Autism in the Schools: Evidence-Based Assessment and Intervention

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Presentation Objectives

- ✓ The autism spectrum disorders.
- ✓ Clinical vs Educational definition of autism.
- ✓ DSM-IV-TR and IDEA.
- \checkmark Prevalence in the schools.
- ✓ Evidence-based assessment.
- ✓ Evidence-based Interventions.
- ✓ Special education law.
- ✓ Recommendations.

Autism Spectrum Disorders (ASD)

- The *clinical* terms Autism Spectrum Disorder (ASD) and Pervasive Developmental Disorder (PDD) refer to a continuum of associated neurobehavioral disorders.
- A brain disorder that impacts communication, social interaction, cognitive development and behavior.
- ✓ Primarily a social-communication disability.
- The PDD/ASD category is one of the fastest growing disability categories in the world. ASD is now more prevalent in the pediatric population than cancer, diabetes, spina bifida, and Down syndrome.

CDC Statistics

The most recent statistics from the Centers for Disease Control and Prevention (CDC) indicate that one in every 88 school-age children in the U.S. has an autism spectrum disorder (ASD). Over the past 10 years the prevalence rates have risen steadily, from one in 150, to one in 110, and now to one in every 88 children. This represents a dramatic 78 percent increase in the number of children identified with an autism spectrum disorder (ASD) over the past decade.

What We Know

- ✓ Autism is *not* an emotional or conduct disorder.
- ✓ Autism is not a mental illness.
- Co-existing (comorbid) disorders include ADHD, seizure disorder, oppositional defiant disorder, obsessive-compulsive disorder, and other anxiety disorders, tic disorders, and mood disorders.
- Level of cognitive and language functioning is related to symptom severity and outcome.
- ✓ There are no medical tests that can diagnose autism.
- ✓ Autism has no racial, ethnic, or social boundaries.

What We Know

- ✓ Family income, lifestyle, and educational levels do not affect the chance of occurrence.
- ✓ Autism is 4 times more prevalent in boys than girls.
- ✓ There are gender differences in phentotypic expression.
- ✓ There is a *broad autism phenotype*.
- Siblings of people with autism have an 18 percent increase of being diagnosed with an ASD.
- ✓ The US is facing \$90 billion annually in costs for autism.
- ✓ Costs can be reduced by 2/3 with early diagnosis/intervention.

ASD in 100 Words or Less

Autism spectrum disorders (ASD) occur in 1-2% of the population, are strongly heritable, and result from atypical neurodevelopment. They are characterized by an uneven developmental profile and a pattern of qualitative impairments in communication and socialization, and by a limited (and often unusual) range of activities or interests. This triad of impairments exists on a continuum that varies in severity of symptoms, age of onset, and association with other childhood disorders. Although many children are not identified until school age, ASD is a life-long condition that has implications for education, social development, and community adjustment.

-Adapted from Baron-Cohen, 2008

The Autistic Triad

- > Triad of impairments:
 - Reciprocal social interactions;
 - 2) Verbal and nonverbal communication;
 - 3) Restricted and repetitive behaviors or interests.
- These delays/atypicality in social development, communication, neurocognition, and behavior vary in severity of symptoms, age of onset, and association with other childhood disorders.



Clinical vs Educational Classification

> The specific criteria for autism differ among the various diagnostic and classification schemes. Although a variety of systems exist, the *Individuals with Disabilities Education Act* of 2004 (IDEA) and the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR) have made the greatest impact on the assessment and classification of children with autism

DSM-IV-TR

- ✓ DSM-IV-TR is concerned with classifying mental disorders.
- ✓ The classification process depends upon the *clinical judgment* of the mental health professional.
- ✓ The DSM-IV-TR uses a medical model.
- ✓ The DSM-IV-TR was written primarily by physicians and intended primarily for use by physicians.
- School professionals should have a broad understanding of the DSM IV-TR multiaxial diagnostic system.

DSM-5 Proposal

- A new category of *autism spectrum disorder*, incorporating autistic disorder (autism), Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified (PDD-NOS).
- > The *autistic triad* will now become *a dyad*:
 1) Social/communication deficits
 2) Fixated interests and repetitive behaviors
- > A consideration of severity with the diagnosis (Levels).

IDEA

- > Unlike the DSM-IV, IDEA specifies 13 disability categories to determine eligibility for special educational services.
- The educational definition of autism is considered sufficiently broad and operationally acceptable to accommodate both the clinical and educational descriptions of autism and related disorders.
- > A student can have a psychiatric diagnosis yet not be eligible for special education under IDEA.
- > In many respects, these disability categories may be considered *de facto* diagnoses.

IDEA Definition

(c)(1)(i) Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that adversely affects a student'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 student's educational performance is adversely affected primarily because the student has an emotional disturbance, as defined in this section.

(ii) A student who manifests the characteristics of "autism" after age 3 could be diagnosed as having "autism" if the criteria in paragraph (c)(1)(i) of this section are satisfied.

- Individuals with Disabilities Improvement Act of 2004

Florida Definition

Autism Spectrum Disorder is defined to be a range of pervasive developmental disorders that adversely affects a student's functioning and results in the need for specially designed instruction and related services. Autism Spectrum Disorder is characterized by an uneven developmental profile and a pattern of qualitative impairments in social interaction, communication, and the presence of restricted repetitive and/or stereotyped patterns of behavior, interests, or activities. These characteristics may manifest in a variety of combinations and range from mild to severe. Autism Spectrum Disorder may include Autistic Disorder, Pervasive Developmental Disorder Not Otherwise Specified, Asperger's Disorder, or other related pervasive developmental disorders.

- Florida Department of Education

Categorical vs Dimensional

- The DSM-IV-TR lists specific criteria for each disorder that must be met to receive a diagnostic classification. Similarly, the Individuals with Disabilities Education Act (IDEA) specify categories of special education disability. Both are categorical rather than dimensional systems of classification (e.g., a child meets or does not meet criteria) and both focus on a description of behavior rather than function.
- Children with the same diagnostic classification are likely to be heterogeneous and many childhood disorders, including autism, fall along a continuum in the general population.



Waiting for a Diagnosis ✓ A survey of parents of school-age children with ASD across five countries (including the US) found an average diagnosis age of 7.5 years for higher functioning ASD such as Asperger syndrome.

- ✓ Parents reported visiting, on average, between four and five clinicians en route to an ASD diagnosis.
- ✓ In many instances, parents waited more than 5 years before a diagnosis was confirmed.
- ✓ Nearly half of the families reported that the school system and other parents were the major source of assistance.
- ✓ A recent study examining the timing of identification among children with autism using a population-based sample in the US found the gap between potential and actual age of identification to be in the range of 2.7 to 3.7 years. More than one quarter of cases were never identified as having ASD through age 8.

ASD in the Schools

- ✓ Not all cases will be identified prior to school.
- ✓ Average age of autistic disorder is 5.6 years.
- ✓ Average age of higher functioning ASDs is 11 years.
- ✓ Only 3% of children with ASD are identified solely by non-school resources.
- All other children are identified by a combination of school and non-school resources (57%), or by school resources alone (40%).

ASD in the Schools

- While the number of students, ages 6-21, served under IDEA, Part B, in the U.S. Remained generally constant for most disability categories between Fall 1999 and Fall 2008, the number of students served who were classified with autism increased four fold from 66,043 In 1999 to 292,818 in 2008.
- Compared with general population estimates, children with mild to moderate autistic traits continue to be an underidentified and underserved population in our schools.
- There are many students with social-communication impairments who do not meet the *clinical definition* of ASD.





School Personnel

- > Question: What are the levels of factual knowledge concerning autism (e.g., definition, assessment/diagnosis, and treatment) among school personnel (teachers, counselors, and Paraprofessionals)?
- ✓ Overall school personnel's factual knowledge about the definition of autism was correct only 51.7% of the time while 48.3% of the time they shared erroneous information.
- ✓ School personnel's perceived and factual knowledge about the assessment/diagnosis and treatment of autism of autism was *low*.
 - Williams et al. (2011)

Identification

- ✓ There are no specific biological or test markers.
- ✓ Diagnosis is made by behavioral criteria.
- ✓ A team approach is essential.
- ✓ Comprehensive developmental model.
- ✓ No single measure provides a definitive diagnosis.
- ✓ Assessment of symptom *severity*.
- Assessment is a continuing process, rather than a single event.

Screening, Diagnosis, and Assessment

- Screening refers to the process of identifying school children most likely to have an ASD and/or developmental delay.
- The terms diagnostic evaluation, diagnosis, and classification refer to the process of assigning a specific diagnostic or special education label.
- Assessment describes the process of evaluating the child's level of functioning in multiple developmental areas and his or her unique pattern of strengths and weaknesses.

Why Assess?

- > Four principal reasons to conduct an ASD assessment:
 - 1) To verify the presence of the disorder and quantify symptom severity.
 - 2) To generate interventions for educational programming.
 - 3) To establish a baseline for progress monitoring.
 - To determine whether an ASD has been overlooked or misclassified, describe coexisting (comorbid) disorders, or identify an alternative classification.

Who Should Assess?

> School districts must ensure that comprehensive individualized evaluations are completed by school professionals who have *knowledge*, *experience*, *and expertise in ASD*. If qualified personnel are not available, school districts should provide the appropriate training or retain the services of a consultant.

Yell et al., 2003

Evaluation Components

- > Four components of minimum student evaluation:
 - 1) Documented and dated behavioral observations.
 - 2) Comprehensive social/developmental history addressing the core features of ASD.
 - 3) Comprehensive psychological evaluation.
 - 4) Comprehensive speech/language evaluation.

Medical information provided by a licensed physician shall be considered –

-Florida Department of Education

Eligibility Criteria

- > There must be evidence of *all* of the following:
- An uneven developmental profile across the domains of social interaction, adaptive behavior, and/or cognitive skills.
- Impairment in social interaction evidenced by delayed, absent, or atypical ability to relate to people or the environment.
- Impairment in verbal and/or nonverbal language or social communication skills.
- Restricted repetitive and/or stereotyped patterns of behavior, interests, or activities.

-Florida Department of Education

Eligibility Decisions

- ✓ IDEA definition is the controlling authority with regard to eligibility decisions for special education.
- ✓ While the DSM-IV-TR criteria are helpful, they are neither legally required nor sufficient for determining educational placement.
- ✓ When it comes to special education, it is state and federal education codes and regulations (not DSM IV-TR) that drive eligibility decisions.
- School professionals should make sure that children meet the criteria for autism as outlined by *IDEA* and use the *DSM-IV* to the extent that the diagnostic criteria include the same core behaviors (e.g., difficulties with social interaction, difficulties with communication, and the frequent exhibition of repetitive behaviors or circumscribed interests).

- Fogt et al., 2003; Mandlawitz, M. R. 2002

Evidence-Based Assessment

Evidence-based tools provide a reliable and valid assessment of the autistic triad. They are problem-specific and based on relevance to identification, differential diagnosis and classification, intervention planning and monitoring, outcome, professional experience, psychometric adequacy, and/or a combination of these in both the research and practice literature. All provide information critical to the delivery of services to children with ASD.

- Mash and Hunsley, 2005

Diagnostic Accuracy/Validity

- > Sensitivity: Percentage of cases with a disorder that test positive.
- > Specificity: Percentage of cases without a disorder that test negative.
- > False negative: Percentage of cases with a disorder who test negative.
- > False positive: Percentage of cases without a disorder who test positive.
- Positive Predictive Value (PPV): The power of an instrument to identify a disorder. Instruments are expected to have high PPV with a known high-risk group.

Sensitivity Matters

- A highly sensitive test means that there are few *false negative* results (individuals with a disorder who screen negative), and thus fewer cases of the disorder are missed. Specificity is the percentage of cases without a disorder that screen negative. A highly specific test means that there are few *false positive* results (individuals without a disorder who screen positive). False negatives decrease sensitivity, while false positives decrease specificity. Sensitivity and specificity levels of .80 or higher are generally recommended.
- An efficient assessment tool should minimize false negatives as these are individuals with a likely disorder who remain unidentified

Selected Screening Measures

Measure	Age Range	Informant	No. of Items	Sensitivity	Specificity	Time to Complet
ASRS (a)	2 to18	Parent/Teacher	15 (Likert Scale)	.94	.92	10 min
ASSQ (b)	6 to 17	Parent/Teacher	27 (Likert Scale)	.91	.86	10-20 min
SCQ (c)	4 to Adult	Parent	40 (yes/no)	.96	.80	10 min
SCDC (d)	4 to 16	Parent	12 (yes/no)	.88	.91	10 min
CDC (a)	4 to 18	Parent and/or Teacher	65 (Likert Scale)	85	75	10-20 min

Multi-Tier Screening Model

✓ Tier One:

The initial step is *case finding*. Students who present with elevated developmental risk factors and/or warning signs of ASD.

✓ Tier Two:

Once screened, scores on the ASRS, ASSQ, SCQ, SCDC, and SRS can be used as an indication of the approximate severity of ASD symptomatology.

✓ Tier Three:

Students who meet the threshold criteria in Tier Two may then be referred for an in-depth assessment and intensive intervention. Because the *ASRS*, *SCQ*, and *SRS* report good reliability and high levels of diagnostic validity, results from these screening measures can be integrated into a comprehensive developmental assessment.

Comprehensive Developmental Assessment

- > Components:
- ✓ Record review
- Developmental and medical history
- ✓ Medical screening and/or evaluation
- ✓ Parent/caregiver interview
- ✓ Parent/teacher ratings of social competence
- Direct child observation
- ✓ Cognitive assessment
- ✓ Academic assessment
- ✓ Adaptive behavior assessment
- ✓ Communication and language assessment

Core Assessment Domains

Direct Observation: Direct observation should take place throughout the assessment and intervention planning process. The specific format can be either formal or informal.

Parent/Teacher Report: The determination of social functioning is fundamental to the assessment and evaluation of the student. Questionnaires completed by parents and teachers are one of the most vital sources of information about the child's social responsiveness and social-communication skills.

Achievement: The assessment of academic ability is necessary for the purposes of educational decision making and planning. An evaluation of academic functioning will often reveal a profile of strengths and weaknesses.

Cognitive: A critical domain of the core assessment is intellectual or cognitive functioning. The level of intellectual functioning is associated with the severity of autistic symptoms, skill acquisition and learning ability, and level of adaptive functioning.

Communication: Communication skills are a vital component of a comprehensive ASD assessment. Particular attention should be given to the pragmatic, social communicative functions of language (e.g., turn taking, understanding of inferences and figurative expressions) as well as to the nonverbal skills needed to communicate and regulate interaction.

Adaptive Behavior: This domain is a fundamental component of the core ASD assessment battery. Assessment of adaptive behavior should always accompany intellectual testing. Measuring adaptive behavior is also important for setting appropriate goals in treatment and intervention planning.

Additional Domains

Behavioral/Emotional Problems: Children with ASD are at risk for other conditions such as disruptive behavior disorders, mood, and anxiety disorders. These problems should be assessed whenever significant behavioral issues become evident or when major changes in behavior are reported.

Executive Function and Attention: Deficits in executive function may be an important feature of ASD. Children with ASD frequently demonstrate symptoms associated with attention deficit/hyperactivity disorder. *ADHD* is a common initial diagnosis for many children with ASD. An assessment of *ADHD* characteristics may be included when inattention and/or impulsivity are indicated as presenting problems.

Family System: Because stress can directly influence the parent or caregiver's ability to support the child with disabilities, the identification of parenting stress and parent-child relationship problems can alert the assessment team to the need for additional support or counseling.

Motor: Children with ASD may have problems in fine and/or gross motor functioning and visual Motor integration. Some students may demonstrate atypical motor development, poor coordination, or deficits in praxis (motor planning, execution, and sequencing).

Sensory Processing: Although sensory issues are considered a "nontriadic" characteristic and often overlooked in many ASD assessment procedures, attention to sensory problems can be an important component of a screening or evaluation.

Gender Differences

✓ Gender differences should be considered in screening and assessment.

- ✓ Lower symptom severity scores for girls.
- ✓ Referrals for evaluation for boys are nearly 10x higher than for girls.
- Over reliance on the male model with regard to diagnostic criteria may result in *test bias*.
- ✓ Higher functioning girls on the spectrum are less impaired than boys.
- ✓ Qualitative difference in social connectedness and reciprocity.
- ✓ Gender-specific differences on the ASRS, ASSQ, SCDC, and SRS.
- ✓ A higher threshold cut-off scores for boys might be considered.

Selected ASD-Specific Tools

Measure	Format	Age Range	Time
Direct Observa	tion/Interaction:		
ADOS	Direct Testing	2 years to adult	30 to 60 min
ADI-R	Interview	18 months to adult	1 to 2.5 hrs
CARS-2	Observation	2 years to adult	5 to 10 min
Parent/Teache	r Report:		
ASRS	Questionnaire	2 to 18 years	5 to 15 min
CCC-2	Questionnaire	4 to 16 years	10 to 15 min
SCQ	Questionnaire	4 years to adult	10 to 15 min
SRS	Questionnaire	4 to 18 years	10 to 15 min

te: ADOS – Autism Diagnostic Observation Schedule; CARS-2 – Childhood Autism Rating Scale; 2nd edition; ASRS – Autism Spectrum Rating Scales; ADIR – Autism Diagnostic Interview – Revised; CCC-2: Children's Communication Checklis; SCQ – Social Communication Questionnaire; SRS – Social Responsiveness Scale.

Autism Diagnostic Observation Scale (ADOS)

- Semi-structured assessment consisting of a standard set of interactions and activities that sample social, communication, and play behaviors.
- Four modules for use with different developmental and language levels. Activities vary based on language level and chronological age.
- Scoring algorithm results in a Communication score, a Reciprocal Social Interaction score, and a Total score (a sum of the Communication and Reciprocal Social Interactions scores). Algorithm cut-off score for Autism or the more broadly defined ASD in each of these areas.
- Does not include an algorithm for restricted and repetitive behaviors.
- ✓ Training in administration and coding is required.
- ✓ Should be used within the context of a comprehensive evaluation.

Other Popular Tools

- ✓ Popular third party rating scales such as the Gilliam Autism Rating Scale (GARS/GARS2), Asperger Syndrome Diagnostic Scale (ASDS), and Gilliam Asperger's Disorder Scale (GADS) should be used with caution due to questions concerning standardization and norming procedures.
- ✓ Practitioners who are using or considering using the GARS/GARS2 should be aware of the instrument's poor sensitivity (.38 to .53) and underidentification of higher functioning ASD.
- Given its high false negative rate, the GARS2 is not recommended for inclusion as a primary phenotypic instrument in a comprehensive developmental assessment battery for ASD.

-Mazefsky & Oswald, 2006; Norris & Lecavalier, 2010

Intervention/Treatment: Four Factors of Evidence-Based Practice

- ✓ Research Findings Strength of evidence ratings.
- $\checkmark\,$ Professional Judgment Professionals with expertise in ASD.
- Values and Preferences Values and preferences of parents, care providers, and the individual with ASD.
- ✓ Capacity Proper training, adequate resources, and feedback about *treatment fidelity*.

Established Interventions/Treatments

- ✓ Early Intensive behavioral intervention (EIBI)
- ✓ Positive Behavior Support.
- \checkmark Joint attention intervention.
- ✓ Modeling.
- ✓ Naturalistic teaching strategies.
- ✓ Peer training.
- \checkmark Pivotal Response Treatment.
- ✓ Visual Schedules.✓ Self-management.
- ✓ Story-based interventions (Social Stories).
- National Autism Center, National Standards Project

Emerging Interventions/Treatments

- ✓ Augmentative/alternative Communication.
- ✓ Cognitive-Behavioral Interventions.
- ✓ Developmental Relationship-Based Treatment.
- ✓ Social Communication Intervention.
- ✓ Social Skills Training.
- ✓ Picture Exchange Communication System.
- ✓ Music Therapy.
- ✓ Structured Teaching.

- National Autism Center, National Standards Project

Unestablished Interventions/Treatments

- ✓ Sensory integration therapy (SI).
- ✓ Auditory integration training (AIT).
- ✓ Facilitated Communication (FC).
- ✓ Gluten-and Casein-Free Diet.
- ✓ Sensory Integration Therapy
- ✓ Academic Interventions

- National Autism Center, National Standards Project

Questions to Ask

- ✓ Is there reliable evidence to support effectiveness? (Scientifically Validated)?
- ✓ Is there a risk of harm to the child?
- ✓ Is there excessive media publicity?
- ✓ Is there promise of a cure?
- ✓ What is the rationale or purpose?
- ✓ Only case reports and anecdotal data?
- ✓ Lack of peer-reviewed references?

Autism Litigation Under IDEA

- ✓ FAPE/LRE court cases are over 10 times more likely to concern a child with autism than the proportion of children with this disability in the special education population.
- ✓ Children with autism accounted for almost one third (32%) of a comprehensive sample of published court decisions concerning the core concepts of free appropriate public education (FAPE) and least restrictive environment (LRE) under the Individuals With Disabilities Education Act.

- Zirkel, 2011

Implications

- ✓ School districts should ensure that the IEP process follows the procedural requirements of IDEA. This includes actively involving parents in the IEP process and adhering to the time frame requirements for assessment and developing and implementing the student's IEP.
- ✓ School districts should make certain that comprehensive, individualized evaluations are completed by school professionals who have knowledge, experience, and expertise in ASD. If qualified personnel are not available, school districts should provide the appropriate training or retain the services of a consultant.
- School districts should develop IEPs based on the child's unique pattern of strengths and weaknesses. Goals for a child with ASD commonly include the areas of communication, social behavior, adaptive skills, challenging behavior, and academic and functional skills. Evidence-based instructional strategies should also be adopted to ensure that the IEP is implemented appropriately.

More Implications

- ✓ School districts should assure that progress monitoring of students with ASD is completed at specified intervals by an experienced team of professionals. Evidence-based data should be collected to document progress towards achieving IEP goals and to assess program effectiveness.
- ✓ Inclusive education alone is insufficient. Evidence-based intervention and training is also necessary to address specific skill deficits. While the least restrictive environment (LRE) provision of IDEA requires that efforts be made to educate students with special needs in less restrictive settings, some students may require a more comprehensive program to provide FAPE
- ✓ School districts should provide on-going training and education in ASD for both parents and professionals. Professionals who are trained in specific methodology and techniques will be most effective in providing the appropriate services based upon the unique needs of the individual child.

Some Big Ideas

- School districts should provide training to all school professionals ✓ on evidence-based guidelines for screening, assessment, and intervention for ASD.
- ✓ Identify widely used measures with and without empirical support.
- ✓ Consider resident ASD specialists within the school district.
- Implement common protocols for the assessment of ASD.
- Develop closer relationships with ASD experts and service providers in the community.
- Provide school personnel and parents with information about the differences between the DSM-IV categories of PDD/ASD and the educational category of autism.

Acknowledgement

Adapted from:

Wilkinson, L. A. (2010). A Best Practice Guide to Assessment and Intervention for Autism and Asperger Syndrome in Schools. London & Philadelphia: Jessica Kingsley Publishers.



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References and Resources

- Akshomoff, N., Corsello, C., & Schmidt, H. (2006). The role of the Autism Diagnostic Schedule in the assessment of autism spectrum disorders in school and community settings. *The California School Psychologist*, 11, 7 (13)
- Brock, S. E., Jimerson, S. R., & Hansen, R. L. (2006). Identifying. Assessing, and Treating Autism at School. New York: Springer. Baron-Cohen, S. (2008). Autism and Asperger syndrome: The facts. New York: Oxford University Press.
- Campbell, J. M. (2005). Diagnostic assessment of Asperger's disorder: A review of five third party rating scales. Journal of Autism and Developmental Disorders, 35, 25–35.
- Charman, T., Baird, G., Simonoff, E., Loucas, T., Chandler, S., Meldrum, D., et al. (2007). Efficacy of three screening instruments in the identification of autistic-spectrum disorders. *British Journal of Psychiatry*, 191, 554–559.
- Ehlers, S., Gillberg, C., & Wing, L. (1999). A screening questionnaire for Asperger syndrome and other high functionine autism spectrum disorders in school age children. *Journal of Autism and Developmental* 29, 129-141.
- Fogt, J. B., Miller, D. N., & Zirkel, P. A. (2003). Defining autism: Professional best practices and published case law. Journal of School Psychology, 41, 201-216. Goldstein, S., Naglieri, J. A., & Ozonoff, S. (Eds.) (2009). Assessment of Autism Spectrum Disorders. New York: Guilford.
- House, A. E. (2002). DSM-IV Diagnosis in the Schools. New York: Guilford.
- Kamphaus, R. W., & Campbell, J. M. (Eds.) (2006). Psychodiagnostic Assessment of Children: Dimensional and Categorical Approaches. New Jersey: Wiley.

References and Resources

Lord, C., & Corsello, C. (2005). Diagnostic instruments in autistic spectrum disorders. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders: Vol. 2.* Assessment, interventions, and policy (3rd ed. pp. 730-771). New York: John Wiley.

- Mandlawitz, M. R. (2002). The impact of the legal system on educational programming for young children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 32, 495-508. National Research Council (2001). Educating Children with Autism. Washington, DC: National Academy Press.
- Norris, M. & Lecavalier, L. (2010). Screening accuracy of level 2 autism spectrum disorder rating scales: A review of selected instruments. Autism, 14, 263-284.
- Ozonoff, S., Goodlin-Jones, B. L., & Solomon, M. (2005). Evidence-based assessment of autism spectrum disorders in children and adolescents. Journal of Clinical Child and Adolescent Psychology, 34, 523–540.
- Russell, G., Ford, T., Steer, C., & Golding, J. (2010). Identification of children with the same level of impairment as children on the autism spectrum, and analysis of their service use. *Journal of Child Psychology and Psychiatry*, 51, 643-651. Skuse, D. H., Mandy, W., Steer, C., Miller, L. L., Goodman, R., Lawrence, K., Emond, A. & Golding, J. (2009).
- Social communication competence and functional adaptation in a general population of Children. Preliminary evidence for sex-by-verbal IQ differential Risk. Journal of the American Academy of Child and Adolescent Psychiatry, 48(2), 128-137.
- Wilkinson, L. A. (2011). Identifying students with autism spectrum disorders: A review of selected screening tools. Communiqué, 40, pp. 1, 31-33.
- Yell, M. L., Katsiyannis, A. Drasgow, E. & Herbst, M. (2003). Developing legally correct and educationally appropriate programs for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 18, 182-191.

References and Resources

- American Academy of Pediatrics http://www.pediatrics.org Association for Science in Autism Treatment http://www.nationalautismcenter.org/
- Center for Autism and Related Disabilities (CARD) <www.coe.fau.edu/card/>
- Center for Disease Control and Prevention (CDC)
- <www.cdc.gov/ncbdd/autism/index.html>
- Individuals with Disabilities Education Improvement Act of 2004. Pub. L. No. 108-446, 108th Congress, 2nd Session. (2004) http://idea.ed.gov/explore/homes-
- National Autism Center: National Standards Project
- <http://www.nationalautismcenter.org>
- National Information Center for Children and Youth with Disabilities
- (NICHCY) http://www.nichcy.org National Institute of Student Health and Human Development Autism Site
- <http://www.nichd.nih.gov/autism>
- National Institutes of Health Autism Research Network <http://www.autismresearchnetwork.org/>

References and Resources

National Research Council <http://www.nap.edu>

Organization for Autism Research <www.researchautism.org/>

First Signs <www.firstsigns.org>

Wrightslaw: Special Education Law, 2ndEdition (2007). http://www.wrightslaw.com/

Best Practice Reviews

ASRS: <http://bestpracticeautism.blogspot.com/2011/01/best-practice-review autism spectrum.html>

CARS2: <http://bestpracticeautism.blogspot.com/2010/11/best-practice-autism review-childhood.html>

GARS/GARS2: < http://bestpracticeautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceautism.blogspot.com/2011/03/best-practiceaureview-gilliam-autism.html>

SCQ: <http://bestpracticeautism.blogspot.com/2011/06/best-practice-review social.html>

SRS: <http://bestpracticeautism.blogspot.com/2011/04/best-practice-review social.html>

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