

Learning Disabilities & Disorders



DEFINITIONS
&
CHARACTERISTICS

Learning Disabilities



Official Definition of Learning Disabilities

Adopted by the Learning Disabilities Association of Canada January 30, 2002, <http://ldac-acta.ca/>

Learning Disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.

Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g. planning and decision-making).

Learning disabilities range in severity and may interfere with the acquisition and use of one or more of the following:

- •oral language (e.g. listening, speaking, understanding);
- •reading (e.g. decoding, phonetic knowledge, word recognition, comprehension);
- •written language (e.g. spelling and written expression); and
- •mathematics (e.g. computation, problem solving).

Learning disabilities may also involve difficulties with organizational skills, social perception, social interaction and perspective taking.

Learning disabilities are lifelong. The way in which they are expressed may vary over an individual's lifetime, depending on the interaction between the demands of the environment and the individual's strengths and needs. Learning disabilities are suggested by unexpected academic under-achievement or achievement which is maintained only by unusually high levels of effort and support.

Learning disabilities are due to genetic and/or neurobiological factors or injury that alters brain functioning in a manner which affects one or more processes related to learning. These disorders are not due primarily to hearing and/or vision problems, socio-economic factors, cultural or linguistic differences, lack of motivation or ineffective teaching, although these factors may further complicate the challenges faced by individuals with learning disabilities.

Learning disabilities may co-exist with various conditions including attentional, behavioural and emotional disorders, sensory impairments or other medical conditions.

For success, individuals with learning disabilities require early identification and timely specialized assessments and interventions involving home, school, community and workplace settings. The interventions need to be appropriate for each individual's learning disability subtype and, at a minimum, include the provision of:

- •specific skill instruction;
- •accommodations;
- •compensatory strategies; and
- •self-advocacy skills.

Specific Learning Disorder

According to DSM-5



- Specific learning disorder is diagnosed through a clinical review of the individual's developmental, medical, educational, and family history, reports of test scores and teacher observations, and response to academic interventions. The diagnosis requires persistent difficulties in reading, writing, arithmetic, or mathematical reasoning skills during formal years of schooling. Symptoms may include inaccurate or slow and effortful reading, poor written expression that lacks clarity, difficulties remembering number facts, or inaccurate mathematical reasoning.
- Current academic skills must be well below the average range of scores in culturally and linguistically appropriate tests of reading, writing, or mathematics. The individual's difficulties must not be better explained by developmental, neurological, sensory (vision or hearing), or motor disorders and must significantly interfere with academic achievement, occupational performance, or activities of daily living.

Difficulties with Executive Functioning Skills



- Executive function is like the CEO of the brain. It's in charge of making sure things get done from the planning stages of the job to the final deadline. When kids have issues with executive functioning, any task that requires planning, organization, memory, time management and flexible thinking becomes a challenge. The more you know about the challenges, the better you'll be able to help your child build her executive skills and manage the difficulties.
- **Manifestations:**
 - Finds it hard to figure out how to get started on a task
 - Can focus on small details or the overall picture, but not both at the same time
 - Has trouble figuring out how much time a task requires
 - Does things either quickly and messily or slowly and incompletely
 - Finds it hard to incorporate feedback into work or an activity
 - Sticks with a plan, even when it's clear that the plan isn't working
 - Has trouble paying attention and is easily distracted
 - Loses a train of thought when interrupted
 - Needs to be told the directions many times
 - Has trouble making decisions
 - Has a tough time switching gears from one activity to another
 - Doesn't always have the words to explain something in detail
 - Needs help processing what something feels/sounds/looks like
 - Isn't able to think about or do more than one thing at a time
 - Remembers information better using cues, abbreviations or acronyms

Attention Deficit Disorder (ADD/H



- ADHD is characterized by a pattern of behavior, present in multiple settings (e.g., school and home), that can result in performance issues in social, educational, or work settings. Symptoms are divided into two categories of inattention and hyperactivity/impulsivity that include behaviors like failure to pay close attention to details, difficulty organizing tasks and activities, excessive talking, fidgeting, or an inability to remain seated in appropriate situations.

Diagnostic and Statistical Manual of Mental Disorders (DSM-5), <http://www.dsm5.org>

Dyslexia



- It is a difficulty with the alphabet, reading, writing and spelling in spite of normal or above-normal intelligence, conventional teaching methods, and adequate sociocultural opportunity. Dyslexia is thought to be genetic and hereditary.

Characteristics of Dyslexia

Characteristics of dyslexia vary greatly from one individual to another. The dyslexic person can experience difficulties in many areas, including:

- formation of letters;
- correctly writing letters of the alphabet in the proper sequence;
- naming the letters;
- associating sound (phonetics) with the symbol (grapheme);
- appropriate sequence of individual letters, and a series of letters which make up a word, in the reading or writing process (e.g. b-d, was-saw, quiet-quite);
- reading, spelling, writing;
- finding a word in the dictionary;
- expressing ideas in writing;
- finding the right word when talking;
- expressing clear ideas verbally;
- distinguishing left from right, east from west;
- telling time, days of the week, months of the year;
- confusion with math symbols;
- memorizing multiplication tables (sequential memory);
- difficulty memorizing non-phonetic words.

As well, other symptoms of dyslexia include:

- inordinate amount of time spent on homework;
- inconsistent performance and grades from day-to-day;
- high stress resulting from having to perform on the spot;
- lack of organization and study habits that are not in keeping with the person's level of intelligence.

Developmental Dysphasia

Could be called: Specific Language Disorder



Developmental Dysphasia is a clearly defined speech-language disorder of neurodevelopmental origin. It is explicitly not a speech-language delay although the combination of Developmental Dysphasia and a speech-language delay may occur.

- **Manifestations:**

- 1. Understanding of speech clearly better than speaking
- 2. Spontaneous speech (monologue) better than dialogue (on command situation)
- 3. Fluency impaired (connection of ideas e.g. story-telling)
- 4. Morphological and syntactical disorders

Dyspraxia



- Dyspraxia, a form of developmental coordination disorder (DCD) is a common disorder affecting fine and/or gross motor coordination, in children and adults. While DCD is often regarded as an umbrella term to cover motor coordination difficulties, dyspraxia refers to those people who have additional problems planning, organizing and carrying out movements in the right order in everyday situations. Dyspraxia can also affect articulation and speech, perception and thought. Although Dyspraxia may occur in isolation, it frequently coexists with other conditions such as Attention Deficit Hyperactive Disorder (ADHD), Dyslexia, language disorders and social, emotional and behavioural impairments
- **Manifestations:**
 - Is late in reaching milestones e.g. rolling over, sitting, standing, walking, and speaking
 - May not be able to run, hop, jump, or catch or kick a ball although their peers can do so
 - Has difficulty in keeping friends; or judging how to behave in company
 - Has little understanding of concepts such as 'in', 'on', 'in front of' etc.
 - Has difficulty in walking up and down stairs
 - Poor at dressing
 - Slow and hesitant in most actions
 - Appears not to be able to learn anything instinctively but must be taught skills
 - Falls over frequently
 - Poor pencil grip
 - Cannot do jigsaws or shape sorting games
 - Artwork is very immature
 - Often anxious and easily distracted
 - Probably has all the difficulties experienced by the pre-school child with dyspraxia, with little or no improvement
 - Avoids PE and games
 - Does badly in class but significantly better on a one-to-one basis
 - Reacts to all stimuli without discrimination and attention span is poor
 - May have trouble with math and writing structured stories
 - Experiences great difficulty in copying from the blackboard
 - Writes laboriously and immaturely
 - Unable to remember and /or follow instructions
 - Is generally poorly organized

Pervasive Developmental Disorders

Now: Autism Spectrum Disorders (ASD)



- People with ASD tend to have communication deficits, such as responding inappropriately in conversations, misreading nonverbal interactions, or having difficulty building friendships appropriate to their age. In addition, people with ASD may be overly dependent on routines, highly sensitive to changes in their environment, or intensely focused on inappropriate items. Again, the symptoms of people with ASD will fall on a continuum, with some individuals showing mild symptoms and others having much more severe symptoms.

Diagnostic and Statistical Manual of Mental Disorders (DSM-5), <http://www.dsm5.org>

Asperger's Syndrome



Asperger syndrome is an autism spectrum disorder (ASD) considered to be on the “high functioning” end of the spectrum. Affected children and adults have difficulty with social interactions and exhibit a restricted range of interests and/or repetitive behaviors. Motor development may be delayed, leading to clumsiness or uncoordinated motor movements. Compared with those affected by other forms of ASD, however, those with Asperger syndrome do not have significant delays or difficulties in language or cognitive development. Some even demonstrate precocious vocabulary – often in a highly specialized field of interest.

The following behaviors are often associated with Asperger syndrome. However, they are seldom all present in any one individual and vary widely in degree:

- Limited or inappropriate social interactions
- "Robotic" or repetitive speech
- Challenges with nonverbal communication (gestures, facial expression, etc.) Coupled with average to above average verbal skills
- Tendency to discuss self rather than others
- Inability to understand social/emotional issues or nonliteral phrases
- Lack of eye contact or reciprocal conversation
- Obsession with specific, often unusual, topics
- One-sided conversations
- Awkward movements and/or mannerisms

Autism



Autism spectrum disorder (ASD) and autism are both general terms for a group of complex disorders of brain development. These disorders are characterized, in varying degrees, by difficulties in social interaction, verbal and nonverbal communication and repetitive behaviors. With the May 2013 publication of the DSM-5 Diagnostic Manual all autism disorders were merged into one umbrella diagnosis of ASD. Previously, they were recognized as distinct subtypes, including autistic disorder, childhood disintegrative disorder, pervasive developmental disorder-not otherwise specified (PDD-NOS) and Asperger syndrome.

ASD can be associated with intellectual disability, difficulties in motor coordination and attention and physical health issues such as sleep and gastrointestinal disturbances. Some persons with ASD excel in visual skills, music, math and art.

Autism appears to have its roots in very early brain development. However, the most obvious signs of autism and symptoms of autism tend to emerge between 2 and 3 years of age.

Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS)



PDD-NOS stands for Pervasive Developmental Disorder-Not Otherwise Specified. Psychologists and psychiatrists sometimes use the term “pervasive developmental disorders” and “autism spectrum disorders” (ASD) interchangeably. As such, PDD-NOS became the diagnosis applied to children or adults who are on the autism spectrum but do not fully meet the criteria for another ASD such as autistic disorder (sometimes called “classic” autism) or Asperger syndrome.

Like all forms of autism, PDD-NOS can occur in conjunction with a wide spectrum of intellectual ability. Its defining features are significant challenges in social and language development.

Studies suggest that persons with PDD-NOS can be placed in one of three very different subgroups:

- A high-functioning group (around 25 percent) whose symptoms largely overlap with that of Asperger syndrome, but who differ in terms of having a lag in language development and mild cognitive impairment. (Asperger syndrome does not generally involve speech delay or cognitive impairment).
- A second group (around 25 percent) whose symptoms more closely resemble those of autistic disorder, but do not fully meet all its diagnostic signs and symptoms.
- A third group (around 50 percent) who meet all the diagnostic criteria for autistic disorder, but whose stereotypical and repetitive behaviors are noticeably mild.

As these findings suggest, individuals with PDD-NOS vary widely in their strengths and challenges.

<http://www.autismspeaks.ca/about-autism/what-is-autism/pdd-nos/>

Auditory Processing Disorder



Auditory processing is a term used to describe what happens when your brain recognizes and interprets the sounds around you. Humans hear when energy that we recognize as sound travels through the ear and is changed into electrical information that can be interpreted by the brain. The "disorder" part of auditory processing disorder means that something is adversely affecting the processing or interpretation of the information.

Children with APD often do not recognize subtle differences between sounds in words, even though the sounds themselves are loud and clear. For example, the request "Tell me how a chair and a couch are alike" may sound to a child with APD like "Tell me how a couch and a chair are alike." It can even be understood by the child as "Tell me how a cow and a hair are alike." These kinds of problems are more likely to occur when a person with APD is in a noisy environment or when he or she is listening to complex information.

APD goes by many other names. Sometimes it is referred to as central auditory processing disorder (CAPD). Other common names are auditory perception problem, auditory comprehension deficit, central auditory dysfunction, central deafness, and so-called "word deafness."

- **Have trouble paying attention to and remembering information presented orally**
- **Have problems carrying out multistep directions**
- **Have poor listening skills**
- **Need more time to process information**
- **Have low academic performance**
- **Have behavior problems**
- **Have language difficulty (e.g., they confuse syllable sequences and have problems developing vocabulary and understanding language)**
- **Have difficulty with reading, comprehension, spelling, and vocabulary**

<https://canadianaudiology.ca/consumer/apd-in-children.html>

Tourette Syndrome



Tourette Syndrome (TS) is a neurological disorder characterized by tics: involuntary, rapid, sudden movements or vocalizations that occur repeatedly in the same way. The cause has not been established and as yet there is no cure.

The symptoms include:

- Both multiple motor and one or more vocal tics present at some time, although not necessarily in the same way;
- The occurrence of tics many times a day (usually in bouts) nearly every day or intermittently throughout a span of more than one year;
- The periodic change in the number, frequency, type and location of the tics, disappear for weeks or months at a time; and
- Onset before the age of 18.

Simple:

- Motor - Eye blinking, head jerking, shoulder shrugging and facial grimacing;
- Vocal - Throat clearing, yelping and other noises, sniffing and tongue clicking.

Complex:

- Motor - Jumping, touching other people or things, smelling, twirling about and, although very rare, self-injurious actions including hitting or biting oneself;
- Vocal - Uttering ordinary words or phrases out of context, echolalia (repeating a sound, word or phrase just heard) and in rare cases, coprolalia (vocalizing socially unacceptable words). The range of tics or tic-like symptoms that can be seen in TS is enormous. The complexity of some symptoms often confuses family members, friends, teachers and employers who may find it hard to believe that the actions or vocal utterances are "involuntary".

Anxiety



TYPES OF ANXIETY DISORDERS

Children and teens can have more than one type of anxiety disorder at the same time. Some types of anxiety disorders are:

Separation Anxiety Disorder

Sometimes older children and teens become frightened of leaving their parent(s). They may worry that something bad might happen to their parent or to someone else they love. It is only a problem if there is no real reason for this worry. These young people may have a condition called Separation Anxiety Disorder.

Children with Separation Anxiety Disorder may refuse to go to school or they may be unable to go to sleep without a parent being present. They may have nightmares about being lost or kidnapped. They may also have physical symptoms like stomachaches, feeling sick to their stomach, or even throwing up out of fear. A diagnosis of separation anxiety is made if the behaviour has been present for at least four weeks and the behaviour results in real and ongoing social or school problems.

Generalized Anxiety Disorder (GAD)

This is a condition in which the child or adolescent has many worries and fears. They have physical symptoms like tense muscles, a restless feeling, becoming tired easily, having problems concentrating, or trouble sleeping. Children with this condition often try to do things perfectly. They also feel a need for approval.

Social Phobia

Social phobia is more likely to occur in teenagers than young children. It involves worrying about social situations, like having to go to school or having to speak in class. Symptoms may include sweating, blushing, or muscle tension.

People with this disorder usually try to control their symptoms by avoiding the situations they fear. Young people with social phobia are often overly sensitive to criticism and have trouble standing up for themselves. They can also suffer from low self-esteem, be easily embarrassed, and be very shy and self-conscious.

Phobias & Panic Disorders



What are phobias?

A phobia is an intense fear of a specific thing like an object, animal, or situation. Two common phobias include heights and dogs.

We all feel scared of certain things at times in our lives, but phobias are different. People change the way they live in order to avoid the feared object or situation. For example, many people feel nervous about flying, but they will still go on a plane if they need to. Someone who experiences a phobia around flying may not even go to an airport. Phobias can affect relationships, school, work or career opportunities, and daily activities.

What is panic disorder?

Panic disorder involves repeated and unexpected panic attacks. A panic attack is a feeling of intense fear or terror that lasts for a short period of time. It involves physical sensations like a racing heart, shortness of breath, chest pain, dizziness, shaking, sweating or nausea. Some people feel like they're having a heart attack or suffocating, or fear that they are dying. However, a panic attack goes away on its own.

Panic attacks can be a normal reaction to a stressful situation or a part of another mental illness. With panic disorder, panic attacks seem to happen for no reason. People who experience panic disorder fear more panic attacks and may worry that something bad will happen as a result of the panic attack. They may avoid places, sensations, or activities that remind them of a panic attack.

Some people avoid any situation where they can't escape or find help. They may avoid public places or even avoid leaving their home. This is called agoraphobia.

Obsessive Compulsive Disorder



Obsessive-compulsive disorder is a mental illness. It's made up of two parts: obsessions and compulsions. People may experience obsessions, compulsions, or both, and they cause a lot of distress.

Obsessions are unwanted and repetitive thoughts, urges, or images that don't go away. They cause a lot of anxiety. For example, someone might worry about making people they love sick by bringing in germs. Obsessions can focus on anything. These obsessive thoughts can be uncomfortable. Obsessions aren't thoughts that a person would normally focus on, and they are not about a person's character. They are symptoms of an illness.

Compulsions are actions meant to reduce anxiety caused by obsessions. Compulsions may be behaviours like washing, cleaning, or ordering things in a certain way. Other actions are not obvious to others. For example, some people may count things or repeat phrases in their mind. Some people describe it as feeling like they have to do something until it feels 'right.' It's important to understand that compulsions are a way to cope with obsessions. Someone who experiences OCD may experience distress if they can't complete the compulsion.

People who experience OCD usually know that obsessions and compulsions don't make sense, but they still feel like they can't control them. Obsessions and compulsions can also change over time.

Post-Traumatic Stress Disorder (PTSD)



PTSD is fairly rare in children. It usually involves a set of anxiety symptoms that begin after one or many episodes of serious emotional upset. The symptoms include jumpiness, muscle tension, being overly aware of one's surroundings (hypervigilance), nightmare and other sleep problems.

Children and young people with PTSD sometimes also report feeling like they are "re-living" the traumatic experience. These "flashbacks" often include vivid memories of the triggering event(s), which may involve physical, emotional or sexual abuse.

Depression



Depression is a type of mental illness called a mood disorder. Mood disorders affect the way you feel, which also affects the way you think and act. With depression, you may feel ‘down,’ hopeless, or find that you can’t enjoy things you used to like. Many people who experience depression feel irritable or angry. And some people say that they feel ‘numb’ all the time.

Recognizing depression in young people can be more difficult than recognizing depression in adults because young people experience so many changes. You may wonder what is ‘normal’ and what might be a problem. Also, many children and teens may not want to talk about their feelings, or may have their own explanation for their experiences. However, you may still notice the following changes.

- **Changes in feelings:** Your child may show signs of being unhappy, worried, guilty, angry, fearful, helpless, hopeless, lonely, or rejected.
- **Changes in physical health:** Your child may start to complain of headaches or general aches and pains that you can’t explain. They may feel tired all the time or have problems eating or sleeping. Your child may unexpectedly gain or lose weight.
- **Changes in thinking:** Your child may say things that indicate low self-esteem, self-dislike or self-blame—for example, they may only talk about themselves negatively. They may have a hard time concentrating. In some cases, they may show signs that they’re thinking about suicide.
- **Changes in behaviour:** Your child might withdraw from others, cry easily, or show less interest in sports, games, or other fun activities that they normally enjoy. They might over-react and have sudden outbursts of anger or tears over small incidents.

Some of these changes may be signs of mental health problems other than depression. It’s important to look at the bigger picture: how intense the changes are, how they impact your child’s life, and how long they last. It’s particularly important to talk to your child if you’ve noticed several changes lasting more than two weeks.