

# Investigating Adolescent Issues in Autism Spectrum Disorder (ASD) & the DSM-5 Criteria

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#### Three Core Symptom Domains - DSM-IV









#### Two Core Symptom Domains – DSM-5

- Social Communication/Interaction
- Restricted, Repetitive behaviors, and interests

Accompanied by a severity modifier for each domain to capture the spectrum of ASD







### DSM-5

- 7 criteria (from 12 criteria from DSM-IV)
- 5 previously independent disorders in DSM-IV grouped as PDD, DSM-5 defines a single ASD
- New category of Social Communication Disorder
- Language development is treated as separate from ASD
- More inclusive age of onset criterion







### **DSM-5** Criteria for ASD

- 1. Persistent deficits in social communication and social interaction, have to have all 3 (currently or by history):
  - a. Deficits in social-emotional reciprocity
  - b. Deficits in nonverbal communicative behaviors used for social interaction
  - c. Deficits in developing, maintaining and understanding relationships
- \*\* Specify current severity







### **DSM-5** Criteria

- 2. Restricted, repetitive patterns of behavior, interests or activities as evidenced by at least 2 of the following (currently or by history):
  - a. Stereotyped or repetitive motor movements, use of objects or speech
  - b. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of behavior of verbal or nonverbal behaviors
  - c. Highly restricted, fixated interests that are abnormal in intensity or focus
  - d. Hyper-or hypo reactivity to sensory input or unusual interest in sensory aspects of environment







## DSM-5 (cont'd)

- 3. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities or may be masked by learned strategies in later life).
- 4. Symptoms cause clinically significant impairment in social, occupational or other important areas of current functioning.
- 5. Not better explained by intellectual disability or global developmental delay. Intellectual disability and ASD frequently co-occur; to make co-morbid diagnosis, social communication should be below that expected for developmental level.





#### Autism Spectrum Disorder

- ASD- can be conceptualized as a heterogeneous group of disorders or symptoms
- Not a single disorder and there is no agreed upon single cause
- Every child with ASD is unique
- Key is to identify the symptoms so we can intervene







### Comorbidity

- 64% poor attention span
- 43-88% unusual preoccupation
- 16-37% obsessive/compulsions or rituals
- 50-89% stereotypic utterances
- 68-74% stereotypic mannerisms
- 17-74% anxiety/fears
- 9-44% depressive mood, irritability
- 43% self-injurious







### Sleep Problems in ASD

- Individuals with ASD suffer from problems (insomnia) 40-80% more
- Those with hx of regression have more sleep problems
- Sleep problems can impact mood, attention, impulse control, daytime functioning in general & cause parental stress
- Daytime sleepiness may manifest as hyperactivity

(Cortesi, Giannotti, Ivanenko, & Johnson, 2010)







#### Pediatric Neuropsychology

• Professional specialty concerned with learning and behavior in relationship to a child's brain. A pediatric neuropsychologist is a licensed psychologist with expertise in how learning and behavior are associated with the development of brain structures and systems.

www.div40.org







### What is a Good Evaluation?

- Looks at "whole" child/adolescent
- Tests administered depend on your concerns have specific questions in mind
- Clearly delineates strengths and weaknesses
- Interprets test data for you in terms that you understand
- Uses the objective data from research-based methods/standardized tests to make specific, relevant and practical recommendations





### What do we assess?

- General Intelligence
- Academic Achievement
- Language
- Phonological Processing
- Visual-Spatial Perception
- Memory
- Attention

- Executive Functions
- Processing Speed
- Fine Motor Skills
- Sensory Functioning
- Emotional/Behavioral/ Social Functioning
- Adaptive Functioning





## Monarch Center for Autism

#### Achievement

- Word Reading
- Reading Fluency
- Reading Comprehension
- Math Computation
- Math Story Problems
- Written Expression (Transcription and Generation)







### Written Expression

- Transcription: production of letter and spelling that is necessary to translate ideas into a written product
- Generation: translations of ideas into language representations that must be organized, stored and then retrieved from memory

(Fletcher, 2012)







### **Evaluation Procedure**

- Rating scales input from parents/teachers
- Home videos
- Thorough diagnostic interview
- Observation
- Formal neuropsychological testing
- Referral to other specialists as needed









### **Evaluation Procedure**

- Feedback to parents
- Do not just give label
- Provide concrete steps (in writing) for parents to follow
- Discuss results with child if appropriate
- Be available for follow-up with family and school







### Neuropsychological Findings

- Have problems in comprehension of sentences
- Mental state verbs
- Reasoning
- Theory of mind tasks
- Prosody
- Pragmatics







### Neuropsychological Findings

- Impaired memory for emotional events, faces and verbal information
- Sustained attention for non-preferred activities
- Impaired executive functions (set shifting, working memory, hypothesis testing)
- Impaired attention shifting







### **Executive Functioning**

• Umbrella term for many complex cognitive processes that serves ongoing goal-directed behaviors

Most definitions of executive functions include the following:

- Goal setting and planning
- Organization of behavior over time
- Flexibility
- Attention and memory systems (working memory)
- Self-regulatory processes (self-monitoring)





#### **Benefits of Executive Functions**

• Academic success in school and life is increasingly dependent on a student's ability to plan, organize and prioritize information, distinguish main ideas from details, monitor their progress, and reflect on their work

(Meltzer & Krishnan, 2007)







#### Critical Elements Common to Programs

- Highly supportive environment
- A functional approach to problem behaviors
- Curriculum content that addresses communication, behavior and social skills
- Plans for transition from junior high & high school
- Focuses on the whole child







#### Intervention

- Education about ASD
- Individual/Family Therapy
- Behavior management techniques/Positive programming
- Primary focus is prevention of problems (be aware of sensory issues & coping skills)
- Social Skills Training (Social Stories/Scripts/Groups)
- Visual Supports
- Peer Mediated Intervention
- Medication







#### **Adolescent Issues**

- Dealing with Anger/Frustration (Co-morbidity)
- Independent Task Completion & Executive Functioning Skills
- Pragmatic Language/Social Awareness
- Personal Hygiene
- Self-Awareness & Advocacy
- Dating/Sexual Interests
- Managing Money
- Employment







#### Eliminating Negative Behaviors

- Intervene when adolescent shows initial signs of stress
- Provide visual support and assistance with communication
- When appropriate ignore
- Will perceive responses in "absolute value"
- FBA to identify antecedents
- Positive Behavior Plan; collect data to determine if plan is working







### **Self-Regulatory Strategies**

- Identify signs of overload
- Identify potential problematic situations
- Strategies (effectiveness) adolescent uses to manage stress
- Modify environment and adult response
- Try soothing music
- Exercise
- Technology







### Calm Down Strategies

- Create cue cards or visual list of what to do when angry/stressed.
- When adolescent shows card, direct to "quiet spot"
- When in quiet spot, direct to visual to show how to calm (take a deep breath, count to 100, recite Star Wars characters, listen to music on iPad)
- Use stress ball, notebook to write in, book, etc. When calm, return to activity







### Adolescents and Daily Living

- Hygiene no real drive to please others & sensory issues
- Dressing teach independence
- Bathing and Grooming (list of how to adequately shower; list for bathroom routine)
- Use calendar to remind to shower, brush teeth, do laundry, etc.
- List and discuss why good hygiene is important







### Independence

- All are driven by hormones -they are adolescents
- Teach adolescent skills to do things for themselves cooking, laundry, packing lunch, cleaning, importance of appearance/hygiene, and leisure skills
- Use older peers as buddies/tutors to go shopping







#### **EF** Interventions

- Use of everyday routine with (e.g., Goal-Plan-Do-Review)
- Support working memory with "visual copy" of routine
- Teach adolescent how to formulate a plan, review their performance
- Teach to monitor their behavior
- Teach to become a self-advocate







#### Academic Interventions

- Highlight texts, study guides, notes
- Completed model of what is expected
- List of criteria for grading
- Decrease writing-verbal responses, computer, multiplechoice tests







#### Academic Interventions

- Priming
- Teaching outlining skills, how to pick out important details
- Graphic Organizers (*Framing Your Thoughts, Inspirations, etc.*)
- Provide enrichment activities in areas of strength (i.e., advanced classes in science, drama, art, etc.)
- Homework support fax or email to parent or eliminate







### Suggestions for Attention

- Allow individual own ways of attending
- Reduce distractions
- Exercise
- Use visual frames & graphic organizers
- Provide auditory frame (say what you are going to do and then do it)
- Break down lengthy assignments/lists
- Model goal directed behaviors







#### "Learning the R.O.P.E.S for Improved Executive Function"

(Schetter, 2004)

• Capitalize on visual strengths, practice and feedback in reallife situations, relies heavily on graphic organizers







Vrite a	about y	our day:	
Today I			
The best part of my day was			
Draw about your day!			
	Name:		Date:
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### Social Skills

- Cue cards and scripts for interacting with friends
- List of reminders/rules for behavior (cue cards to show how to deal with stressful situations; too loud get headphones or exit room)
- Never assume, always teach skill
- Use Social Stories & Comic Strip Conversations
- List of activities, list of free-time options
- Dry erase board, white board, etc.






#### Social /Language Strategies

- Teach exceptions to rules
- Keep a double meaning word notebook to review and test
- Teach idioms
- Break down social skills







#### Respect

To make people respect me, I should respect them. I should:

- Say "hello" when I see them
- Thank them for the favors they do for me
- Compliment them on their work
- Do favors for them (i.e., open doors and show I care)
- Start a pleasant conversation with them







### Respect (part 2)

If something goes wrong, I should not freak out. I should:

- Stay calm: don't be a "rude dude"
- Ask a calm question to help problem solve
- (If I am out of lunch money) "Can you help me? I'd like to each lunch today."
- (If the schedule changes) "What am I supposed to be doing right now?"







## Respect (part 3)

I should not: raise my voice or hit them

- If I think they are laughing at me, laugh along with them (Everyone must laugh at themselves once in a while)
- Thank them if they give me an explanation
- Go along with it as if nothing happened
- Go through with what I have to do without complaining out loud (by, A.C.D.C.)







# Responding to Bullying

- Know the facts and slang
- If someone upsets you, stay calm
- If they continue, make an excuse to get away
- Inform parents and/or counselor
- Stay safe, get away, tell trusted adult
- If someone approaches you online, tell parents ASAP







### Sample Hidden Curriculum

- Don't write on the bathroom walls
- For boys, don't talk in the restroom while you are urinating
- Don't look over someone's shoulder when they are checking their email/texting
- Know which kids to avoid
- Do not pass gas or pick your nose (or teeth) in any class

(Myles & Simpson, 1998, 2001)







### Items (cont'd)

- Use a nice tone of voice when talking to teachers they like it. Also, try to smile sometimes.
- Rules change from teacher to teacher. Do not focus on the fact that it might not be fair.
- If you do something funny, it is usually funny once. If you do it repeatedly, it makes you look goofy and people might make fun of you.







#### Technology to Improve Skills

- A personal digital assistant (PDA) also helps by listing conversational tips (i.e., smile, make eye contact, don't interrupt, etc.)
- Can program it with lists of organizational tips, strategies, track progress
- Use it to record feelings/frustrations
- iPad, iPhone Apps Proloquo2Go
- <u>www.FizzBrain.com</u>
- Software programs: Dragon Naturally Speaking
- Iscribe DigiMemo4







#### Summary

- Prepare for transitions
- Provide structure and visual supports
- Establish routines and be consistent
- Limit verbalizations and avoid arguments
- Teach expectations for all new routines (lists, social stories)
- Never assume, first teach
- Focus on generalization







#### Resources

- Parent support groups/information (<u>www.autism-society.org</u>)
- Sibling support groups (<u>www.thearc.org/siblingsupport</u>)
- Respite services (CCBDD)
- Other family members (<u>www.asgc.org</u>)
- Create informal network of other parents/families/professionals in community (<u>www.milestones.org</u>)
- Books/training modules (<u>www.ocali.org</u>; <u>www.autisminternetmodules.org</u>)





• AIMS – Autism Internet Modules: Linking Research to Real Life (from Autism Interactive Collaborative Network group)

www.autisminternetmodules.org





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www.worldautismawarenessday.org

www.autismspeaks.org









# Questions





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