



LEARNING DISABILITIES

Presented by
Ahmad Abu Khadra

DEFINITION

is a neurodevelopmental disorder produced by the interactions of heritable and environmental factors that influence the brain's ability to efficiently perceive or process verbal and nonverbal information

Children with learning disabilities are not dumb or lazy. In fact, they usually have average or above average intelligence. Their brains just process information's differently.



LEARNING DISABILITY VS LEARNING DISORDER

Learning disorder is a diagnostic term.

A psychiatrist diagnoses a person with a learning disorder based on a list of symptoms.

Learning disability is a legal, social term.

A public school identifies a student with a learning disability.

ETIOLOGIES OF LEARNING DISORDERS

No real cause

Might be caused by :

- Hereditary
 - Teratogenic
 - Medical
 - Environmental
-

EPIDEMIOLOGY

Learning disorders are among the most frequently diagnosed developmental disorders in childhood.

- An estimated 5 to 15% of school-age children struggle with a learning disability.
- 80% of those with learning disorders have an impairment in reading in particular.
- There is an increased risk of four to eight times in first-degree relatives for reading deficits and about five to ten times for mathematics deficits, compared to the general population.
- Specific learning disorder occurs two to three times more often in males than in females.

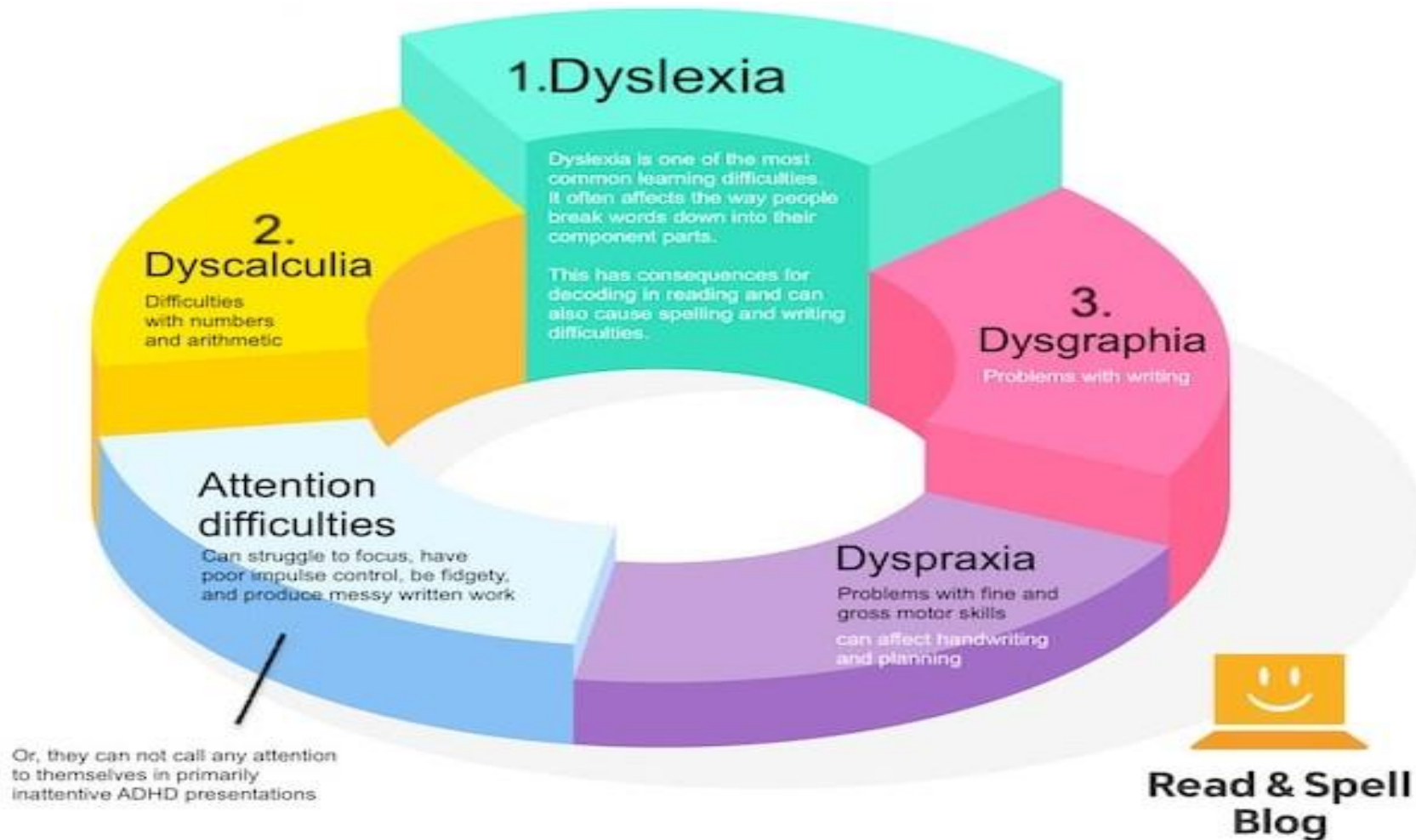
DSM-5 DIAGNOSTIC CRITERIA

- To be diagnosed with a specific learning disorder (SLD), a person must meet four criteria.
 1. Have difficulties in at least one of the following areas for at least six months despite targeted help:
 - Difficulty reading (e.g., inaccurate, slow and only with much effort).
 - Difficulty understanding the meaning of what is read.
 - Difficulty with spelling.
 - Difficulty with written expression (e.g., problems with grammar, punctuation or organization).
 - Difficulty understanding number concepts, number facts or calculation.
 - Difficulty with mathematical reasoning (e.g., applying math concepts or solving math problems).

DSM-5 DIAGNOSTIC CRITERIA

2. Have academic skills that are substantially below what is expected for the child's age and cause problems in school, work or everyday activities.
3. The difficulties start during school-age even if some people don't experience significant problems until adulthood (when academic, work and day-to-day demands are greater).
4. Learning difficulties are not due to other conditions, such as intellectual disability, vision or hearing problems, a neurological condition (e.g., pediatric stroke), adverse conditions such as economic or environmental disadvantage, lack of instruction, or difficulties speaking/understanding the language.

TYPES OF SPECIFIC LEARNING DISORDER



DYSLEXIA (DIFFICULTY LEARNING READING)

- A learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling.

"I have dyslexia" was extremely hard for me to say to anyone. It was like saying "I am stupid." I didn't believe that I am stupid. I didn't know if the person I was telling

Symptoms in children with dyslexia:

- ✓ difficulty in recognizing words
- ✓ Slow and inaccurate reading
- ✓ poor comprehension
- ✓ difficulties with spelling

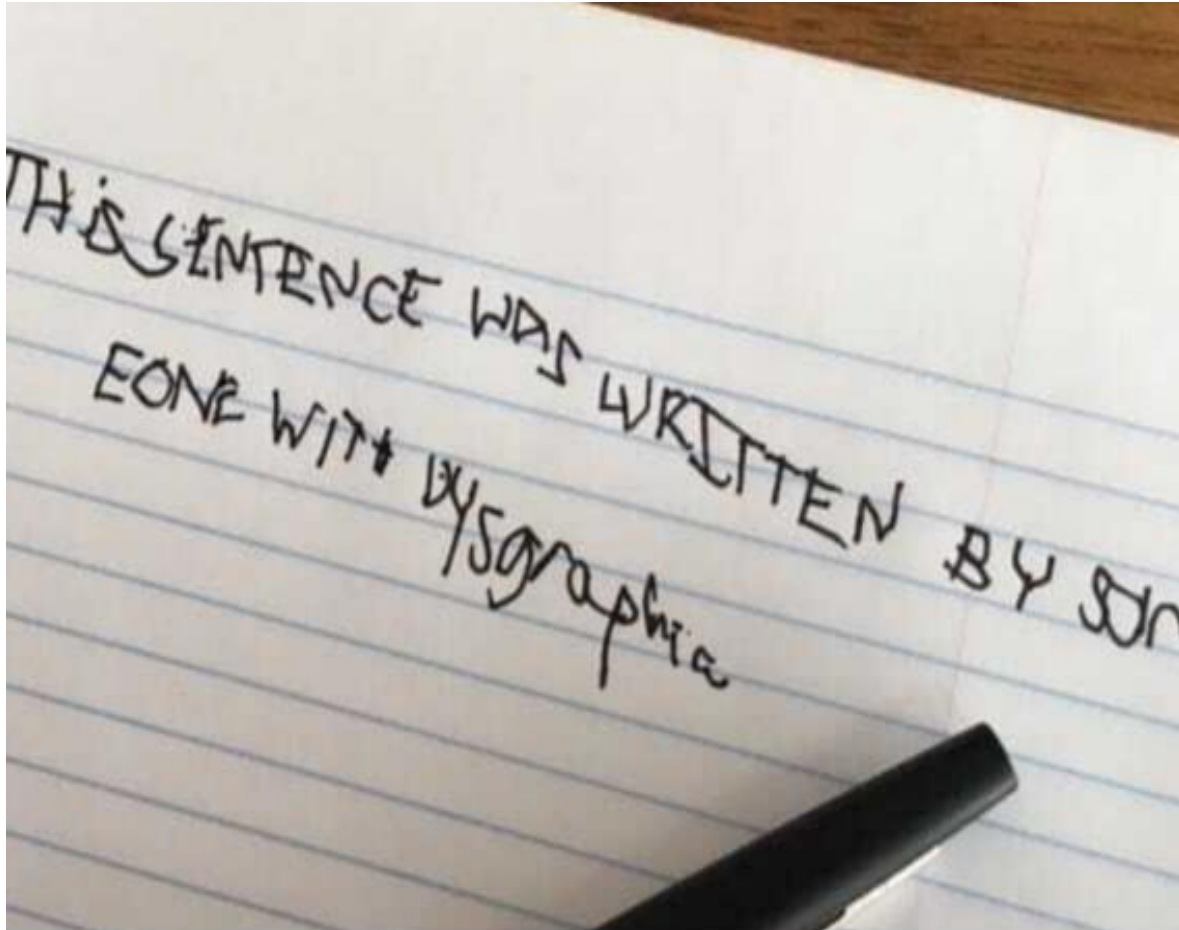
* Most common learning disability, with 20% have comorbid ADHD and male predominance .

One day, John and Bob went for a walk. "What would you like
to do today?", Bob asked John. "I don't know, John," he replied,
"What would you like to do?" "It might be watching a
video on TV, especially if we have some donuts." "Wow,"
said John, "That's a great idea! Let's do that."
"Good idea," said John. "I'll get some donuts for you."
"Look," he said, "after lunch, let's go to the store."
"Great idea!" Bob said. "Let's go to the store."
"I'll get some donuts for you."

What you feel
while reading or
trying to read
this is actually
what a child
with dyslexia
experience
every time he
reads.

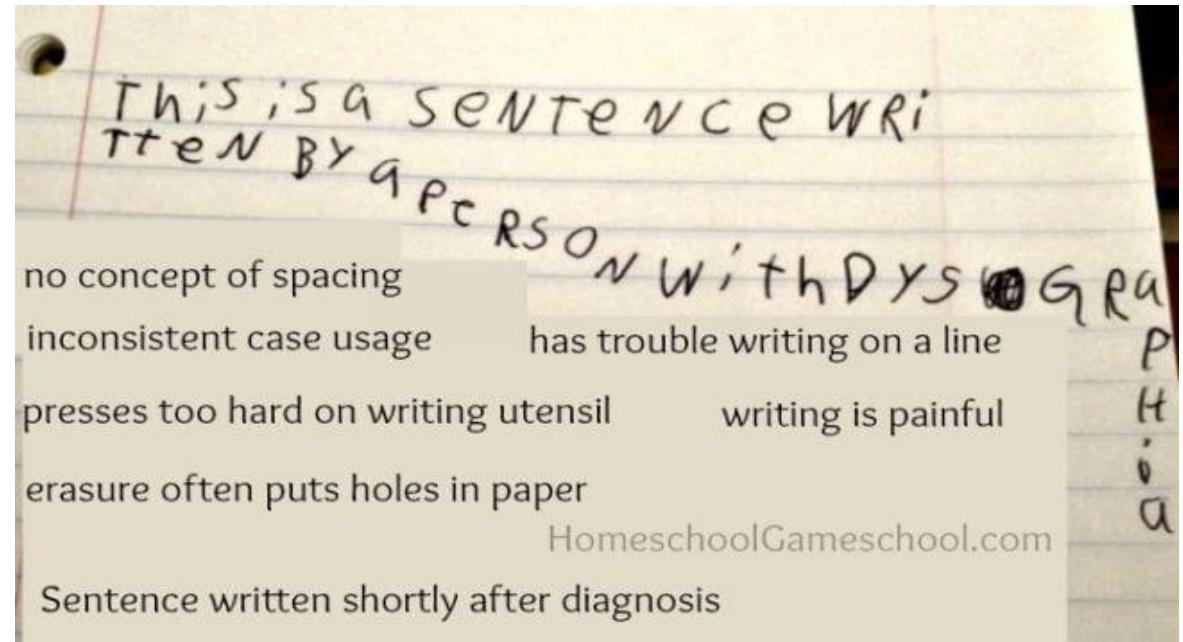
DYSGRAPHIA

- Is a term that refers to trouble with writing.



Symptoms in a child with dysgraphia:

- 1) Difficulty in writing letters
- 2) Trouble in spacing letters correctly on the page
- 3) Difficulty in writing in a straight line
- 4) Trouble with spelling, grammar and punctuation



DYSCALCULIA

- The term “dyscalculia” is used to describe difficulties with learning number number-related concepts, with processing numerical information, with learning arithmetic facts or with using the symbols and functions to perform accurate or fluent math calculations.
- With impairment in mathematics(dyscalculia):
 1. Number sense.
 2. Memorization of arithmetic facts.
 3. Accurate or fluent calculation.
 4. Accurate math reasoning.



DEVELOPMENTAL COORDINATION DISORDER

Developmental coordination disorder (DCD) and dyspraxia are generally held to be synonymous and refer to an impairment of, or difficulties with, the organization, planning, and execution of physical movement with a developmental, rather than acquired, origin.

A stylized logo for Developmental Coordination Disorder (DCD). The letters 'D', 'C', and 'D' are rendered in a bold, grey, sans-serif font. They are enclosed within a red, rounded rectangular border. The 'D' on the left and the 'D' on the right are solid, while the 'C' in the middle is hollow.

DCD

SEVERITY

In addition to specifying the domain of learning disorder, the degree of severity should also be indicated in the SLD diagnosis. There are three levels of SLD severity.

Mild: Some difficulties with learning in one or two academic areas, but may be able to compensate with appropriate accommodations or support services.

Moderate: Significant difficulties with learning, requiring some specialized teaching and some accommodations or supportive services may be needed in school, in the workplace, or at home for activities to be completed accurately and efficiently.

Severe: Severe difficulties with learning, affecting several academic areas and requiring ongoing intensive specialized teaching for most of the school years. Even with accommodations, an individual with a severe SLD may not be able to perform academic tasks with efficiency.

PROGNOSIS

- The prognosis of SLD is mixed as it really depends on a number of factors, like the age of diagnosis and comorbidity of conditions.
- Generally, the earlier the diagnosis for SLD, the better the prognosis. Early diagnosis allows for early intervention. It's been found that there is a brief window of opportunity for successful intervention, which is before the age of 8. Many who receive early intervention are actually able to do well academically and go on to pursue higher education.

TREATMENT

Requires intense educational interventions and behavioral techniques

Educational interventions include special classrooms, remedials, or Systematic individualized education tailored to child's specific needs (1 to 1 tutoring)

Remediation of basic processing problems and cognitive skills (Dyslexia will also undergo a 2-year remediation program)



Thank
you!

REFERENCE :

- [Oxford-HandBook-Of-Psychiatry-4th Ed](#)
- [Kaplan & Sadock's Synopsis of Psychiatry](#)
- <https://www.psychiatry.org/patients-families/specific-learning-disorder/what-is-specific-learning-disorder>