

ADDITUDE *Inside the ADHD mind*

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DYSGRAPHIA

What Is Dysgraphia?

Dysgraphia is a brain-based learning disability that affects writing. As with all learning disorders, dysgraphia is common among individuals with ADHD. Learn more about dysgraphia signs & symptoms, diagnosis, and treatment here.

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What is Dysgraphia?

Dysgraphia is a neurological disorder of written expression that impairs writing ability and fine motor skills. It is a learning disability that affects children and adults, and interferes with practically all aspects of the writing process, including spelling, legibility, word spacing and sizing, and expression.

It's estimated that 5 to 20 percent of all children have some type of writing deficit like dysgraphia.¹ Dysgraphia and other learning disorders, like dyslexia and dyscalculia, are common in children with attention deficit hyperactivity disorder (ADHD or ADD); Up to half of children with ADHD in the U.S. have a learning disorder.^{2 3}

Dysgraphia Symptoms

Dysgraphia is typically identified as a child learns to write. However a disorder of written expression may remain unrecognized through the early school years as a child's writing ability continues to develop; dysgraphia may remain undiagnosed until adulthood.⁴

According to the National Center for Learning Disabilities (NCLD)⁵, symptoms of dysgraphia include:

- Trouble forming letters shapes
- Tight, awkward, or painful grip on a pencil
- Difficulty following a line or staying within margins
- Trouble with sentence structure or following rules of grammar when writing, but not when speaking
- Difficulty organizing or articulating thoughts on paper
- Pronounced difference between spoken and written understanding of a topic

Dysgraphia symptoms typically change over time. Children with dysgraphia generally have trouble with the mechanics of writing and exhibit other fine-motor impairments, while dysgraphia in adolescents and adults manifests as difficulties with grammar, syntax, comprehension, and generally putting thoughts on paper.⁴

[\[Could Your Child Have Dysgraphia? Take This Test\]](#)

[\[Take This Dysgraphia Symptom Test for Adults\]](#)

Is Dysgraphia a Form of Dyslexia?

Dysgraphia is associated with writing difficulties, whereas [dyslexia](#) is associated with reading difficulties. Both [learning disorders](#) share some symptoms, like difficulty with spelling, that may complicate a diagnosis. It is possible for an individual to have both dysgraphia and dyslexia⁶ (see “Dysgraphia Diagnosis” below for more information on learning disorders).

What Causes Dysgraphia?

Dysgraphia is commonly thought of in the following two ways.⁴

Acquired dysgraphia is associated with brain injury, disease, or degenerative conditions that cause the individual (typically as an adult) to lose previously acquired skills in writing.

Developmental dysgraphia refers to difficulties in acquiring writing skills. This type of dysgraphia is most commonly considered in childhood. The causes for developmental dysgraphia are unknown, but researchers have identified several subtypes⁴ that correspond to certain neurological mechanisms:

- **Motor dysgraphia:** Lack of fine-motor coordination and visual perception have long been tied to dysgraphia and may explain difficulties with producing written text. Individuals with motor dysgraphia typically exhibit illegible and slow handwriting, poor drawing and tracing skills, and slow finger-tapping (a common measure of fine motor skills).
- **Spatial dysgraphia** is likely related to problems of spatial perception, which affects letter spacing and drawing ability. Individuals with spatial dysgraphia struggle with handwriting and drawing, however spelling and finger-tapping speed are typically normal.
- **Linguistic dysgraphia** impacts the language processing skills required in the writing process. It most strongly affects spontaneously written text (which hasn't been traced or copied), which is often illegible. Drawing, copying, and oral spelling are not affected by linguistic dysgraphia.

[\[Read: What Does Dysgraphia Look Like in Children?\]](#)

Dysgraphia Diagnosis

The term “dysgraphia” is not recognized by the American Psychological Association (APA) in its Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5)⁷. Instead, the DSM-5 lists problems in writing (as well as in reading and math) under the “specific learning disorder” (SLD) diagnosis category. The category also includes the specifier, “SLD with impairment in written expression,” which is most closely aligned with common notions of dysgraphia.

To merit an SLD diagnosis, an individual must meet these four criteria:

- Exhibit at least one of six outlined symptoms related to difficulties with learning and using academic skills for at least six months. Difficulty with written expression is included in the list.
- Exhibit academic skills that are substantially below what is expected for the individual's age, and cause problems in school, work, or everyday activities.
- The difficulties started during school-age, even if problems only become acute in adulthood.

- Other conditions and factors are ruled out, including intellectual disability, vision problems, and lack of instruction.

SLD with impairment in written expression is diagnosed when an individual exhibits deficits in subskills that include spelling and grammar accuracy, and clarity or organization of written expression.

Dysgraphia is typically diagnosed by a licensed psychologist who specializes in learning disorders, though it may involve a team of specialists, including occupational therapists, special education teachers, and educational psychologists.⁴

The team can use a variety of tools to determine a diagnosis, including:

- School reports
- Psychoeducational measures
- Review of the individual's developmental, medical, and familial history
- Standardized writing assessments

Tests for dysgraphia typically include a writing component — copying out sentences or answering brief essay questions — as well as a fine-motor component that tests the individual's reflexes and motor speed. The diagnosing specialist works to get a sense of both the quality of the writing — how well does the patient organize thoughts and convey ideas — and the physical act of writing itself. Does writing hurt? Are letters formed correctly?

Why Is a Dysgraphia Diagnosis Critical?

Even in the digital age, handwriting is an important skill necessary for success in the classroom and beyond. With dysgraphia, the mechanics of writing and other foundational writing skills are difficult, making a student more likely to fall behind peers without the learning disorder. Writing problems are also associated with persistent academic struggles and low self-perception, which can persist to adulthood.⁴

What's more, the act of writing often helps the brain remember, organize, and process information. When the physical act of writing is incredibly challenging, a child can't effectively "show what they knows." A student with dysgraphia may fail an exam simply because they can't translate his thoughts and answers to paper.

Dysgraphia Treatment

Dysgraphia and other learning disorders are lifelong conditions that have no cure. Treatment for dysgraphia focuses on interventions, accommodations, and special services to circumvent writing-related tasks and/or improve writing abilities. Given the nature of dysgraphia, attempts at remediation and "more practice" alone are not enough – accommodations and other modifications are necessary to successfully manage the condition.⁸

Under the Individuals with Disabilities Education Act ([IDEA](#)), students with learning disorders like dysgraphia are eligible for special services in the classroom. Adults with dysgraphia can implement several fixes in the workplace on their own, or after communicating with management.

Dysgraphia Accommodations in School and at Work

- Utilizing larger pencils with special grips, or other writing instruments
- Using paper with raised lines to help with margins
- Permitting or asking for extra time on writing-related assignments and tasks
- Allowing alternative methods to showcase learning and work, like oral or recorded responses
- Using assistive electronic technologies, like voice-to-text programs
- Asking for a copy of written materials given in class or the workplace
- Opting to type notes during meetings

Other Dysgraphia Interventions

- Letter-formation drills
- Handwriting-training programs, including:
 - [Handwriting Without Tears](#)
 - [Sensible Pencil \(#CommissionsEarned\)](#)

[Read This Next: [Could It Be A Learning Disability?](#)]

Dysgraphia At a Glance

Comorbidity with ADHD	<ul style="list-style-type: none"> • Up to half of children with ADHD in the U.S. have a learning disorder, including dysgraphia.
Suggestive Symptoms	<ul style="list-style-type: none"> • Handwriting is slow and/or illegible • Inconsistent spacing, or running out of space on the paper; irregularly sized letters • Speaking the words out loud while writing • Omitted words in sentences • Difficulty with grammar and syntax structure • Avoidance of writing tasks • Difficulty organizing thoughts when writing them down
Professional to See	<p>Evaluation should be conducted by a school psychologist or special education professional. School supports may be provided by special education professionals and/or your child's classroom teacher.</p>
Treatments & Medications	<ul style="list-style-type: none"> • There is no medication to treat dysgraphia and other learning disabilities • Your child may qualify for an IEP to receive special-education services
Recommended Resources	<ul style="list-style-type: none"> • LDAmerica.org • NCLD.org • LDOnline.org • WrightsLaw.com • <i>The Misunderstood Child, Fourth Edition: Understanding and Coping with Your Child's Learning Disabilities</i> (#CommissionsEarned) by Daniel Ansari, Ph.D.

Sources

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