

## Appropriate Diagnosis of Autism Spectrum Disorders; What School-Based SLPs Should Know

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## Discussion

- How are autism spectrum disorders (ASD) defined?
- What is the difference between Autism, Asperger, and PDD-NOS?
- Assessment / Evaluation of the ASD

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## Discussion Topic #1

How are autism spectrum disorders (ASD) defined?

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## Defining ASD

What is the criteria?

The operational definitions?

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## It Depends

- Categorical definitions are provided by:
  - American Psychiatric Association's (APA) *Diagnostic and Statistical Manual on Mental Disorders* (DSM)
  - International Classification of Diseases (ICD)
  - Gillberg and Gillberg
  - Public Schools

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## Diagnostic Systems

• “Diagnostic systems lose value if they are either overly broad or overly narrow”

(Volkmar & Klin, 2005, p. 10)

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### Does the Label Matter

- “Programs should be designed around individuals rather than labels”

(Volkmar & Klin, 2005, p. 10)

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### DSM (IV-TR)

- Social Interaction
- Communication
- Stereotyped pattern of behaviors , interests, and activities
- Delay prior to 3 in (at least one) social, language, or imaginative play

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### Gillberg and Gillberg (1989)

- Social Impairment
- Narrow Interest
- Repetitive Routines
- Speech and Language Problems / Nonverbal Communication Problems
- Clumsy

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## School's Diagnosis

Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, which adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance as defined by IDEA criterion. A child who manifests the characteristics of "autism" after age 3 could be diagnosed as having "autism" if the criteria in the preceding paragraph are met. From the Individuals with Disabilities Education Improvement Act, 34 CFR 300.7, Section 300.7 (c) (1).

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## Defining Characteristics of Autism

- Relating to people and objects (affect, eye-contact)
- Emotional Regulation
- Peculiar Body Movements
- Difficulty with Change
- Oral Language Problems (spoken and gestural)
- Splinter Skills (Uneven academic performance)

(Schopler, Reichler, & Renner, 1986)

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## Common Characteristics of Autism

- Imitation
- Sensory Disturbances (Response to Noises, Smells, Tastes, Fears)
- Hyper or Hypo Activity

(Schopler, Reichler, & Renner, 1986)

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## Communication Skills

- VARIED
- Nonverbal with limited use of intentional gestures or coordinated gaze in communicating
- Considerable use of echolalia
- Normal skills in vocabulary, syntax, and phonology
- Deficits in comprehension
- Failure to acquire communication skills that are socially appropriate

(Tager-Flusberg, Paul & Lord, 2005).

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## Discussion Topic #2

### Autism, Asperger, or PDD-NOS

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## Autism, Asperger, or PDD-NOS

- How do you know?



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## Autism Diagnosis

- “Differential diagnosis of autism is more advanced than for other ASDs”

(Matson, Nebel-Schwalm, & Matson, 2007, p. 39)

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## Autism Versus Asperger

- The research community has not reached a consensus as to the appropriate diagnostic criteria for Asperger disorder
- OR
- Specific differences that may distinguish Asperger syndrome from high functioning autism

(Klin et al., 2005)

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## Is there a difference between Autism and Asperger?

- The research evidence is not convincing that individuals diagnosed with autism who are higher functioning differ in predictable ways from individuals diagnosed with Asperger syndrome

(MacIntosh & Dissanayake, 2004)

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## DSM

- According to the children who meet the criteria for the diagnoses of autism, PDD-NOS, childhood disintegrative disorder, or Asperger syndrome all demonstrate the same core features:
  - verbal and/or nonverbal communication impairments
  - deficits in reciprocal social interactions, and
  - restricted and/or repetitive behaviors or interests.

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## Can the Diagnoses Change

- YES!
- The symptoms will vary widely across individuals as well as changing in the same individual across time
- (Volkmar, Lord, Bailey, Schultz, & Klin, 2004)

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## DSM Difference

- According to the DSM children with autism show some signs of the disorder before 3 years of age such as significantly delayed:
  - talking and gesturing
  - social deficits in areas such as shared affect or joint attention
  - limited imaginative or pretend play and/or the use of repetitive behaviors
- (Lord & Risi, 2000).

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## PDD-NOS

- According to the DSM, Children with PDD-NOS do not meet the full criteria for a diagnosis of any of the other pervasive developmental disorders.
- Many parents and professionals use the term “PDD” loosely; thus, one should not assume that “PDD” means “PDD-NOS.”
- An earlier diagnosis of PDD-NOS may also be changed to autism or Asperger syndrome as the child matures.

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## Higher-Functioning Autism

- Approximately two-thirds to three-fourths of individuals with autism have intellectual quotients (IQs) below 70 (Richard, 1997)
- The terms “more able” or “higher functioning” are often applied to individuals with IQs above 70 (Rumsey, 1992)

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## Higher-Functioning

- Parents and professionals often refer to certain children on the spectrum as “higher-functioning”
- This may include individuals with both autism and Asperger disorder

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## Autism

- Relative visual strengths and verbal weaknesses
- May present as passive communicators; they may not initiate much conversation
- May have difficulty establishing mutual attention with another person
- May demonstrate a relative strength in a nonverbal performance domain (e.g. art, visual spatial judgment).
- They may be educationally aided by visual supports

(Klin, Volkmar, and Sparrow (2000); Rubin, 2004).

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## Individual Differences

- Varying cognitive profiles are found in each group
- This stresses the importance of individualized assessment and program planning that is required in IDEA

(Chadiuzzin & Mountain-Kimchi, 2004; Miller & Ozonoff, 2000)

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## Discussion Topic #3

### Assessment Evaluation

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### What to Look for in an Assessment

- Is it reliable?
- Is it valid?
- Is it predictive, if it is for young children?
- How easy is it to administer, score, USE?

(Matson, Nebel-Schwalm, & Matson, 2007)

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### Diagnostic Challenges

- There exists a... “bewildering and even shocking amount of misinformation and bad advice”

(Matson, Nebel-Schwalm, & Matson, 2007, p. 43)

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### How to Evaluate

- Parent Reports
- Observational Scales
- Diagnostic Tools

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### Who Should Do the Evaluation

- A diagnostic evaluation should be performed only by professionals with expertise in the evaluation and treatment of ASD (NRC, 2001)
- Multidisciplinary is consistent with best-practice (ASHA, 2006)

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### Diagnostic Process

- Provides a description of the child
- A historical account of the origins of the difficulties and changes over time
- Discussed development
- Discussed social behaviors
- Highlights competence and difficulties
- Speaks to adaptive skills
- Previous treatments
- Available resources
- Risk factors

(Volkmar & Klin, 2005, p. 10)

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### Parent Report for School-Age Children

- *Social Communication Questionnaire (SCQ)*
- For children 4 and older
- Reliability is better for older children

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### Checklist for ASD

- *The Childhood Autism Rating Scale (CARS)*
  - May over identify special needs children
- *The Gilliam Autism Rating Scale (GARS)*
  - May lack sensitivity (South et al., 2002)

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### “Gold Standard” Assessments for School-Age Children

- *Autism Diagnostic Observation Scale (ADOS)*
- *The Autism Diagnostic Interview-Revised (ADI-R)*
- Both use DSM criteria
- Both recommend or require specific training

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### Rating Scales

- *Checklist for Autism in Toddlers (CHAT)*
- *Modified Checklist for Autism in Toddlers*
- *Social Communication Questionnaire (SCQ)*
- *Pervasive Developmental Disorders Screening Test, Second Edition (PDDST-II)*
- *Screening for Autism in Two-Year Olds (STAT)*
- *Systematic Observation of Red Flags (SORF)* – scored from CSBS

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## Diagnostic Evaluations

- *Autism Diagnostic Observation Scale (ADOS)*
- *The Childhood Autism Rating Scale (CARS)*
- *The Autism Diagnostic Interview-Revised (ADI-R)*
- *The Parent Interview for Autism (PIA)*
- *The Gilliam Autism Rating Scale (GARS)*

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