A WALK THROUGH THE DSM 5: Specific Learning Disorders

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Disclosures

• Dr. Hill has a contract with IHS for neuropsychological assessment of children through her private practice.

• Dr. King has no financial relationships or conflicts of interest related to this presentation. She is not involved in any clinical drug trials.
Overview of Neurodevelopmental Series

• **Session 1:** Intellectual Disabilities

• **Session 2:** Communication Disorders

• **Session 3:** ADHD/Externalizing Disorders

• **Session 4:** Specific Learning Disorders

• **Session 5:** Motor Disorders

• **Session 6:** Special Topics
Session 4: Specific Learning Disorders

Goals/Objectives

• Identify children with specific learning disorders, while considering differential diagnoses.

• Examine the implications of culture/language/race in the identification and treatment of children with specific learning disorders.

• Recommend resources and interventions for families with children who have specific learning disorders.
Specific Learning Disorders: General Criteria

A. Difficulties learning and using academic skills with at least one of the following symptoms that have persisted at least 6 months despite targeted intervention

B. Academic skills are substantially and quantifiably below expectations based on age and significantly impact functioning
Specific Learning Disorders: General Criteria

C. The learning difficulties begin during school-age years but may not fully manifest until the demands exceed the individual’s capacities.

D. Learning difficulties aren’t better accounted for by intellectual disabilities, sensory deficits, or other conditions.

• Severity Ratings
Differences between DSM-IV and DSM-5

• One overarching category of SLD with ‘specifiers’ to characterize the specific manifestations of learning difficulties

• Elimination of the IQ-achievement discrepancy requirement and its replacement with four criteria, all of which must be met.
Specific Learning Disorders: Development & Course

- Onset, recognition, and diagnosis of specific learning disorder usually occurs during the elementary school years when children are required to learn to read, spell, write, and learn mathematics.

- Manifestations may be behavioral (e.g., a reluctance to engage in learning; oppositional behavior).
Specific Learning Disorders: Development & Course

• Changes in manifestation of symptoms occur with age, so that an individual may have a persistent or shifting array of learning difficulties across the lifespan.

• Specific learning disorder is lifelong, but the course and clinical expression are variable
Specific Learning Disorders: Functional Consequences

• Lower academic attainment, higher rates of high school dropout, lower rates of postsecondary education

• High levels of psychological distress and poorer overall mental health, higher rates of unemployment and under-employment, and lower incomes.
Specific Learning Disorders: Comorbid Conditions

• Attention-Deficit/Hyperactivity Disorder (ADHD)
• Communication Disorders
• Developmental Coordination Disorder
• Autism Spectrum Disorder
• Psychiatric Disorders
Specific Learning Disorders: Differential Diagnosis

- Typical Development
- Sensory (vision/hearing) Impairments
- First Language/Bilingualism
- Communication Disorders
- Neurodevelopmental Disorders
- Psychosocial
Specific Learning Disorders (SLD) with Impairment in Reading

- Inaccurate or slow/effortful word reading
- Difficulty understanding the meaning of what is read
- Dyslexia
SLD with Impairment in Reading: Demographics/Etiology

• Reading disorder/dyslexia affects boys and girls equally

• Epidemiological studies report prevalence rates of 4–9% for deficits in reading

• Dyslexia is both familial and heritable

• Studies implicate loci on chromosomes 6, 15, and 2 in causation of dyslexia
SLD with Impairment in Reading: Diagnostic Evaluation

• Screening

• Diagnostic Evaluation
  • Reasons to have an evaluation
  • When to have an evaluation
  • What’s included in an evaluation
SLD with Impairment in Reading: Interventions

• Types of Interventions
  • Empirically-Validated Interventions

• Settings for Interventions
  • School-based
  • Community-based

• IDEA; Section 504 Plans
Specific Learning Disorder (SLD) with Impairment in Mathematics

• Difficulties mastering number sense, number facts, or calculation

• Difficulties with math reasoning

• Dyscalculia
SLD with Impairment in Mathematics: Demographics/Etiology

• Prevalence is estimated to be between 3-6 percent of the population

• Etiology:
  • Genetic
  • Turner syndrome, epilepsy, and Fragile X syndrome, FASD
  • Prematurity or very low birth weight
SLD with Impairment in Mathematics: Diagnostic Evaluation

• Screening
  • Number Sense Screener

• Diagnostic Evaluation
  • Computation skills
  • Math fluency
  • Mental computation
  • Quantitative reasoning
SLD with Impairment in Mathematics: Interventions

• Intervention Strategies:
  • General Strategies

• Specific Interventions
  • Dyscalculia.org
  • “Number Rockets”
Specific Learning Disorder with Impairment in Written Expression

• Difficulties with spelling

• Difficulties with written expression
SLD with Impairment in Written Expression:
Demographics/Etiology

• Written Language Disorder is at least as frequent as Reading Disorder: 6.9% to 14.7%

• Significantly more frequent among boys than girls (2-3 times)

• Etiology
  • Environmental
  • Genetic/Neurological
SLD with Impairment in Written Expression: Diagnostic Evaluation

- **Screening**
  - Formal/Informal Measures
  - Observation/Teacher Report
  - Progress-Monitoring Data: RTI
  - Hearing screening

- **Evaluation**
  - Formal Measures
  - Observations/Teacher Report
SLD with Impairment in Written Expression: Interventions

• General Strategies

• Specific Programs
  • Teacher/Tutor Based
  • Computer Based
Cultural Considerations for Diagnosis, Intervention, & Health Information Exchange

• Native language consideration
• Linguistic and cultural context in which the individual is living
• Information sharing
  (visual/auditory)
• Role of Healthcare Providers