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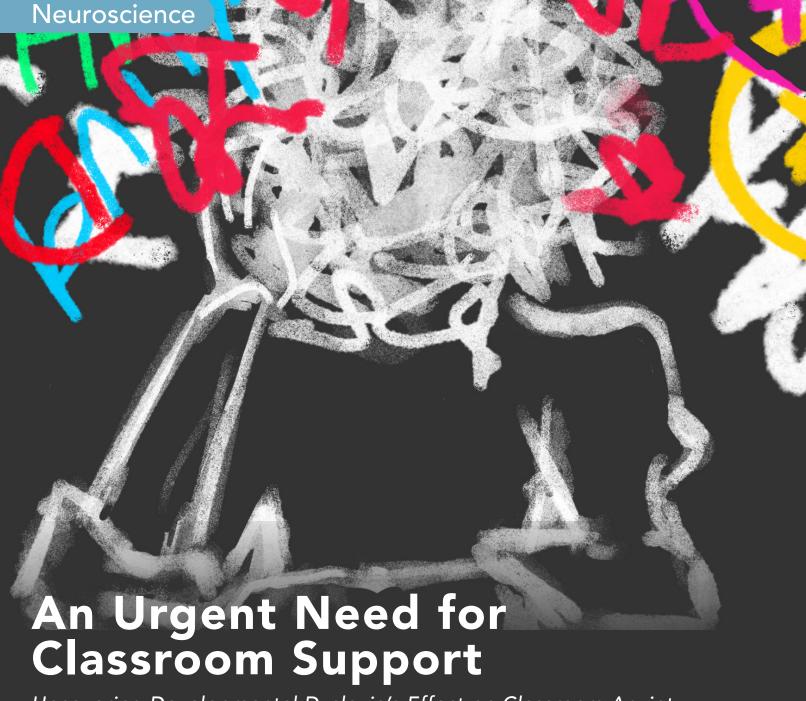
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Uncovering Developmental Dyslexia's Effect on Classroom Anxiety

Written by Susan Robinson-Cloete Illustrated by Leah Potoff

yslexia is a learning disorder characterized by learning difficulties, including accurate word recognition, poor spelling, and poor decoding. It is one of the more common neurodevelopmental disorders. There are currently five theories that attempt to explain the etiology of dyslexia; their explanations range from an auditory to a visual processing deficit. While there are no definitive answers as to why dyslexia happens, it is clear that there is a genetic component. More specifically, there is a 52 percent heritability rate. In the same vein, developmental dyslexia is the unexpected difficulty in reading, specifically in children who are otherwise intelligent, motivated students. Students with developmental dyslexia

undergo fluctuations throughout their early education; regardless of their diagnosis, the children may experience a gradient of developmental problems. Adolescents with developmental dyslexia are not any less intelligent or capable of success. They require a system that expands its breadth of techniques. In recent cognitive neuroscience studies, researchers have been investigating the question: How does developmental dyslexia affect students' ability and confidence in the classroom?

Classroom anxiety can manifest in various ways, from disrupting class, abstaining, and reluctance to share. Unfortunately, the individualized nature of reading can isolate students from their peers. Students' isolation and internalized self-doubt can

manifest into anxiety disorders . One theory for the prevalence of these comorbidities is the Nelson Demoralization Hypothesis. The Nelson Demoralization Hypothesis states that higher rates of demoralization – i.e., falling behind on reading markers without a diagnosis – lead to the development of anxiety. Down the line, these anxiety levels profoundly impact the quality of life for people with developmental dyslexia. On average, they will drop out of school at higher rates than their peers without reading problems and may be less inclined to continue postsecondary school education or advanced training.

Researchers have established the lifelong impact of the comorbidity, but just how many people with developmental dyslexia will have anxiety as well? Piechurska et al. hypothesized that people with dyslexia suffer from significantly higher levels of reading and writing anxiety than their asymptomatic peers because of their experience in the classroom. In 2009, Whitehouse et al. supported their claim by stating that individuals with dyslexia are at an increased risk for anxiety disorders. A UK epidemiological study found that 9.9 percent of children with specific reading and spelling disabilities had a co-morbid anxiety disorder, a significantly greater prevalence than those without literacy difficulties: 3.9 percent . The constant expectation of failure in reading by children with dyslexia is assumed to be associated with severe emotional consequences since reading is so profoundly central to the modern educational system. One of the most convincing results of this hypothesis is derived from a 2019 meta-analysis of 58 studies performed by Nelson et al. They found that school-aged children with learning difficulties, including dyslexia, have higher anxiety than non-LD children (d = .61). A study by researcher Dr. Mai Eissa revealed that dyslexia had negatively influenced adolescents' self-esteem and caused them to feel different from others. Furthermore, dyslexic adolescents in this study suffered from anxiety, externalizing, and internalizing symptoms of withdrawal, somatic complaints, depression, social problems, thought problems, aggression, and delinquent behavior.

The reality is that most resources for students with learning differences are challenging to acquire as they are typically connected to private education.

Interestingly, research has found gender differences in the prevalence of developmental dyslexia and anxiety comorbidities. Studies concerning gender and anxiety among students in a school setting also confirmed that females reported higher anxiety on all anxiety subscales than males . This is explained through the notion that female students with reading disabilities appear to be at particular risk for these internalizing problems. Resources for studying adolescent neurodevelopment disease are rarely equal between the sexes, as seen with research into ADHD and Autism symptomatology. These emerging trends that show female students are at-risk necessitate an increased focus on how to support female students with developmental dyslexia better.

While quantitative measures like surveys can help numerically assess the effects of developmental dyslexia and

anxiety, it is valuable to hear the day-to-day perspective of someone living with dyslexia and anxiety. We will refer to her as Iz to protect the patient's privacy. Iz is a 21-year-old woman who was diagnosed with dyslexia after her mother discovered she was not reading the stories but rather memorizing what her mother said. Iz's diagnosis came almost a year and a half after her class had begun learning to read. Iz recalls, "I felt alone and ashamed that I was not progressing like those around me and began to think I was not smart enough". However, it was not only her attitude toward reading that changed but soon enough, her behavior: "Because of my dyslexia, I struggled to read words and spell them, so this often caused me not to want to participate in activities revolving around those things."

Furthermore, Iz affirms much of what researchers like Eissa and Piechurska found: "I believe because of my confidence issues in my education, I often would get very anxious and not focus on what I was learning." Today, Iz is a successful college student finishing her undergraduate degree in sociology before getting her master's in social work. Iz describes herself as incredibly fortunate; she received a diagnosis early enough and received endless support through tutors and private school teachers. However,Iz recognizes that this is a privilege and that not every child with developmental dyslexia can be given the tools to succeed before they internalize the outside noise and risk developing classroom anxiety.

Students with developmental dyslexia do not develop anxiety in a vacuum; instead, they are absent from the scary support systems to affirm them, and they are intelligible. At the present moment, most children all across the globe, from Indonesia to Germany, are without the tools to equip them with the confidence to know they will learn and the strategy to help them get there . The reality is that most resources for students with learning differences are challenging to acquire as they are typically connected to private education. However, several proposed approaches have come out of interview surveys with students who have learning differences and are in the public school system. For example, in learning a second language - something particularly difficult for adolescents with dyslexia - several interviewed students said motivational teaching strategies made all the difference. We may not have all the answers, but asking those affected by it is a fantastic place to start.

There is a need for increased awareness about youth with dyslexia. Early identification and initiation of appropriate education interventions could make a profound difference. The comorbidity rates of anxiety and dyslexia are not a done deal but a wake-up call for researchers, psychologists, and educators to think of better ways to serve these students. • • •