

# Learning Difficulties

## Definition

Learning disabilities (LDs) are neurodevelopmental disorders that affect the brain's ability to receive, process, store, and respond to information. They are chronic conditions that begin in the early school years and persist throughout a person's life. LDs are not due to low intelligence, poor teaching, or lack of motivation, but to specific differences in the way the brain works.

### Basic forms of learning disabilities:

- Dyslexia: Difficulty in recognizing words, reading, understanding text, and writing.
- Dysarithmia: Difficulty understanding and performing numerical concepts and operations.
- Dysorthography: Difficulty in spelling correctly, even common or simple words.
- Dysgraphia: Difficulty with written language, the form of letters, and the structure of written language.

## Prevalence

Learning disabilities are common.

It is estimated that:

- 5% to 15% of school-age children exhibit some form of learning difficulties.
- Dyslexia is the most common form and affects approximately 5% to 10% of children.
- In Greece, approximately 1 in 10 students presents diagnosed or undiagnosed learning difficulties.

**Learning disabilities, in many cases, are not identified in a timely manner, especially in areas with limited access to special services.**

## **Etiology**

The causes of learning disabilities are multifactorial and include:

- Genetic factors: A family history of learning disabilities increases the likelihood of occurrence.
- Neurobiological factors: Changes in the way areas of the brain function (such as the left hemisphere, responsible for language).
- Environmental factors: Premature birth or low birth weight.
- Exposure to toxic substances during pregnancy (e.g. alcohol, lead)
- Lack of appropriate cognitive stimulation in the first years of life.
- Psychosocial Factors (e.g. trauma, unstable family environment).

## **Characteristics**

Students with learning disabilities often exhibit:

- Language difficulties: Difficulty in reading, writing, expressing and understanding written and spoken language.
- Difficulties in mathematics: Inability to perform arithmetic operations, understand problems, memorize mathematical rules.
- Concentration and organization problems: Inability to follow instructions, organize their time and tasks.
- Slow pace of learning compared to the classroom.
- Low self-esteem: Feelings of failure, anxiety, and frustration that often accompany the school experience.
- Social difficulties: Difficulty in interpersonal relationships, in understanding social rules.

## **Intervention/Rehabilitation**

Intervention is more effective when it is timely and personalized.

Main forms of intervention:

- Special teaching support: Development of personalized learning programs based on the student's needs.
- Collaboration with an interdisciplinary team: Special educators, speech pathologists, psychologists and occupational therapists.
- Multisensory teaching: Methods that combine visual, auditory, and kinesthetic stimuli to enhance memory and learning.
- Technological tools: Educational software and applications that help in self-regulation and enhance learning.
- Boosting self-esteem: Supporting emotional growth through encouragement, achievable goals, and positive experiences.
- Collaboration with the family: The role of parents is crucial in enhancing daily learning and emotional support.

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