Features of AUTISM

- All or none approach

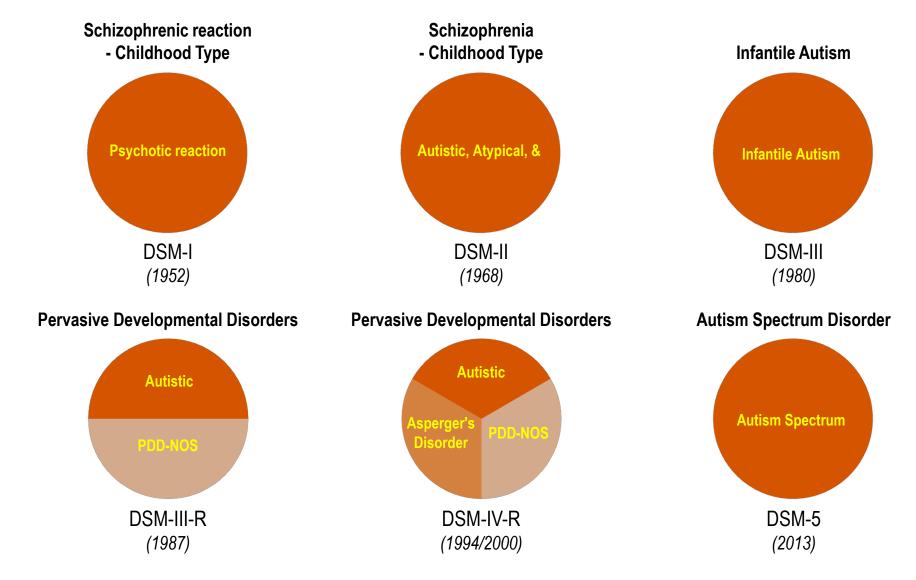
- Abnormal intensity of interests

CORE Features	
Impaired Social-Emotional Competence	Restricted/Repetitive Behaviors (RRBs)
I. Non-verbal communication - Eye contact (joint-attention)	 Cognitive Rigidity Routines / rituals (rule-bound/transitional difficulties/lack spontaneity)
II. Social-emotional reciprocity - Empathy - Sharing (activities, affect, conversations) - Social flexibility - Contextual understanding	II. Repetitive patterns - Speech (Delayed echolalia, Scripting) - Motor mannerisms (Flapping, Clapping, Rocking, Swaying) - Interests
III. Social-emotional Salience - Relevant social-emotional stimulus	III. Atypical Salience - Idiosyncratic (odd) Interests
 IV. Abstracting ability Black & white/concrete/literal thinking Tolerance for unstructured time, ambiguity 	IV. <u>Sensory Dysregulation</u> - Atypical sensory perceptions/responses - Introsceptive ability
 V. Introspective/Introceptive ability (self awareness of cognitions, emotions, & physiological state) Psychological mindedness VI. Executive Functions 	• Poor motor coordination
(Control/moderation of emotions, motivations, interests)	Novelty averse behaviors Atypical foor response.

Atypical fear response

Self-injurious behaviors

DSM Criteria for Autism



Clinical and Research Program in Pediatric Psychopharmacology

DSM-5 Diagnostic Criteria for Autism

AUTISM SPECTRUM DISORDER (299.00)

A Persistent deficits in social interaction and communication

as manifested by lifetime history of all three of the following:

I Deficits in social-emotional reciprocity

- Inability to initiate or respond to social interactions
- Inability to share affect, emotions, or interests
- Difficulty in initiating or in sustaining a conversation

II Deficits in nonverbal communicative behaviors used for social interaction

- Abnormal to total lack of understanding and use of eye contact, affect, body language, and gestures
- Poorly integrated verbal and nonverbal communication

III Deficits in developing, maintaining, and understanding relationships

- Difficulty in adjusting behavior to social contexts
- Difficulty in making friends
- Lack of interest in peers

B Restricted, repetitive, and stereotyped patterns of behavior, interests, or activities as manifested by lifetime history of at least two of the following:

I Stereotyped or repetitive speech, motor movements, or use of objects

- Motor stereotypies or mannerisms (lining up toys)
- Echolalia, stereotyped, or idiosyncratic speech

II Excessive adherence to sameness, routines, or ritualized patterns of verbal or nonverbal behavior

- Transitional difficulties
- Greeting rituals
- Rigid patterns of thinking

III Highly restricted, fixated interests that are abnormal in intensity or focus

- Preoccupation with excessively circumscribed or perseverative interests

IV Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment

- Sensory integration issues
- Apparent indifference to pain/temperature
- Excessive smelling, touching, or visual fascination with lights or movements

- C Symptoms must be present in the early developmental period Symptoms may not fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life.
- D Symptoms cause clinically significant impairment in functioning
- E These disturbances are not better explained by intellectual disability

 To make comorbid diagnoses of ASD & ID, social communication should be below
 that expected for general developmental level.

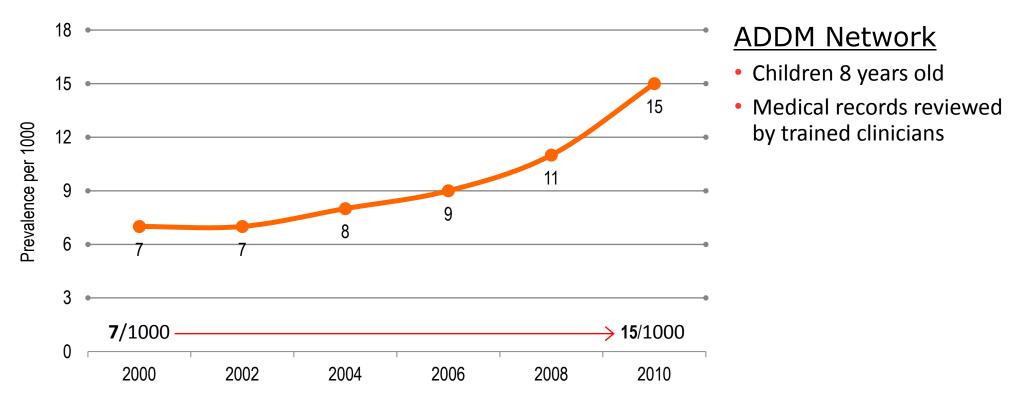
Specify if:

With or without accompanying intellectual impairment With or without accompanying language impairment

Associated with a known medical or genetic condition or environmental factor Associated with another neurodevelopmental, mental, or behavioral disorder With catatonia

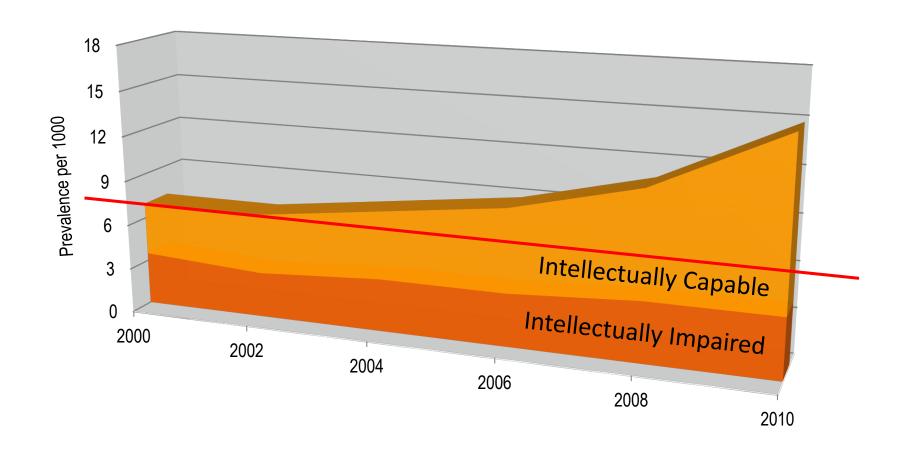
Prevalence of Autism Spectrum Disorder

Children with ASD



Prevalence of ASD has more than DOUBLED between 2002 & 2010 and is increasing at the rate of 10 - 17% / year

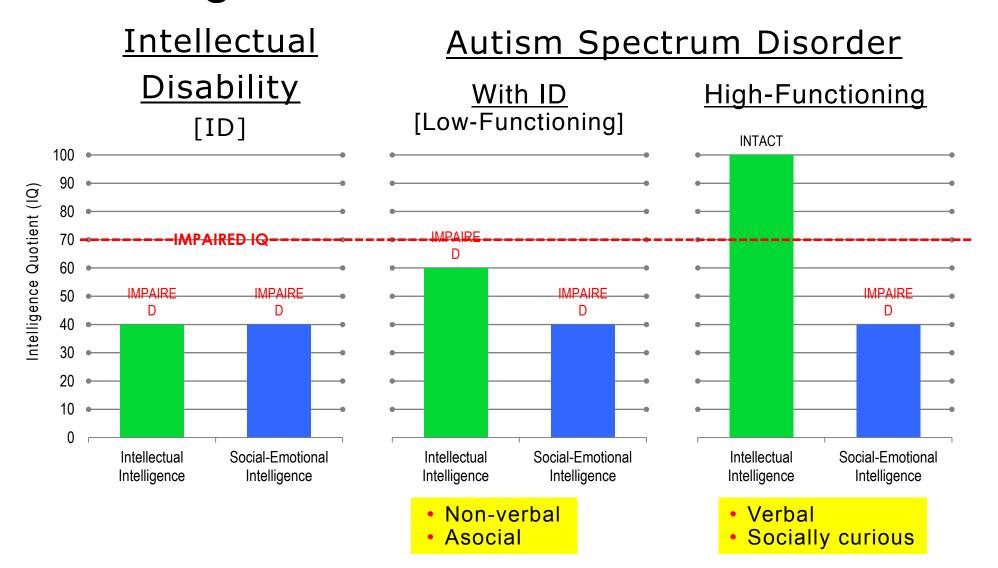
Prevalence of ASD



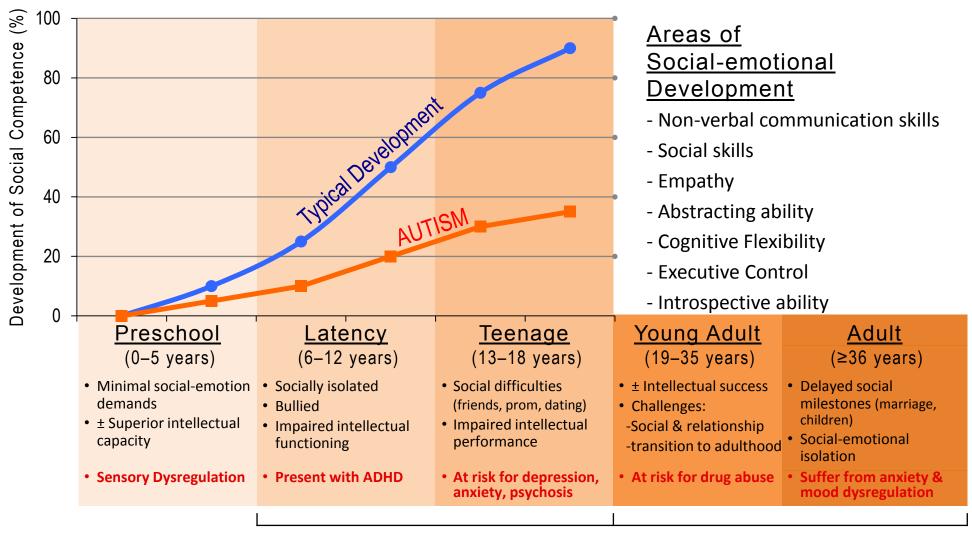
Substantial rise in the prevalence of AUTISM in intellectually capable populations

Centers for Disease Control & Prevention (CDC) Surveys: ADDM Network Surveys 2000, 2002, 2004, 2006, 2008, & 2010

Intelligence Profile in AUTISM



Social-emotion Competence Across the Lifespan



Social phase

Professional Phase