
- Reading difficulties tend to run in families, which suggests a genetic link.

Diagnosis methods

Dyslexia or SLD can be hard to diagnose unless the problem is severe. Seek professional advice from a specialist educational psychologist if you think you or your child may have dyslexia. The evaluation may include testing a range of factors including:

- Cognitive (thinking) skills
- Memory
- Vocabulary
- Literacy skills
- Intellectual ability
- Information processing
- Psycholinguistic processing.

An evaluation by a speech pathologist may also assist.

Contributing factors

It is important to remember that not everyone who has trouble with reading and writing is dyslexic. Similarly, some of the reading and writing difficulties of someone with dyslexia may be caused or worsened by other factors. Some of the contributing factors that are taken into account during the evaluation could include:

- **Health** - for example, the person may have health issues that have interfered with their language development and writing ability, such as deafness or visual problems.
- **Language** - for example, a child from a non-English speaking background usually takes longer to master speech, reading and writing in both languages.
- **Education** - the person may have missed out on educational opportunities; for example, a chronic illness may have kept them out of school for long periods of time.
- **Behavioural or developmental disorders** - for example, the person may have attention deficit hyperactivity disorder (ADHD), which can cause learning problems.

Treatment options

There is no cure for dyslexia, but the person can benefit from specialised support, which could include:

- One-to-one tutoring from a specialist educator.
- A phonics-based reading program that teaches the link between spoken and written sounds.
- A multi-sensory approach to learning, which means using as many different senses as possible such as seeing, listening, doing and speaking.
- Arrangements with the child's school - for example, for them to take oral instead of written tests.
- Learning via audiotape or videotape.

Where to get help

- Your doctor
- Specialist educational psychologist
- Your child's school
- A speech pathologist.

Things to remember

- Dyslexia is characterised by difficulties with reading for no apparent reason.
- One of the early symptoms may be the child's inability to understand rhyming words.
- Dyslexia or SLD can be hard to diagnose unless the problem is severe, so seek professional advice from a specialist educational psychologist.

This page has been produced in consultation with, and approved by:

Child Development Service of Child and Adolescent Community Health Service, of Child and Adolescent Health Service.

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