

Understanding ADHD and



DYSLEXIA

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DID YOU KNOW that some people who have attention disorders can also exhibit a reading disorder such as dyslexia? It is reported that approximately thirty percent of people with dyslexia also have one type of attention disorder. Dyslexia is a reading disorder that is language based. That is, the same centers in the brain that are responsible for language abilities are the ones affected for reading problems such as dyslexia.

Characteristics of dyslexia

Processing and manipulating sounds within words, which is a basic skill needed for successful reading, can be challenging for dyslexics. For example, they have trouble knowing that the word *trip* has four sounds: /t/ /r/ /i/ /p/. They may also have difficulty changing sounds within words. One example might be: Say the word *mat*. Change the sound /m/ to /b/. The word is *bat*. This skill is referred to as phonological awareness.

Reading words accurately is another challenge for dyslexics. This is related to their difficulty understanding the letter-to-sound correspondences in an alphabetic language. This decreases their ability to read fluently. In turn, if someone cannot read accurately or fluently, this can affect their reading comprehension, which is their ability to understand what they have read.

Spelling words correctly, which is related to processing sounds, understanding the letter-to-sound correspondences, and spelling rules is another characteristic of dyslexia. Spelling is important, as it lays the foundation for good writing. Some dyslexics may also have difficulty with handwriting, which inhibits their written language.

Therefore, dyslexia is a language-based disorder and is not a visual problem. Persons with dyslexia do not see letters backwards.

Their eye movements are normal. However, when they read they may appear to have abnormal eye movement, which is more a result of their reading difficulties and not the cause of their reading problem.

Characteristics of attention disorders

Individuals with an attention disorder have difficulties with some or all of the following skills or symptoms.

Sustaining attention and concentration are common deficits in people with ADHD. They experience problems with the regulation of attention rather than an inability to pay attention. That is, individuals with ADHD struggle to pay attention to the right thing, at the right time, for as long as is needed and as in-depth as required. The problem is not that they can't pay attention; they have difficulty regulating it.

A person that is inattentive may not be an efficient worker because they often get distracted. They make careless mistakes as they may not read all the instructions or pay attention to details, such as the function symbol in a math problem.

Due to their distractibility, inattentive persons may not always do as they were told, may not complete their work, or leave many projects unfinished as they start new ones. They may also be less attuned to subtle details. This may impact their reading. For example,

reading comprehension may be affected when they are distracted or their mind wanders, because the focus shifts from what they are reading to daydreaming.

Attention is also critical when a person is first learning to read or when trying to decode (sound out) an unfamiliar word. Dyslexics have trouble sounding out words, but it is not due to inattention. It is more related to difficulty understanding the letter-to-sound correspondences.

Controlling impulsive behaviors is another symptom that affects many people with ADHD. Impulsivity is defined as the inability to sustain inhibition; that is, the ability to stop and wait. This is often referred to as reflection, which we define as the space between thought and action. Individuals who have the combined or predominantly hyperactive/impulsive types of ADHD have problems stopping to think about the consequences of their actions or to formulate a plan. They often don't stop to consider the rules that may apply to a particular situation or to reflect on past experiences. Writing a report can take a long time for them, due to poor planning. People with dyslexia have trouble writing, but it is more related to their difficulty with spelling, handwriting, and sequencing of words rather than primarily planning abilities.

Individuals with ADHD may also interrupt conversations or struggle to wait for their turn. Providing the first response that comes to mind without considering the details of the questions can lead to careless mistakes. Sitting still and controlling hyperactivity are also frequently seen in individuals with ADHD.

These symptoms present in three typical forms: overactivity, fidgetiness, and excessive talking. When someone frequently gets up from his seat or talks, he is engaging in activities that prevent him from doing the assigned task. Once again, work productivity suffers. These are also disruptive behaviors that can interfere with the work of others.

ADHD and dyslexia can coexist

Dyslexia and ADHD are two distinct disorders; however, they can co-exist. It is important to determine if a child's reading problem is more than inattention or unwillingness to read.

A comprehensive evaluation should be recommended if a student is exhibiting difficulties with reading.

The evaluation should include a test of phonological awareness; that is, a test which measures if the student can process and manipulate sounds within words. The reading test should be standardized and include reading real and nonsense words. Many dyslexics memorize words, so a test of nonsense words will determine if they can actually use their knowledge of letters and sounds to read new and unfamiliar words. The evaluation should also include a test that measures their ability to read fluently and one that measures their ability to understand what they have read, which is known as reading comprehension.

It is important that the reading tests not only measure the ability to read words but also sentences and paragraphs. The compre-

hensive evaluation should also include tests of written language. This would include the ability to spell sounds and spell words. The ability to construct grammatically correct sentences and paragraphs is an essential component of written language. Special consideration for handwriting can be reviewed as well, since many dyslexics exhibit difficulty with writing legibly.

Given how often ADHD and dyslexia coexist, it is important that screening for ADHD is included in a comprehensive evaluation of a person with reading problems. If an individual exhibits dyslexia, then it is important that they receive a Structured Literacy approach for intervention; that is, an evidence-based approach which will address phonological awareness in addition to learning the sounds and the symbols that represent those sounds for reading, as well as for spelling and writing. In addition, work on semantics or word meanings and word parts is necessary for understanding the text and should be included during literacy instruction.

The Structured Literacy approach should be delivered in an explicit, systematic, sequential and cumulative manner using a variety of learning styles. Students with dyslexia need routines and need to learn the rules for reading, spelling, and writing. The intervention should be delivered by an educator who has specialized training for dyslexia intervention.

The International Dyslexia Association is in the process of accrediting universities that include Structured Literacy as an instructional reading approach for their teacher training programs. In the future, parents and school administrators will be able to find teachers who are certified in Structured Literacy and can provide high quality reading instruction for students with dyslexia.

Students with dyslexia can improve their reading, spelling, and writing skills when provided the right kind of intervention at an early age. As students improve their reading skills, their willingness to read may also improve. Because attention problems can have an impact on reading accuracy and comprehension, it is important that appropriate management of ADHD is provided. Medical management in conjunction with educational interventions for ADHD can have a positive impact on reading remediation. 🗣️

To learn more about dyslexia read the fact sheets on the website of the International Dyslexia Association (www.interdys.org).

For more information on ADHD and dyslexia, see eida.org/attention-deficithyperactivity-disorder-adhd-and-dyslexia/.

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