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## Signs and Symptoms of Phonological Dyslexia

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## DESCRIPTION

Phonological dyslexia, a type of alexia brought on by a brain injury, stroke, or chronic disease, is a reading disability that impairs previously learned reading skills. Dyslexia is a learning disability that mostly impacts the abilities required for precise and fluid word reading and spelling. Dyslexia is characterized by problems with phonological awareness, verbal memory, and verbal processing speed. Across the spectrum of intellectual capacities, dyslexia exists. Phonological dyslexia, quick naming dyslexia, double deficit dyslexia, surface dyslexia, and visual dyslexia are a few of the numerous types of dyslexia. Developmental (genetic) or acquired dyslexia are also possible (coming from a severe brain damage or disease).

Dyslexia is brought on by unique differences in the brain areas that help with reading. Usually, it runs in families. It appears that specific genes that have an impact on how the brain processes language and reading are associated with dyslexia [1]. Surface dyslexia, sometimes known as orthographic dyslexia, is a less prevalent kind of dyslexia. People with surface dyslexia rely too much on the spelling-sound correspondence, in contrast to people with phonological dyslexia who have trouble sounding out words.

#### Signs and symptoms

The primary differentiating feature of acquired phonological dyslexia is that it selectively impairs the ability to read pronounceable non-words while leaving unaffected the reading of well-known words [2]. Additionally, it has been discovered that reading non-words that are members of a family of pseudo homophones can help. In contrast to surface dyslexics, people with phonological dyslexia experience difficulties. These people can read using the whole-word approach. They have trouble, nevertheless, when trying to sound out words [3]. When it comes to unknown words or non-words that can be pronounced, phonological dyslexics can read recognized words without any problems. Following brain damage, these people appear to stop expanding their vocabulary that reduces their reading comprehension. Early speech delays and a lack of phonological

awareness are indicators that are associated with a later diagnosis of dyslexia [4,5]. One persistent myth relates dyslexia to mirror writing and reading words or letters backwards. These actions are common among kids learning to read and write, thus they are not thought to be dyslexia-specific behaviors.

Dyslexia is also linked to difficulties naming items or retrieving words. A characteristic of dyslexia known as dysorthographia or dysgraphia, particularly depends on the ability of orthographic coding, is that people with the condition frequently have trouble spelling. Phonological dyslexia and profound dyslexia have many of the same symptoms [6]. Phonological dyslexics do not commit the same semantic mistakes as people with profound dyslexia, which is the main distinction between these two types of dyslexia.People with phonological dyslexia struggle because while they can read words using the full word technique, they are unable to sound out words [7]. This indicates that they can read words they are familiar with but find it challenging to read unfamiliar words. When it comes to unknown words or nonwords that can be pronounced, phonological dyslexics can read recognized words without any problems [8,9]. Numerous studies have discovered that many phonological dyslexics may read well provided they have a big vocabulary before suffering brain injury. Following brain damage, these people appear to stop expanding their vocabulary, which impairs their reading comprehension.

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