

Learning Disabilities: Definitions, Evaluation, and Treatment

Learning disabilities (LD) are very common problems that affect a large number of individuals within the general population. Definitions of "LD" primarily serve the purpose of classifying children for educational reasons, such as for alternative classroom placement and program modifications. There is no one absolute definition of "LD." Learning disability is a generic term, while definitions of "LD" can vary from place to place and can change over time.

Many definitions of LD require the individual to demonstrate a discrepancy between IQ Level and academic achievement. However, many neuropsychological disorders that contribute to reading and other spelling problems are not always associated with IQ-achievement discrepancies. It often takes several years for an IQ-academic achievement difference to emerge. This delays diagnosis and intervention, despite observations that the child does not seem to be learning according to expectation. Similarly, some learning disabilities actually present with deficient social skills, and with specific academic problems usually in arithmetic. These children are often very disorganized as well. Traditional academic definitions of LD often do not easily apply to this group of children.

Therefore, it needs to be understood that learning disabilities are not all the same. Learning problems can nevertheless be described, diagnosed, and treated in specific ways. Some of the types of learning disability include the following:

Reading Disorders

This group of problems is often referred to as **dyslexia**. One type of dyslexia can be observed when a child is first learning how to read. These children have weaknesses in perceiving, identifying, and remembering letters. The letter "b" can be confused with "d," the letters "g," "p," and "q" can also be confused with each other, etc., while these letter reversals result in difficulties in learning a sight vocabulary.

A second type of dyslexia can be defined as a difficulty in mastering phonics. Children with this type of problem have difficulty in associating written symbols with their sounds, resulting in a disability for developing word decoding skills. It is important to correctly identify these patterns of dyslexia since the ways of treating these two problems are very different.

Spelling Disorder

Every child with a reading problem also has a spelling problem. However, specific spelling disorder can occur in children who have never experienced a reading problem. Individuals with this difficulty are usually able to spell phonetically, by making words "look" the way they "sound," although they are unable to spell correctly. This type of problem also has its own remediation.

Mathematics Disorder

In this problem, arithmetic ability is very much below expectation as measured by standardized tests. Individuals with this type of difficulty often demonstrate poor social skills, and are often described as odd, clumsy, and socially inept. This range of problems often correlates because many of the same non-verbal thinking skills necessary for math are required to understand the non-verbal features of social interactions as well.

"Executive Function" Disorders

Individuals with these types of problems often have difficulties in planning, in self-monitoring progress towards goals, and in demonstrating non-specific learning difficulties. These types of children are often termed "inattentive," "impulsive," and "disorganized" when described by parents and teachers. Specific remediation techniques include medications coupled with cognitive and behavior modification treatment strategies.

Assessment of Learning Disabilities

While an educational assessment often focuses upon academic achievement levels, a neuropsychological assessment identifies brain-behavior deficiencies that cause or contribute to learning and/or behavioral problems. This type of examination covers a broad range of abilities such as attention, learning, memory, receptive and expressive language, psychomotor and visual-perceptual functions, as well as verbal and non-verbal problem-solving. Academic screening measures are often included. These procedures aid in identifying specific patterns of brain related strengths and weaknesses to assist in remediation planning.

FREQUENTLY ASKED QUESTIONS

How does a neuropsychological evaluation differ from a learning disability assessment done at school?

Learning disability assessments usually focus upon measuring IQ-academic achievement discrepancies. If attention is assessed, it is usually done by having an observer fill out a behavior rating scale. All of this provides information about comparing a student to his/her peers for identifying problems. A neuropsychological evaluation is an interactive assessment that uses standardized procedures to understand the process of how and why an individual behaves, struggles, or fails. The focus is upon understanding the reasons for the problem. The results should be linked to interventions, which may or may not be school based.

Are all problems with attention the same?

Absolutely not. Attention is not just one ability or skill. Attention is comprised of a group of cognitive processes. The amount of information a person can register or "take in" at one time, the length of time a person can engage in an activity or task, the quickness with which a situation can be understood, and appropriately shifting the focus of attention from one thing to another are a few of the abilities that combine to make "attention." Therefore, there are different kinds of problems with attention, dependent upon which component parts are affected. The management and treatment of these problems differs accordingly.

Is a problem with attention the same thing as an attention deficit disorder?

No. Attention deficit disorder (ADD) is a condition that is defined by a person's behavior. An important aspect of the diagnosis includes having observers rate an individual according to certain behaviors. Rating scales or checklists are often used to make these observations. A problem with attention can be quite different. This might concern a problem in initially registering information, a problem with "forgetfulness," a problem with concentration or distractibility, or a problem in adjusting to the flow of situations, just to mention a few examples. While these kinds of problems can be very impairing, people with these kinds of difficulties may or may not show the behaviors that meet the criteria for attention deficit disorder. Problems with attention are evaluated through a neuropsychological assessment

Courtesy of Leonard F. Koziol, Psy.D. (www.hostzone.com/koziol)