

Indian Academy of Pediatrics (IAP)



GUIDELINES FOR PARENTS

When to Suspect Specific Learning Disability in Your Child?

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10 FAQs on WHEN TO SUSPECT SPECIFIC LEARNING DISABILITY IN YOUR CHILD?

1. We are parents of a child who studies in Grade 5th. Recently, his school teacher called us and told that he is generally a bright child but they expressed their concern about our child's progress in studies. They complained that our child is slow in learning at school. They told that our child may have a learning disability. We are very worried. Can you please explain us, what is "specific learning disability"?
2. Are there any other causes of poor school performance other than specific learning disability?
3. All our check-ups were normal and the pregnancy was uneventful and none of us have such types of problem. Why does my child have learning disability?
4. Can you please tell us about the types of specific learning disability (SLD) in detail?
5. Why could we not suspect it earlier, even the school-teachers did not suspect it earlier, what are the ways to screen for SLD in school setting; how to identify SLD in older school-going/college-going children, who have not been identified in childhood?
6. School teachers referred us to see a pediatrician. What is the role of a pediatrician in diagnosis and management of SLD?
7. The pediatrician, after evaluating, referred us to clinical psychologist. Can we know, what is the role of clinical psychologist?
8. How can we help our child with SLD, we have heard there is role of special educator and also please let us know about remedial intervention programs? How can we cope as a parent with the child's challenges?
9. What is the special consideration in a school setting and the natural course of our child? Will he be independent ever?
10. Is not the Government of India doing anything for children with SLD, please inform us about various support groups by government of India and by educational bodies such as NCERT? please also let us know about various career options suited for children with SLD? What support by NCERT and colleges in their education? What are the best suited career options?

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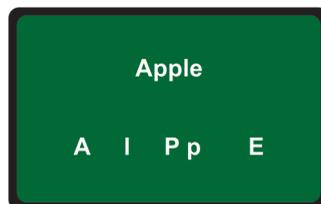
When to Suspect Specific Learning Disability in Your Child?

Q1

We are parents of a child who studies in Grade 5th. Recently, his school teacher called us and told that he is generally a bright child but they expressed their concern about our child's progress in studies. They complained that our child is slow in learning at school. They told that our child may have a learning disability. We are very worried. Can you please explain us, what is "specific learning disability"?

"Specific learning disability" is a condition characterized by unexpected poor school performance of a child in spite of not having low intelligence quotient (IQ), neurologic conditions, poor schooling or vision, and hearing problems. Due to this, the child struggles to acquire particular skills such as reading, writing, and calculations; however, apart from the particular skill, the child is at par with his peers. Difficulty with reading, writing, and calculations result in poor academic performance, even though the child is quite competent, if judged on other aspects, for example, a child with dyslexia may be very good at computers or sports.

Types



Dyslexia: Problems with reading



Dyscalculia: Problems with mathematics



Dysgraphia: Problems with writing

Q2

Are there any other causes of poor school performance other than specific learning disability?

Yes, there are many, for example:

- Neurological diseases with low IQ and developmental delay.
- Nonneurological diseases including heart diseases, recurrent pneumonias, and poor nutrition.
- Vision and hearing problems.
- *Neurodevelopmental issues*: Attention deficit hyperactivity disorder (ADHD), autism.
- Poor schooling, school absenteeism, bullying, and over pampering.
- Environmental issues such as too much noise, television, and other social media usage.
- Emotional problems such as sexual abuse, neglect, and parental problems.

Q3

All our check-ups were normal and the pregnancy was uneventful and none of us have such types of problem. Why does my child have learning disability?

The etiology for learning disability is not noticeably clear or precise. Although prematurity, low birthweight, and prolonged labor have been found to be associated along with occurrence of the condition in the family and also coincidental neurodevelopmental conditions such as obsessive-compulsive disorder (OCD) and attention deficit hyperactivity disorder (ADHD), no specific biologic factor has been proved causative. So, there is no single etiology and a multifactorial causation is most contemplated. It is not secondary to a pregnancy complication or other comorbid factor (**Figs. 1A to E**).



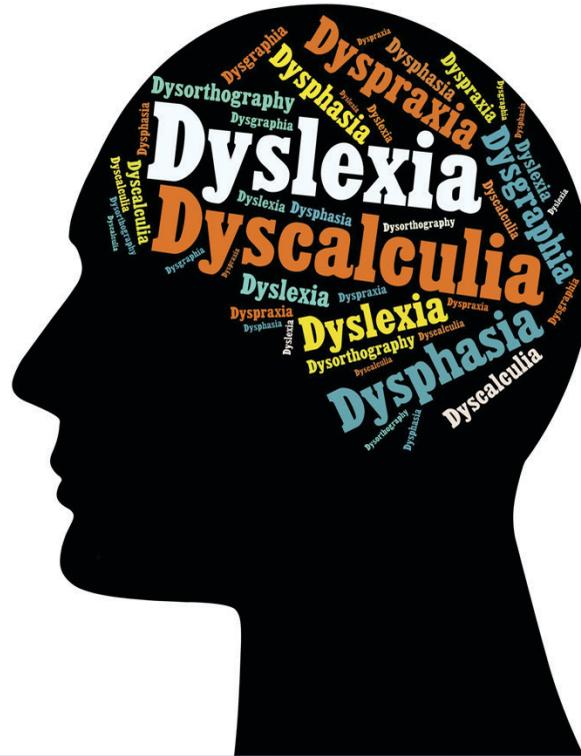
Figs. 1A to E: A child with learning disability.

Q4

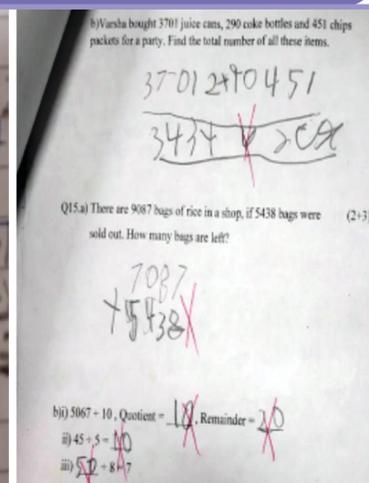
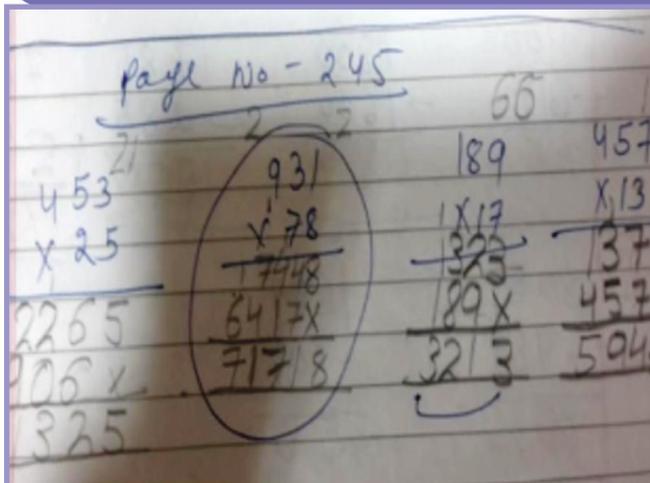
Can you please tell us about the types of specific learning disability (SLD) in detail?

Spoken language disorder can be verbal or nonverbal. Verbal SLDs are most common and among them, dyslexia is the most common. Dyslexia is characterized by reading and related language-based processing skills, such as problems with word reading accuracy, reading rate accuracy/fluency and reading accuracy. Dysgraphia is characterized by problems with person’s handwriting ability and fine motor skills. For example, the child may have issues with spelling accuracy, grammar and punctuation accuracy, and clarity or organization of written expression. Dyscalculia, as explained earlier comprises problems with the person’s ability to understand numbers and learn mathematics facts, which includes number sense, memorization of arithmetic facts, accurate or fluent calculation, and accurate math reasoning (**Figs. 2A to D**).

Nonverbal learning disabilities include problems with learning visual cues such as facial expressions, body languages, coordinating things, and poor visual spatial organizational skills.

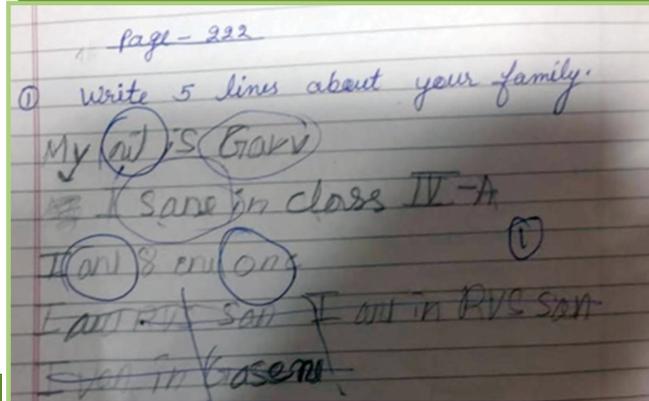


Dyscalculia: Poor understanding of numbers, their magnitude and relation, counts on fingers to add single digit numbers, lost in arithmetic computation



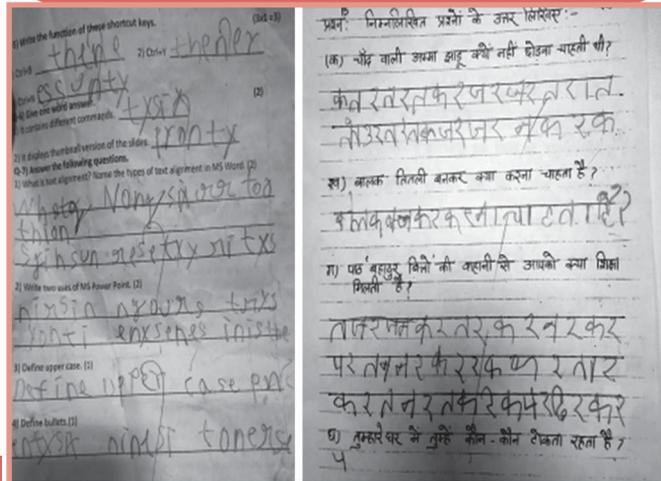
A

Difficulty in Writing



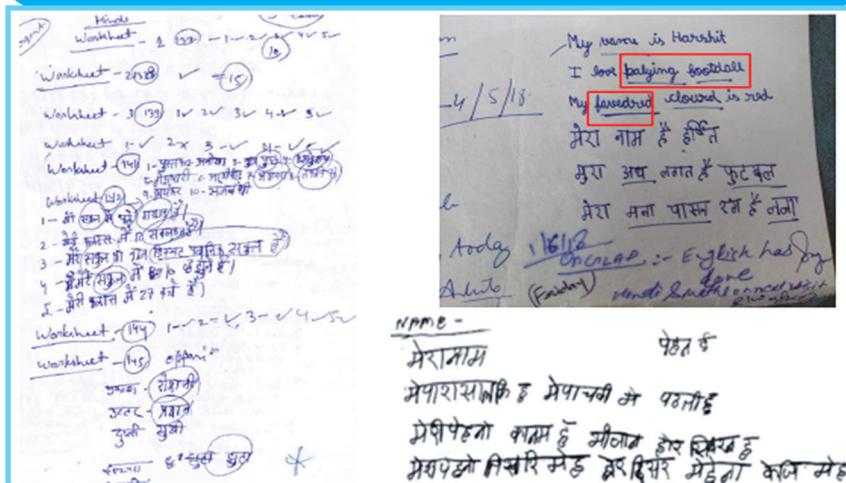
B

Makes multiple grammatical mistakes, punctuation errors within sentences, poor paragraph organization, written expression of ideas lacks clarity, no proper spacing



C

Dyslexia: Reading difficulties, Unable to read, Poor tracking, Reading errors



D

Figs. 2A to D: Spoken language disorder: Dyscalculia, difficulty in writing, and dyslexia.

Q5

Why could we not suspect it earlier, even the school-teachers did not suspect it earlier, what are the ways to screen for SLD in school setting; how to identify SLD in older school-going/college-going children, who have not been identified in childhood?

Usually, children with SLD are diagnosed after their poor academic performance raises red flags and becomes worrisome. Children are diagnosed either because of their below average scholastic performance, or due to secondary psychological effects of difficulty in learning. As these children have normal IQ and they lack only in a narrow range of skills, they are not easily identified initially.

In the school setting, parents and teachers must be vigilant with the different signs and symptoms of SLD: Short attention span, poor memory, difficulty in following directions, inability to discriminate between/among letters, numerals, or sounds, poor reading, writing, and/or mathematics ability, eye-hand coordination problems, poor coordination, difficulty with sequencing and disorganization, and other sensory difficulties. Screening should be done as early as possible using appropriate tools and involving families and teachers. Screening also includes ruling out vision and hearing impairment.

Older children or adults with SLD also pose similar difficulties in difficulty in reading and writing skills. They may be branded as “trouble makers” or “stupid students”. A variety of scales may be used for them.

Screening for Learning Disability by School Teachers

.....

Name of student:

Date of birth:

Class:

Name of School:

How long has the teacher been familiar with the student:

.....

Dear Teacher,

Have you observed in your day-to-day teaching that the student has some of the following difficulties?

Answer with "X" in appropriate column:

S. No.	Statement	Never	Sometimes	Frequently
1.	Makes mistakes in reading like: <ul style="list-style-type: none"> • Omits words • Substitutes words • Adds words • Skips lines • Reads sentences repeatedly 			
2.	Can answer questions orally but has difficulty in writing answers? Or Oral work is better than written work.			
3.	Writes or reads figures or letters in wrong way, for example, 15 for 51, 6 for 9, and b for d			
4.	Difficulty in differentiating letter sounds for vowels and blends, for example, "E" for "I" and "ch" for "sh"			
5.	Difficulty in rhyming words and repeating them			
6.	Reads in past tense, while the text is written in present tense or vice-versa; for example, replaces "is" with "was"			
7.	Changes the sequence of alphabets while reading; for example, says "neerg" instead of "green"			
8.	Replaces long words with compact one; for example "musim" for "museum"			
9.	Difficulty in taking notes or copying them from blackboard and books			
10.	Confusion with mathematics symbols (+, -, ×, ÷), while solving word problems and mathematics computation			
11.	Difficulty in spellings			
12.	Difficulties with spatial orientation, and direction; for example, confusion between left and right, east and west, up and down, etc.			
13.	Misplaces upper and lower case letters, for example, BeTTer, n for N, i for l			
14.	Writes in mirror images; for example, "ram"- "mar"			

* *Sometimes*: Up to 6–7 times in 2–3 months

** *Frequently*: More than 7 times in 2–3 months

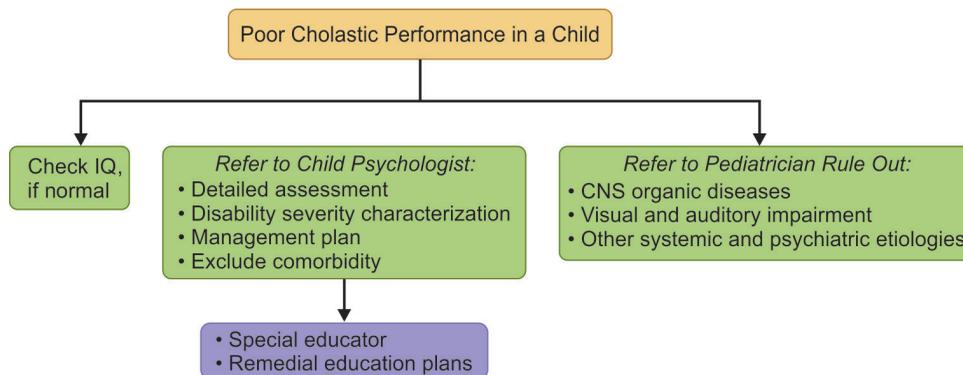
(Source: The Gazette of India: 04-01-2018)

Q6

**School teachers referred us to see a pediatrician.
What is the role of a pediatrician in diagnosis
and management of SLD?**

Your pediatrician has a very important role in the diagnosis and management of SLD. The pediatrician has to rule out whether or not your child fits into SLD. He or she has to assess the presence of other causes which may pose as learning disabilities. These other causes, as mentioned earlier, include vision, hearing impairments, organic central nervous system (CNS) (brain-based) and non-CNS diseases, and other coexisting psychiatric conditions. Your pediatrician will see your child, take a detailed medical, social, and psychological history, shall examine the child, and shall order appropriate tests (**Flowchart 1**). Your pediatrician must be satisfied that your child does not have any other serious disease masquerading as SLD.

Flowchart 1: Poor scholastic performance in a child.



Q7

The pediatrician, after evaluating, referred us to clinical psychologist. Can we know, what is the role of clinical psychologist?

For the diagnosis of SLD, the clinical psychologist may test the child on some standardized tests for IQ (to establish average or above average IQ) and psychoeducational tests for establishing patterns of difficulties in reading, writing, mathematics, auditory and visual processing, etc. consistent with a standardized diagnosis of SLD. If the pediatrician has noted any red flags in terms of behavioral or emotional concerns, the same may be evaluated on standardized tests by the clinical psychologist. The clinical psychologist will make a detailed report of such assessments for the pediatrician's perusal.

Depending on the report and his/her initial assessment, the pediatrician will further direct you to the psychologist for counseling (child and/or parent), to the remedial educator for academic help, to the occupational therapist for working on fine motor and coordination problems, sitting tolerance, attention span, etc.

Q8

How can we help our child with SLD, we have heard, there is role of special educator and also please let us know about remedial intervention programs? How can we cope as a parent with the child's challenges?

Special educator provides direct one-on-one teaching to your child suited as per your child's learning ability and the child's current academic achievement level (not the grade level). The interventions for SLD can be done either via direct teaching or via small group teachings (the earlier is preferable). After the correct diagnosis is made, herein comes the role of special educator and remedial intervention programs. Remedial intervention programs focus on different strategies to help the child to internalize and understand the required academic skill. Phonemic awareness stresses on understanding each letter separately, stressing on each letter, remediation of letter sound knowledge, stressing on word recognition, and reading books. For writing skills, hand exercises such as working with clay or beads to group activities such as writing essays have been found useful. For mathematics, explanation of concepts, repeated practice, connecting numbers with syntax, etc. are tried. Though there are a number of remedial intervention programs that can be used, it is vital to design one that is appropriate to your child. As parents, you have to ask the educator to provide you with written plans and program for your child and the way ahead—expected milestones for improvement in their reading, writing, and mathematics abilities, as well as the child's confidence and self-esteem overall. The parent needs to monitor the improvement as per the plan provided—the child's skills in academics have to match the expected plan. If it does not, then the "Pediatrician" and "Remedial Educator" need to have an idea why the remediation is not going as expected. This may require a re-consideration of the methods and plan being used.

You as a parent can play a very important role for managing your child, once you have identified areas of problems with your child, you may choose to try alternative methods to forge new skills in them, and you may also learn the remedial action plans and try at home.

Q9

What is the special consideration in a school setting and the natural course of our child? Will he be independent ever?

In the school setting, various adjustments can be done for the child. The language medium may be changed, as per child's preference—usually the mother tongue is easier to manage since the child is exposed to the same at home more than foreign languages. Various provisions that are available include choice of subject (person with dyscalculia may omit mathematics and choose another subject), extra time to write examinations, use of scribe for written examinations, oral examination, if the child prefers so, use of a calculator, etc. They may avoid taking professions based on their aptitude such as accounting, literature, etc. SLD is a lifelong condition, children do not grow out of SLD. However, as mentioned earlier, they are able to improve their reading, writing, and mathematics abilities with the help of various therapies (which is why timely monitoring with the pediatrician is very important). They are not intellectually disabled and apart from the specific areas of difficulty, they have, they are apt in other areas and are not dependent on caregivers. Definitely, they can be independent and become very successful too. There were many famous personalities who had SLD.

Q10

Is not the Government of India doing anything for children with SLD, please inform us about various support groups by Government of India and by educational bodies such as NCERT? Please also let us know about various career options suited for children with SLD? What support by NCERT and colleges in their education? What are the best suited career options?

Government of India has made various provisions for SLD. It has made provision for compulsory education for all children with SLD. Also, seats in government educational bodies as well as jobs have been reserved for people with SLD. National Council of Educational Research and Training (NCERT) allows use of scribe for dyslexic children, extra time to write answers and their answer books are sent separately from the other children.

There is no dearth of career options for children with SLD. In today's advanced world, technology can surpass the shortcomings of people with SLD, and they can choose from a variety of career options. Art, graphics, and designing are some of the better suited professions for children with SLD. Even music, fashion, tourism, hospitality, and food industry can be considered. Sports and armed forces can be considered for those who like physical exercise.