Study Sheds Light on Auditory Role in Dyslexia

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The New York Times:

Many people consider dyslexia simply a reading problem in which children mix up letters and misconstrue written words. But increasingly scientists have come to believe that the reading difficulties of dyslexia are part of a larger puzzle: a problem with how the brain processes speech and puts together words from smaller units of sound.

Now, a study published last week in the journal Science suggests that how dyslexics hear language may be more important than previously realized. Researchers at the Massachusetts Institute of Technology have found that people with dyslexia have more trouble recognizing voices than those without dyslexia.

John Gabrieli, a professor of cognitive neuroscience, and Tyler Perrachione, a graduate student, asked people with and without dyslexia to listen to recorded voices paired with cartoon avatars on computer screens. The subjects tried matching the voices to the correct avatars speaking English and then an unfamiliar language, Mandarin.

Nondyslexics matched voices to avatars correctly almost 70 percent of the time when the language was English and half the time when the language was Mandarin. But people with dyslexia were able to do so only half the time, whether the language was English or Mandarin. Experts not involved in the study said that was a striking disparity.

Read the whole story: The New York Times