Understanding and Treating Learning Disorders

Katie Davis, PsyD^{1,2}, Erica Miller, PhD^{2,3}, and Amy Margolis, PhD^{1,2}

1 Division of Child and Adolescent Psychiatry, Columbia University Medical Center, New York, NY 2 Brooklyn, NY 3 Teachers College, Columbia University, New York, NY 2 Brooklyn, NY 3 Teachers College, Columbia University, New York, NY 3 Teachers College, Columbia University, NY 3 Teachers College, College, Col

Introduction

Learning disorders are an important set of child mental health disorders with great potential impact on a child's long-term adjustment.

Learning disorders are characterized by a failure to acquire age appropriate academic skill in the presence of adequate intelligence and educational opportunity.

The DSM-V diagnostic criteria states that learning disorders are characterized by a persistent difficulty learning academic skills for at least six months despite targeted intervention (RTI). Academic skills are substantially below expectations given an individual's age. Academic difficulties are not the result of intellectual disability or other neuropsychological disorders.

Several changes in diagnostic criteria were made in the transition from DSM-IV to DSM-5. First, the diagnostic category was changed from "Usually First Diagnosed in Infancy, Childhood, or Adolescence" to "Neurodevelopmental Disorders." Second, three categories (Reading, Written Expression, Math) merged into a single category (Specific Learning Disorder). Third, the clinician can specify the severity of the disorder (Mild, Moderate, Severe). Finally, a discrepancy between IQ and academic skills is no longer necessary for diagnosis.

Learning disorders are quite prevalent. Roughly 3 million school age children (4 - 6%) have a learning disorder (Lyon, 1996; Pastor, 2008). Almost 50% of children who receive special education have a Learning Disability classification in school. 80% of students with learning disorders have a specific reading disorder (NCLD, 2014).

Literature cite

American Psychiatric Association. (2013). *Diagnostic* and statistical manual of mental disorders: DSM-5. Washington, D.C.: American

Lyon, GR. (1996). Learning disabilities. *Future Child*. 6(1), 54-76.

Psychiatric Association.

National Center of Learning Disabilities. (2014). The state of learning disabilities: Facts, trends, and emerging issues. Retrieved November 2015

from https://www.ncld.org.

Palombo, J. (2001). Learning disorders and disorders of the self in children and adolescents. New York: W.W. Norton.

Pastor, PN & Reuben, CA. (2008). Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004-2006. *Vital Health Stat*, 10(237), 1-14.

Silver, CH, et.al. (2008). Learning disabilities: The need for neuropsychological evaluation.

Archives of Clinical Neuropsychology, 23, 217-219.

Cognitive Efficiency Model

We propose a cognitive efficiency model to describe the development of learning disorders from a neuropsychological perspective. Multiple cognitive domains contribute to performance of academic skills, and so a deficit in one domain can affect many different outcomes.

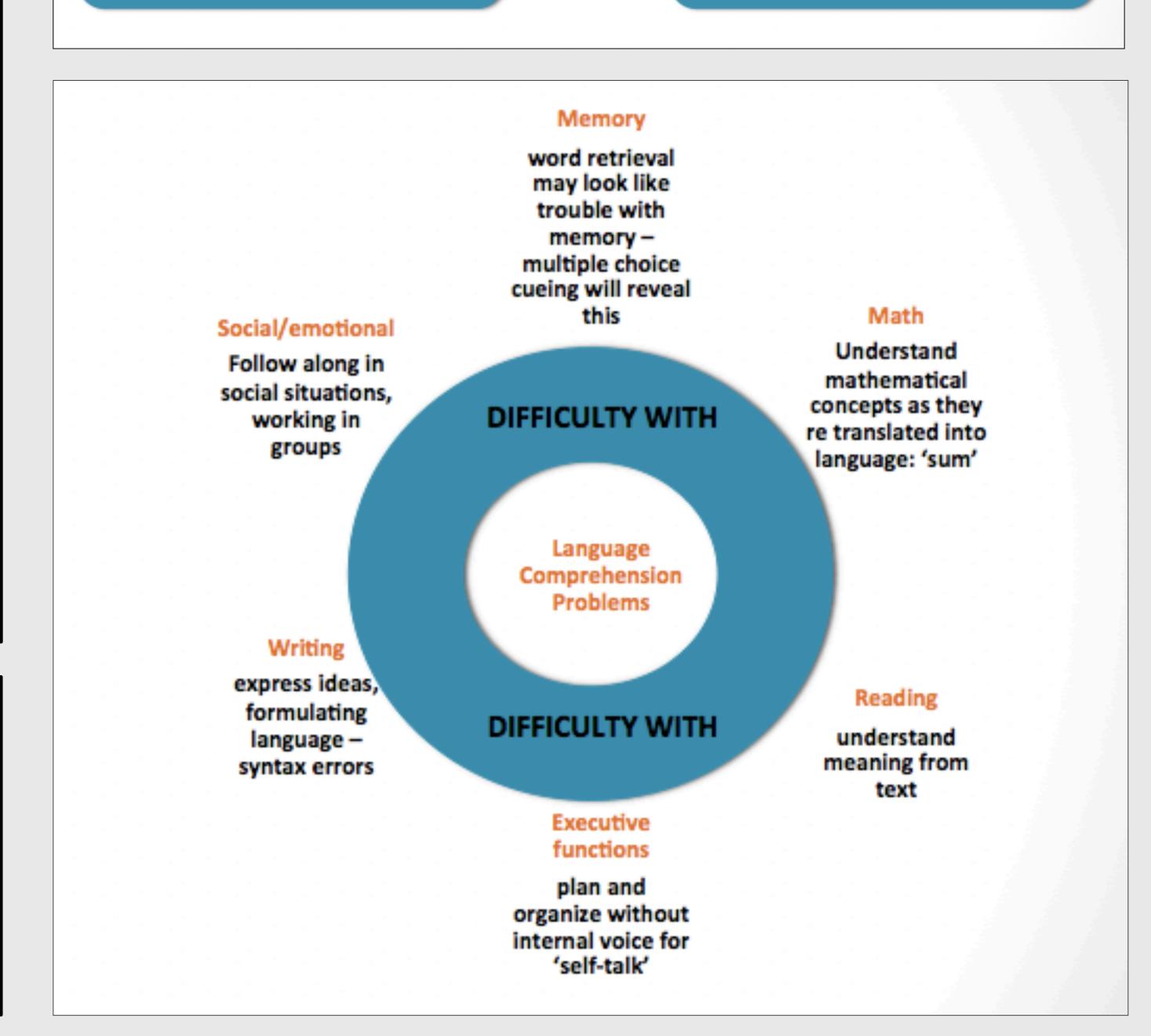
For example, a deficit in language comprehension may lead to difficulties across academic subject areas.

Since cognitive systems are inextricably linked and deficits in one system cause deficits in others, learning disorders inherently include cognitive and emotional difficulties as well as academic difficulties. Treatment for learning disorders must cover the full range of these deficits.

Disruption in cognitive system



Deficits in academic skill



Treating Learning Disorders

Learning disorders are complex psychological problems that require psychological interventions in and of themselves, not because they are often accompanied by comorbid conditions. According to Silver, et.al. (2008), "A learning disability is a neurobiological disorder that presents as a serious difficulty with reading, arithmetic, and/or written expression that is unexpected, given the individual's intellectual ability. A learning disability is not an emotional disorder nor is it caused by an emotional disorder.... When a learning disability is suspected, an evaluation of neuropsychological abilities is necessary to determine the source of the difficulty as well as the areas of neurocognitive strength that can serve as a foundation for compensatory strategies and treatment options. (Silver et al., 2008)." Just as learning disorders require neuropsychological evaluation, they also require neuropsychological treatment. However, currently, the CPT code for psychotherapy is not accepted with a diagnosis of Learning Disorder.

The ideal neuropsychological treatment for learning disorders simultaneously addresses the academic, cognitive, and emotional deficits inherent in learning disorders. In one such treatment that we developed, HomeWork Therapy TM, we combine tutoring, cognitive remediation, and psychotherapy and synthesize knowledge from the medical, psychological, and educational literature into a single treatment modality. Treatment is placed within the lexicon of play therapy and cognitive behavioral therapy, but the major tool used to facilitate treatment and measure outcomes is schoolwork.

By helping students with homework assignments, therapists focus on improving cognitive skills and problem-solving strategies, not academic content, although school performance often improves and students leave sessions with completed homework assignments. This fosters success, which improves motivation. Ultimately, this increases the likelihood that the student will generalize these strategies to other situations at a later date.

The clinician shifts the locus of failure outside the child. Specifically, it is not the student's job to learn the information; it is the clinician's job to make it understandable. This removes blame from the student and helps the student conceptualize difficulties within the context of his/her environment.

Major Aspects of HomeWork Therapy TM Treatment

Developing a Therapeutic Alliance

Children with learning disorders generally receive subtle but painful feedback from people in their environment that they see the world differently (Palombo, 2001). In treatment, the student realizes that the clinician understands how he/she sees the world, and so he/she comes to trust the clinician. This feeling of being understood helps the student develop a cohesive sense of self. Also, children with learning disorders frequently feel as if their ways of thinking are not accepted by others and receive feedback that what they do is "bad" (Palombo, 2001). The clinician does not reject the student for his/her way of thinking, but instead makes efforts to understand the student's way of thinking before introducing a new concept. This experience is validating and helps the student feel accepted and valued.

Working on Current Homework in Session

Completing homework provides a useful outcome at the end of each session, which helps students and families invest in treatment. Treatment does not place an additional time burden on the student and does not cause the student to fall farther behind. Therefore, treatment is placed higher on the priority list and has greater longevity.

Reducing Stigma

Going to work with a tutor is generally more acceptable than seeing a therapist. Therefore, even if the family feels uncomfortable about psychotherapy, the clinician can explore and address emotional issues (i.e. social difficulties, low self-esteem) within the context of an academic treatment model.

Restructuring Cognitive Schemas

In treatment, the student has positive, successful learning experiences. This ameliorates feelings of deficiency that are typically associated with learning and fosters a positive transference to learning that may be generalized to other learning experiences outside of sessions (Palombo, 2001). The student develops a positive sense of self as a learner. Also, many children with learning disorders are told that they cannot succeed due to neurobiological factors that are fixed and unchanging, and so they feel that they are just "not smart" (Palombo, 2001). Treatment shifts the focus from what is not malleable to what is. It teaches skills and strategies to help child understand that they are not broken and have the tools to be successful; they just need help mobilizing those tools.

Further information

Please contact Katie Davis, PsyD for more information:

Brooklyn Learning Center
142 Joralemon Street
Brooklyn, NY 11201
katied@brooklynlearningcenter.com