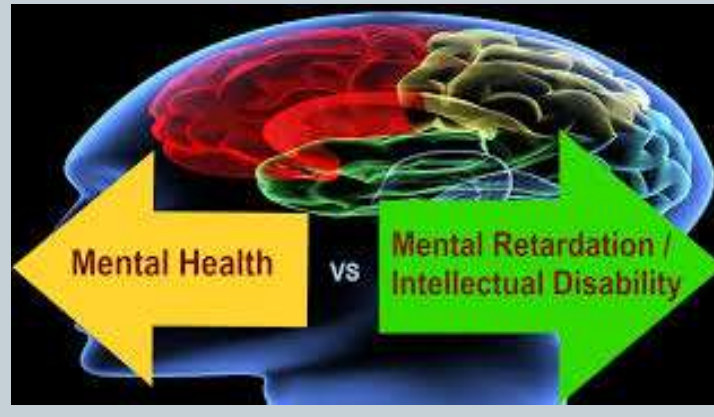


INTELLECTUAL DISABILITY



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DID YOU KNOW ?

MARCH
is
National Developmental
and Intellectual
Disabilities Awareness
Month

INTELLECTUAL DISABILITY



Definition of Intellectual Disability

Intellectual disability is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18. The following five assumptions are essential to the application of this definition.



Definition of Intellectual Disability



Intellectual disability is a disability characterized by significant limitations in both **intellectual functioning** and **inadaptive behavior**, which covers many everyday social and practical skills. This disability originates **before the age of 18**.

- Intellectual Functioning

Intellectual functioning—also called intelligence—refers to general mental capacity, such as learning, reasoning, problem solving, and so on.

- One way to measure intellectual functioning is an IQ test. Generally, an IQ test score of around 70 or as high as 75 indicates a limitation in intellectual functioning.

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Problems Learning and Functioning

- If a kid has an intellectual disability, it means that he or she learns and develops more slowly than other kids. At one time, intellectual disabilities were called "mental retardation," but that term is not used as much anymore because it hurts people's feelings.
- Someone who has an intellectual disability will have trouble learning and functioning in everyday life. This person could be 10 years old, but might not talk or write as well as a typical 10-year-old. He or she also is usually slower to learn other skills, like how to get dressed or how to act around other people.

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- But having an intellectual disability doesn't mean a person can't learn. Ask anyone who knows and loves a person with an intellectual disability! Some kids with [autism](#), [Down syndrome](#), or [cerebral palsy](#) may be described as having an intellectual disability, yet they often have a great capacity to learn and become quite capable kids.
- Just like other health problems, an intellectual disability can be mild (smaller) or major (bigger). The bigger the disability, the more trouble someone will have learning and becoming an independent person.

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- Adaptive Behavior

Adaptive behavior is the collection of conceptual, social, and practical skills that are learned and performed by people in their everyday lives.

- Conceptual skills—language and literacy; money, time, and number concepts; and self-direction.
- Social skills—interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules/obey laws and to avoid being victimized.
- Practical skills—activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of the telephone.

What are the signs of intellectual disability in children?



- There are many different signs of intellectual disability in children. Signs may appear during infancy, or they may not be noticeable until a child reaches school age. It often depends on the severity of the disability. Some of the most common signs of intellectual disability are:
- Rolling over, sitting up, crawling, or walking late
- Talking late or having trouble with talking
- Slow to master things like [potty training](#), dressing, and feeding himself or herself
- Difficulty remembering things
- Inability to connect actions with consequences
- Behavior problems such as explosive tantrums
- Difficulty with problem-solving or logical thinking



Types of Intellectual Disabilities



1. Mental Retardation

Mental retardation is a developmental disability that first appears in children under the age of 18. It is defined as an intellectual functioning level (as measured by standard tests for intelligence quotient) that is well below average and significant limitations in daily living skills (adaptive functioning).



Four different degrees of mental retardation



1. Mild mental retardation

Approximately 85% of the mentally retarded population is in the mildly retarded category. Their IQ score ranges from 50-75, and they can often acquire academic skills up to the 6th grade level. They can become fairly self-sufficient and in some cases live independently, with community and social support.

2. Moderate mental retardation

- About 10% of the mentally retarded population is considered moderately retarded. Moderately retarded individuals have IQ scores ranging from 35-55. They can carry out work and self-care tasks with moderate supervision. They typically acquire communication skills in childhood and are able to live and function successfully within the community in a supervised environment such as a group home.

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3. Severe mental retardation

About 34% of the mentally retarded population is severely retarded. Severely retarded individuals have IQ scores of 20-40. They may master very basic self-care skills and some communication skills. Many severely retarded individuals are able to live in a group home.

4. Profound mental retardation

Only 12% of the mentally retarded population is classified as profoundly retarded. Profoundly retarded individuals have IQ scores under 20-25. They may be able to develop basic self-care and communication skills with appropriate support and training. Their retardation is often caused by an accompanying neurological disorder. The profoundly retarded need a high level of structure and supervision.

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2. Learning disability

A learning disability is a reduced intellectual ability and difficulty with everyday activities – for example household tasks, socialising or managing money – which affects someone for their whole life.

* **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.

What is a Learning Disability?



- A learning disability is a neurological disorder. In simple terms, a learning disability results from a difference in the way a person's brain is "wired." Children with learning disabilities are as smart or smarter than their peers. But they may have difficulty reading, writing, spelling, reasoning, recalling and/or organizing information if left to figure things out by themselves or if taught in conventional ways.
- A learning disability can't be cured or fixed; it is a lifelong issue. With the right support and intervention, however, children with learning disabilities can succeed in school and go on to successful, often distinguished careers later in life.
- Parents can help children with learning disabilities achieve such success by encouraging their strengths, knowing their weaknesses, understanding the educational system, working with professionals and learning about strategies for dealing with specific difficulties.

Learning disabilities



Learning Disability

- Is a classification including several disorders in which a person has difficulty learning in a typical manner, usually caused by an unknown factor or factors.
- The unknown factor is the disorder that affects the brain's ability to receive and process information.

Learning disabilities are neurologically-based processing problems. These processing problems can interfere with learning basic skills such as reading, writing and/or math. They can also interfere with higher level skills such as organization, time planning, abstract reasoning, long or short term memory and attention. It is important to realize that learning disabilities can affect an individual's life beyond academics and can impact relationships with family, friends and in the workplace.



Common learning disabilities



- [Dyslexia](#) – a language-based disability in which a person has trouble understanding written words. It may also be referred to as reading disability or reading disorder.
- [Dyscalculia](#) – a mathematical disability in which a person has a difficult time solving arithmetic problems and grasping math concepts.
- [Dysgraphia](#) – a writing disability in which a person finds it hard to form letters or write within a defined space.
- [Auditory and Visual Processing Disorders](#) – sensory disabilities in which a person has difficulty understanding language despite normal hearing and vision.
- [Nonverbal Learning Disabilities](#) – a neurological disorder which originates in the right hemisphere of the brain, causing problems with visual-spatial, intuitive, organizational, evaluative and holistic processing functions.

Specific Learning Disabilities



1. Auditory Processing Disorder (APD)

Also known as Central Auditory Processing Disorder, this is a condition that adversely affects how sound that travels unimpeded through the ear is processed or interpreted by the brain. Individuals with APD do not recognize subtle differences between sounds in words, even when the sounds are loud and clear enough to be heard. They can also find it difficult to tell where sounds are coming from, to make sense of the order of sounds, or to block out competing background noises.



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Signs and Symptoms

- Has difficulty processing and remembering language-related tasks but may have no trouble interpreting or recalling non-verbal environmental sounds, music, etc.
- May process thoughts and ideas slowly and have difficulty explaining them
- Misspells and mispronounces similar-sounding words or omits syllables; confuses similar-sounding words (celery/salary; belt/built; three/free; jab/job; bash/batch)
- May be confused by figurative language (metaphor, similes) or misunderstand puns and jokes; interprets words too literally
- Often is distracted by background sounds/noises
- Finds it difficult to stay focused on or remember a verbal presentation or lecture
- May misinterpret or have difficulty remembering oral directions; difficulty following directions in a series
- Has difficulty comprehending complex sentence structure or rapid speech
- “Ignores” people, especially if engrossed
- Says “What?” a lot, even when has heard much of what was said

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Strategies

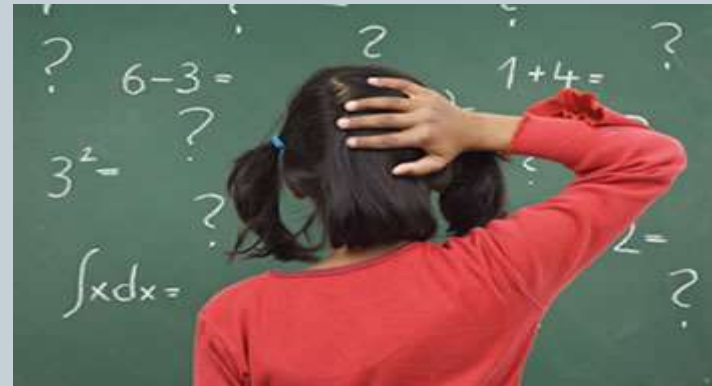
- Show rather than explain
- Supplement with more intact senses (use visual cues, signals, handouts, manipulatives)
- Reduce or space directions, give cues such as “ready?”
- Reword or help decipher confusing oral and/or written directions
- Teach abstract vocabulary, word roots, synonyms/antonyms
- Vary pitch and tone of voice, alter pace, stress key words
- Ask specific questions as you teach to find out if they do understand
- Allow them 5-6 seconds to respond (“think time”)
- Have the student constantly verbalize concepts, vocabulary words, rules, etc.

Contd..



2. Dyscalculia

A specific learning disability that affects a person's ability to understand numbers and learn math facts. Individuals with this type of LD may also have poor comprehension of math symbols, may struggle with memorizing and organizing numbers, have difficulty telling time, or have trouble with counting.



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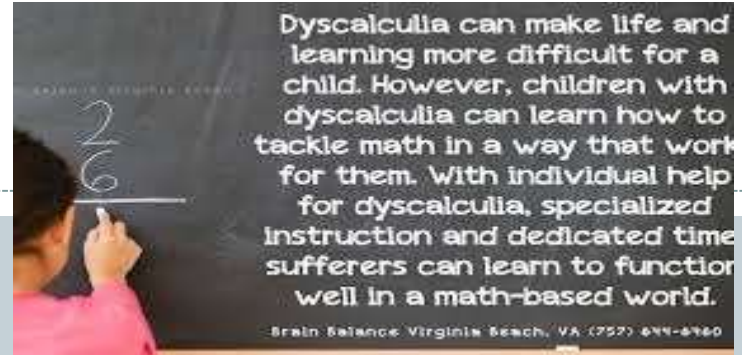
1+1=3

IT'S OKAY
I HAVE
DYSCALCULIA

Signs and Symptoms

- Shows difficulty understanding concepts of place value, and quantity, number lines, positive and negative value, carrying and borrowing
- Has difficulty understanding and doing word problems
- Has difficulty sequencing information or events
- Exhibits difficulty using steps involved in math operations
- Shows difficulty understanding fractions
- Is challenged making change and handling money
- Displays difficulty recognizing patterns when adding, subtracting, multiplying, or dividing
- Has difficulty putting language to math processes
- Has difficulty understanding concepts related to time such as days, weeks, months, seasons, quarters, etc.
- Exhibits difficulty organizing problems on the page, keeping numbers lined up, following through on long division problems

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Strategies

- Allow use of fingers and scratch paper
- Use diagrams and draw math concepts
- Provide peer assistance
- Suggest use of graph paper
- Suggest use of colored pencils to differentiate problems
- Work with manipulatives
- Draw pictures of word problems
- Use mnemonic devices to learn steps of a math concept
- Use rhythm and music to teach math facts and to set steps to a beat
- Schedule computer time for the student for drill and practice

Contd..



3. Dysgraphia

A specific learning disability that affects a person's handwriting ability and fine motor skills. Problems may include illegible handwriting, inconsistent spacing, poor spatial planning on paper, poor spelling, and difficulty composing writing as well as thinking and writing at the same time.



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Signs and Symptoms

- May have illegible printing and cursive writing (despite appropriate time and attention given the task)
- Shows inconsistencies: mixtures of print and cursive, upper and lower case, or irregular sizes, shapes or slant of letters
- Has unfinished words or letters, omitted words
- Inconsistent spacing between words and letters
- Exhibits strange wrist, body or paper position
- Has difficulty pre-visualizing letter formation
- Copying or writing is slow or labored
- Shows poor spatial planning on paper
- Has cramped or unusual grip/may complain of sore hand
- Has great difficulty thinking and writing at the same time (taking notes, creative writing.)



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Strategies

- Suggest use of word processor
- Avoid chastising student for sloppy, careless work
- Use oral exams
- Allow use of tape recorder for lectures
- Allow the use of a note taker
- Provide notes or outlines to reduce the amount of writing required
- Reduce copying aspects of work (pre-printed math problems)
- Allow use of wide rule paper and graph paper
- Suggest use of pencil grips and /or specially designed writing aids
- Provide alternatives to written assignments (video-taped reports, audio-taped reports)

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4.Dyslexia

A specific learning disability that affects reading and related language-based processing skills. The severity can differ in each individual but can affect reading fluency, decoding, reading comprehension, recall, writing, spelling, and sometimes speech and can exist along with other related disorders. Dyslexia is sometimes referred to as a Language-Based Learning Disability.



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Signs and Symptoms

- Reads slowly and painfully
- Experiences decoding errors, especially with the order of letters
- Shows wide disparity between listening comprehension and reading comprehension of some text
- Has trouble with spelling
- May have difficulty with handwriting
- Exhibits difficulty recalling known words
- Has difficulty with written language
- May experience difficulty with math computations
- Decoding real words is better than nonsense words
- Substitutes one small sight word for another: a, I, he, the, there, was



Contd..



Strategies

- Provide a quiet area for activities like reading, answering comprehension questions
- Use books on tape
- Use books with large print and big spaces between lines
- Provide a copy of lecture notes
- Don't count spelling on history, science or other similar tests
- Allow alternative forms for book reports
- Allow the use of a laptop or other computer for in-class essays
- Use multi-sensory teaching methods
- Teach students to use logic rather than rote memory
- Present material in small units

Contd..



5. Non-Verbal Learning Disabilities

A disorder which is usually characterized by a significant discrepancy between higher verbal skills and weaker motor, visual-spatial and social skills. Typically, an individual with NLD (or NVLD) has trouble interpreting nonverbal cues like facial expressions or body language, and may have poor coordination.



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Signs and Symptoms

- Has trouble recognizing nonverbal cues such as facial expression or body language
- Shows poor psycho-motor coordination; clumsy; seems to be constantly “getting in the way,” bumping into people and objects
- Using fine motor skills a challenge: tying shoes, writing, using scissors
- Needs to verbally label everything that happens to comprehend circumstances, spatial orientation, directional concepts and coordination; often lost or tardy
- Has difficulty coping with changes in routing and transitions
- Has difficulty generalizing previously learned information
- Has difficulty following multi-step instructions
- Make very literal translations
- Asks too many questions, may be repetitive and inappropriately interrupt the flow of a lesson
- Imparts the “illusion of competence” because of the student’s strong verbal skills

Contd.



Strategies

- Rehearse getting from place to place
- Minimize transitions and give several verbal cues before transition
- Avoid assuming the student will automatically generalize instructions or concepts
- Verbally point out similarities, differences and connections; number and present instructions in sequence; simplify and break down abstract concepts, explain metaphors, nuances and multiple meanings in reading material
- Answer the student's questions when possible, but let them know a specific number (three vs. a few) and that you can answer three more at recess, or after school
- Allow the child to abstain from participating in activities at signs of overload
- Thoroughly prepare the child in advance for field trips, or other changes, regardless of how minimal
- Implement a modified schedule or creative programming
- Never assume child understands something because he or she can "parrot back" what you've just said
- Offer added verbal explanations when the child seems lost or registers confusion

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6. Visual Perceptual/Visual Motor Deficit

A disorder that affects the understanding of information that a person sees, or the ability to draw or copy. A characteristic seen in people with learning disabilities such as Dysgraphia or Non-verbal LD, it can result in missing subtle differences in shapes or printed letters, losing place frequently, struggles with cutting, holding pencil too tightly, or poor eye/hand coordination.



Contd..



Signs and Symptoms

- May have reversals: b for d, p for q or inversions: u for n, w for m
- Has difficulty negotiating around campus
- Complains eyes hurt and itch, rubs eyes, complains print blurs while reading
- Turns head when reading across page or holds paper at odd angles
- Closes one eye while working, may yawn while reading
- Cannot copy accurately
- Loses place frequently
- Does not recognize an object/word if only part of it is shown
- Holds pencil too tightly; often breaks pencil point/crayons
- Struggles to cut or paste
- Misaligns letters; may have messy papers, which can include letters colliding, irregular spacing, letters not on line

Contd..



Strategies

- Avoid grading handwriting
- Allow students to dictate creative stories
- Provide alternative for written assignments
- Suggest use of pencil grips and specially designed pencils and pens
- Allow use of computer or word processor
- Restrict copying tasks
- Provide tracking tools: ruler, text windows
- Use large print books
- Plan to order or check out books on tape
- Experiment with different paper types: pastels, graph, embossed raised line paper

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7. Dyspraxia

A disorder that is characterized by difficulty in muscle control, which causes problems with movement and coordination, language and speech, and can affect learning. Although not a learning disability, dyspraxia often exists along with dyslexia, dyscalculia or ADHD.



What Is Autism? What is Autism Spectrum Disorder?



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.



What is autism?



- Autism is a lifelong developmental disability that affects how people perceive the world and interact with others.
- Autistic people see, hear and feel the world differently to other people. If you are autistic, you are autistic for life; autism is not an illness or disease and cannot be '[cured](#)'. Often people feel being autistic is a fundamental aspect of their identity.
- Autism is a spectrum condition. All autistic people share certain difficulties, but being autistic will affect them in different ways. Some autistic people also have [learning disabilities](#), [mental health issues](#) or [other conditions](#), meaning people need different levels of support. All people on the autism spectrum learn and develop. With the right sort of support, all can be helped to live a more fulfilling life of their own choosing.

What is autism?



- [Autism](#) is a lifelong, developmental disability that affects how a person communicates with and relates to other people, and how they experience the world around them.
- This section explains some of the different names for autism and [related conditions](#), and provides information about [gender](#), discussions about [causes](#) and current [research](#).



How autism is diagnosed



- The characteristics of autism vary from one person to another, but in order for a diagnosis to be made, a person will usually be assessed as having had persistent difficulties with social communication and social interaction and restricted and repetitive patterns of behaviours, activities or interests since early childhood, to the extent that these "limit and impair everyday functioning".

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Social communication

- Autistic people have difficulties with interpreting both verbal and non-verbal language like gestures or tone of voice. Many have a very literal understanding of language, and think people always mean exactly what they say. They may find it difficult to use or understand:
- facial expressions
- tone of voice
- jokes and sarcasm.
- Some may not speak, or have fairly limited speech. They will often understand more of what other people say to them than they are able to express, yet may struggle with vagueness or abstract concepts. Some autistic people benefit from using, or prefer to use, alternative means of communication, such as sign language or [visual symbols](#). Some are able to communicate very effectively without speech.

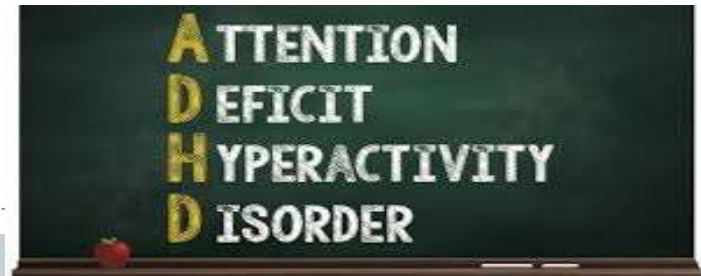
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Social interaction

- Autistic people often have difficulty 'reading' other people - recognising or understanding others' feelings and intentions - and expressing their own emotions. This can make it very hard for them to navigate the social world. They may:
- appear to be insensitive
- seek out time alone when overloaded by other people
- not seek comfort from other people
- appear to behave 'strangely' or in a way thought to be socially inappropriate.
- Autistic people may find it hard to form friendships. Some may want to interact with other people and make friends, but may be unsure how to go about it.

ADHD



Affects focus, attention and behavior and can make learning challenging

- A disorder that includes difficulty staying focused and paying attention, difficulty controlling behavior and hyperactivity. Although ADHD is not considered a learning disability, research indicates that from 30-50 percent of children with ADHD also have a specific learning disability, and that the two conditions can interact to make learning extremely challenging.



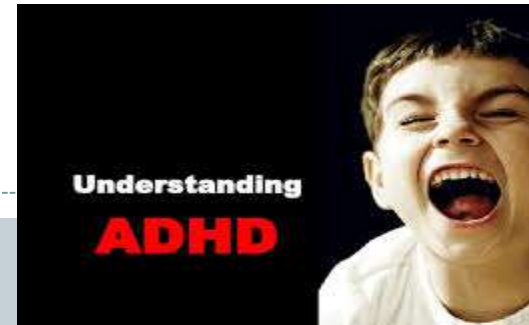
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Signs and Symptoms

- Exhibits poor balance; may appear clumsy; may frequently stumble
- Shows difficulty with motor planning
- Demonstrates inability to coordinate both sides of the body
- Has poor hand-eye coordination
- Exhibits weakness in the ability to organize self and belongings
- Shows possible sensitivity to touch
- May be distressed by loud noises or constant noises like the ticking of a clock or someone tapping a pencil
- May break things or choose toys that do not require skilled manipulation
- Has difficulty with fine motor tasks such as coloring between the lines, putting puzzles together; cutting accurately or pasting neatly
- Irritated by scratchy, rough, tight or heavy clothing

Contd..



Strategies

- Pre-set students for touch with verbal prompts, “I’m going to touch your right hand.”
- Avoid touching from behind or getting too close and make sure peers are aware of this
- Provide a quiet place, without auditory or visual distractions, for testing, silent reading or work that requires great concentration
- Warn the student when bells will ring or if a fire drill is scheduled
- Whisper when working one to one with the child
- Allow parents to provide earplugs or sterile waxes for noisy events such as assemblies
- Make sure the parent knows about what is observed about the student in the classroom
- Refer student for occupational therapy or sensory integration training
- Be cognizant of light and light sources that may be irritating to child
- Use manipulatives, but make sure they are in students field of vision and don’t force student to touch them

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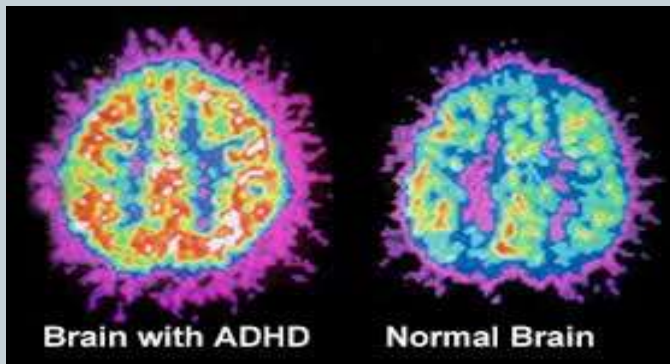
- Attention Deficit Hyperactivity Disorder is a condition that becomes apparent in some children in the preschool and early school years. It is hard for these children to control their behavior and/or pay attention. It is estimated that between 3 and 5 percent of children have attention deficit hyperactivity disorder (ADHD), or approximately 2 million children in the United States. This means that in a classroom of 24 to 30 children, it is likely that at least one will have ADHD.
- ADHD is not considered to be a learning disability. It can be determined to be a disability under the Individuals with Disabilities Education Act (IDEA), making a student eligible to receive special education services. However, ADHD falls under the category “Other Health Impaired” and not under “Specific Learning Disabilities.”

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- The principle characteristics of ADHD are inattention, hyperactivity, and impulsivity. There are three subtypes of ADHD recognized by professionals. These are the predominantly hyperactive/impulsive type (that does not show significant inattention); The predominantly inattentive type (that does not show significant hyperactive-impulsive behavior) sometimes called ADD; and the combined type (that displays both inattentive and hyperactive-impulsive symptoms).
- Other disorders that sometimes accompany ADHD are Tourette Syndrome (affecting a very small proportion of people with ADHD); oppositional defiant disorder (affecting as many as one-third to one-half of all children with ADHD); conduct disorder (about 20 to 40% of ADHD children); anxiety and depression; and bipolar disorder.

THANKS



ADDITUDE

Strategies and Support for ADHD & LD