

# Understood

## Understanding Nonverbal Learning Disabilities

By Erica Patino

### What You'll Learn

What are nonverbal learning disabilities?

How common are nonverbal learning disabilities?

What causes nonverbal learning disabilities?

What are the symptoms of nonverbal learning disabilities?

What skills are affected by nonverbal learning disabilities?

How are nonverbal learning disabilities diagnosed?

What conditions are related to nonverbal learning disabilities?

How can professionals help with nonverbal learning disabilities?

What can be done at home for nonverbal learning disabilities?

What can make the journey easier?

Many people think of “learning disabilities” as issues with verbal skills such as reading or writing. But what if your child has strong verbal skills and a big vocabulary, but doesn’t understand when somebody is being sarcastic? What if he reads at an advanced level but can’t tell you the most important parts of the story?

These are classic signs of nonverbal learning disabilities (NVLD). NVLD is a brain-based condition that affects skills like abstract thinking and spatial relationships. While NVLD can affect your child’s learning in many ways, it creates an even bigger challenge when it comes to your child’s social life. Read more about the signs of NVLD, possible treatments and ways you can help your child at home.

## What are nonverbal learning disabilities?

Many learning and attention issues create social challenges. But these are the main symptoms of NVLD. NVLD affects a child’s social skills, but not his speech or writing skills.

Children with NVLD tend to talk a lot, but they don’t always share in a socially appropriate way. Or they might not relay the most important information. They often miss social cues, so making and keeping friends is a big challenge. There can also be misunderstandings with teachers, parents and other adults.[1]

Unlike kids with language-based learning disabilities like dyslexia, kids with NVLD have trouble understanding communication that *isn’t* verbal. That includes body language, tone of voice and facial expressions.

When a classmate says something in a teasing voice, a child with NVLD may think it's serious. He may also laugh at something serious if the speaker is smiling a little. Not getting the subtle, unspoken messages people send out makes it hard to form friendships and fit in with other kids.[2]

To better understand what nonverbal learning disabilities are, it helps to know more about language-based learning disabilities. Kids with those issues have trouble with reading, writing and spoken language. Their speech and language skills tend to be weak; they struggle with accuracy and speed in their work.[1]

Some children with NVLD have good language skills, but they have trouble sorting through information and understanding bigger concepts. They may not have issues with written or spoken language. But they may think in literal terms and miss subtle, nonverbal cues.[3]

Researchers don't know the exact cause of NVLD. But they believe it's related to differences in various brain processes located in the left and right regions of the brain.[4]

Although there's growing awareness of the condition, NVLD is controversial in medical circles. It does not appear in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), the latest update of the guide used by doctors and therapists to diagnose learning disabilities.[5]

Also, NVLD is not recognized as a disability covered by the Individuals with Disabilities Education Act (IDEA). Children with NVLD-related symptoms may still be eligible for special education services if they're found to have a specific learning disability that's interfering with educational progress.

NVLD can make learning difficult, but that doesn't mean a child with NVLD isn't bright. Like most kids with learning disabilities, kids with NVLD typically have average or above-average intelligence.[1] It's also important to know that NVLD is not the same as Asperger's syndrome or autism, though each can affect social skills and social interaction.

[Back to the top](#)

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## How common are nonverbal learning disabilities?

It's hard to know exactly how many kids have NVLD. That's because there's no clear definition of what this category of learning disabilities includes.[1] Studies estimate that around 1 in 100, or 1 percent, of kids in the United States may have NVLD.[6] It tends to affect boys and girls about equally. It doesn't seem to run in families the way attention issues and language-based learning disabilities do.[7]

NVLD often coexists with Asperger's syndrome. In fact, studies suggest that up to 80 percent of kids with Asperger's also have NVLD-related symptoms.[8] NVLD symptoms may coexist with ADHD, though statistics aren't available.[9]

[Back to the top](#)

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## What causes nonverbal learning disabilities?

Experts don't know the exact cause of NVLD-related symptoms. But they are looking into a number of theories involving differences in important brain processes and functions in the left and right sides of the brain.

There's a lack of consensus among experts regarding whether NVLD exists and what could be the underlying causes for NVLD symptoms. For example, some experts think the issues may be caused by damage to the part of the brain that sends signals between the two sides. Others think the problems may lie with the frontal lobe of the brain, an area of the brain that includes executive functioning skills such as working memory, organization and planning.[3,7]

[Back to the top](#)

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## What are the symptoms of nonverbal learning disabilities?

While symptoms of NVLD may include poor social skills, NVLD may show up in other ways. For example, children with NVLD *may* struggle with math, reading comprehension, writing, and/or physical coordination. Here are some of the symptoms you may be seeing in your child.

- Remembers information but doesn't know why it's important
- Shares information in socially inappropriate ways
- Pays attention to details but misses the big picture
- Struggles with reading comprehension
- Struggles with math, especially word problems
- Is physically awkward and uncoordinated
- Has messy handwriting
- Thinks in literal, concrete terms
- Misses social cues such as verbal and/or nonverbal expressions, which may make your child seem "off" to others
- Has poor social skills
- Stands too close to people
- Is oblivious to people's reactions
- Changes the subject abruptly in conversation
- Is overly dependent on parents
- Is fearful of new situations
- Has trouble adjusting to changes

Kids with NVLD are often misunderstood because of these behaviors. Peers and adults may see them as odd or immature. Without knowing a child has NVLD, a teacher may think he's inattentive or defiant.

### **Symptoms May Change as Children Get Older**

Young children with NVLD may seem bright and precocious because they have good verbal skills. They're like little professors, asking adults lots of questions and spouting off information they've heard. Some children may have good memory, but they also can have trouble interpreting and drawing conclusions from what they read.

But as kids get older, the symptoms of NVLD may become more obvious and create more problems. Kids realize they perceive social situations differently than their peers, but don't know what to do about it.[10] Some develop anxiety, which can lead to compulsive behaviors such as touching a doorknob a certain number of times before opening it.

The earlier you know about your child's issues, the sooner you'll be able to find treatments and strategies that can help build social skills and relieve anxiety.

[Back to the top](#)

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## **What skills are affected by nonverbal learning disabilities?**

NVLD doesn't affect all kids in the same way or to the same degree. But for most, the condition will have some impact on the following skills:

- **Conceptual skills:** Trouble grasping large concepts, problem-solving and cause-and-effect relationships.
- **Motor skills:** Problems with coordination and movement. This includes gross motor skills (like running and kicking), fine motor skills (like writing and using scissors), and balance (such as riding a bike).
- **Visual-spatial skills:** Has trouble with visual imagery, visual processing, and spatial relations. Kids may remember what they hear, but not what they see.
- **Social skills:** Difficulty picking up on social cues and sharing information in a socially appropriate way. They may not understand sarcasm or teasing, and may interrupt in the middle of conversation.
- **Abstract thinking:** Trouble with reading comprehension and understanding the "big picture." Kids may be good at memorizing details but not at understanding the larger concepts behind them. They may also have trouble organizing their thoughts.[11]

[Back to the top](#)

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# How are nonverbal learning disabilities diagnosed?

Nonverbal learning disabilities aren't included in the *DSM*, the manual psychologists and other professionals use to make a diagnosis. But you can still have your child evaluated to find out if he has NVLD.

Since there is no single test for NVLD, getting a diagnosis involves a number of steps, including:

**Step 1: Get a medical exam.** Your child's primary doctor probably isn't an expert in learning issues, but starting here allows you to talk about your concerns and find out if a medical condition could be causing your child's symptoms. The doctor can rule out some conditions, but you may be referred to a specialist such as a neurologist for further evaluation.

**Step 2: Get a referral to a mental health professional.** After ruling out medical causes, your child's doctor will likely refer you to a mental health professional such as a child neuropsychologist. The specialist will talk to you and your child about your concerns. Then he'll use a variety of tests to evaluate your child's abilities in these areas:

- **Speech and language:** Speech development in younger kids; and verbal skills, understanding of abstract ideas and use of context in older kids
- **Visual-spatial organization:** The ability to connect visual information with abstract concepts, such as telling time and reading a map
- **Motor skills:** Fine motor skills like drawing and writing, and gross motor skills like throwing and catching objects

The specialist will look at how your child performs these skills, and will ask you about the symptoms you see in your child.[4,12]

**Step 3: Put the pieces together.** After gathering all the information, the specialist will look for a pattern of strengths and weaknesses that are common in kids with NVLD. This will help determine if your child has the condition.[12]

## Common Strengths

- Average to above average intelligence
- High verbal scores
- Early language development
- Strong ability to remember and repeat spoken information
- Learns better by hearing information than by seeing it

## Common Weaknesses

- Social skills

- Balance, coordination and handwriting
- Understanding cause and effect
- Visualizing information
- Activity level (high when young; low when older)

[Back to the top](#)

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## What conditions are related to nonverbal learning disabilities?

NVLD is the condition most closely associated with social skills issues. However, there are several other conditions that make it hard for kids to connect. These conditions are separate, but they can occur along with NVLD.

- **ADHD:** Kids with NVLD may first be misdiagnosed with ADHD. The two conditions have some similar symptoms, such as excessive talking, poor coordination and interrupting conversations. But ADHD isn't a learning disability. It's a brain-based condition that can make it difficult for kids to concentrate, consider consequences and control their impulses.[9]
- **Language disorders:** These are problems with talking (expressive language disorder) and understanding (receptive language disorder) language. Kids with these conditions may have trouble understanding and using gestures, following directions and knowing how to maintain a conversation.[1] NVLD also may resemble some symptoms of social (pragmatic) communication disorder.
- **Asperger's syndrome:** This is a developmental disorder that affects a child's ability to socialize and communicate clearly with others. It falls on the mild end of the autism spectrum. There is a lot of overlap in the symptoms of Asperger's syndrome and NVLD, and studies suggest that up to 80 percent of kids with Asperger's also have NVLD. But they are separate conditions.[8]

[Back to the top](#)

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## How can professionals help with nonverbal learning disabilities?

There are a number of therapies and educational strategies that can help your child manage and work around NVLD symptoms. These include:

- **Social skills groups** to teach kids how to handle social situations such as greeting a friend, joining a conversation, and recognizing and responding to teasing.

- **Parent behavioral training**, run by a psychologist, to help parents learn how to collaborate with teachers. It also can teach parents how to help kids with social skills in playdates and extracurricular activities.
- **Occupational therapy** to build tolerance for outside experiences, improve coordination and enhance fine motor skills.
- **Cognitive therapy** to help deal with anxiety and other mental health issues.
- **Your child's school** to determine what services might be available.

NVLD is not one of the disabilities covered by IDEA. This means having NVLD does not make him eligible for special education services. However, if you and the school think your child needs special education services, the school may test him and identify him as having the most similar disability covered by IDEA. This would allow him to have an Individualized Education Program (IEP).

Another option may be for your child to receive services under Section 504, which is less restrictive in the types of disabilities it covers.

Once your child has an IEP or a 504 plan, you and the school will decide what accommodations and modifications his education plan should include. NVLD and “new” methods for treating it are still considered controversial. For that reason, the school may prefer to use “tried-and-true” methods for helping your child. That should work well as long as the plan addresses your child’s specific challenges.

If your child doesn’t qualify for either an IEP or a 504 plan, the school may be willing to give him informal accommodations.

[Back to the top](#)

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## What can be done at home for nonverbal learning disabilities?

Parenting a child with NVLD can be challenging, but there are many things you can do at home to help your child manage symptoms and learn social skills. You can also try some of the strategies from our behavior experts. These steps can help you make positive changes in your child’s life and in your family life.

- **Think about how you say things.** Remember that kids with NVLD have trouble sensing sarcasm and tone of voice, and they’re likely to take instructions literally. For example, if you say, “Don’t let me see you playing with that toy,” he might continue playing with the toy but turn his back so you can’t see him. Give clear instructions such as, “Please put that toy down and come over here.”
- **Help with transitions.** Kids with NVLD tend to dislike change because it’s hard for them to understand. They may not have the abstract thinking skills needed to envision what’s going to happen next. You can prepare your child for a change in routine by using logical explanations.

Instead of saying, “We’re leaving soon to have dinner with Grandma,” try “We’re going to eat dinner at Grandma’s house tonight because it’s her birthday. We need to leave in an hour.”

- **Keep an eye on your child.** Kids with NVLD can become overwhelmed by too much sensory input, such as noise, smells, sounds and temperature. Try to avoid situations that could trigger those reactions in your child.
- **Encourage playdates.** Help your child find kids who are interested in the same things he enjoys, whether it’s comic books or cooking. Set up one-on-one playdates at your home, so your child can get social experience in a familiar setting. Make sure to keep the playdate structured, organizing activities to keep your child and his friend busy. It’s also a good idea to plan playdates for a time of day when your child tends to be on his best behavior.

[Back to the top](#)

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## What can make the journey easier?

Whether you’re just starting your journey or are well on your way to understanding NVLD, there are many ways you support your child.

- **Take notes.** Keep track of the behaviors and symptoms you see in your child and when and where they happen. Your observations will provide valuable information for the professionals who can help your child.
- **Take your notes to your child’s doctor** to discuss possible next steps. That might include referrals to a psychologist who can conduct a comprehensive evaluation and figure out a treatment plan.
- **Talk with your child’s teacher** to see what problems your child is having in the classroom. Ask about what interventions have been used and which, if any, are effective. You also may want to talk to the school about whether your child may need special education services.
- **Connect with other parents.** You can find other parents who are dealing with the same issues you are in our online community.

NVLD can cause both social and academic challenges for your child, and there’s no surefire way to treat it. But there are many supports, therapies and strategies that can help your child build social skills and recognize weaknesses. Learning as much as you can will help you make the best choices for your child.

[Back to the top](#)



- **The diagnosis of NVLD is controversial among doctors and psychologists.**
- **NVLD isn't recognized as a disability under the Individuals with Disabilities Education Act, but there are still ways kids with NVLD could be eligible for special education services.**
- **There are therapies and strategies that can help kids with NVLD at home and at school.**

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