**DSM-V:**

ASD stands for Autism Spectrum Disorder.

According to the Diagnostic and Statistical Manual of Mental Disorders – Version 5 (DSM-V) – Autism is a spectrum disorder ranging from mild to severe.

Level 1 – “Requiring support”

* Typically speaks in full-sentences
* Social deficits
  + Difficulty initiating and maintaining conversation
  + Non-verbal cues can be difficult
* Inflexibility of behavior
  + Difficulty switching between activities
* Problems with organization and planning

Level 2 – ”Requiring substantial support”

* Language impairments – speaks in short phrases
* Social impairments
* Narrowed interests
* Difficulty coping with change
* Restricted repetitive behaviors

Level 3 – “Requiring very substantial support”

* Severe deficits in verbal and nonverbal social communication
* Limited initiations of social interaction
* Severe language delays
* Inflexibility of behavior
* Extreme difficulty coping with change
* Restricted/Repetitive behaviors that markedly interfere with functioning
* Great distress changing focus

Behavioral Excesses

* Disruptive Behavior
  + Tantrums, non-compliance, physical aggression, self-injury
* Stereotypic Behavior
  + Visual, auditory, olfactory, tactile, proprioceptive, rituals
* Splinter Skills
  + Hyperlexia, superior rote memory, affinity towards numbers

Behavioral Deficits

* Impaired Language
  + Mutism, echolalia, inappropriate inflection, volume, and content
  + Receptive understanding and expressive output
  + Social and Emotional
  + Avoidance or escape from social interactions and physical contact, lack of response to fear-evoking stimuli, displaying flat or non-contextual affect such as inappropriate laughter or crying
  + Attention
  + Ability to stay on task for an appropriate amount of time, short attention to task, poor eye contact
* Deficits in Play
  + Interactive, symbolic, pretend, peer play)
  + Abnormal Responses to Sensory Stimulation
  + Visual, auditory, tactile
  + Stimulus Over-Selectivity
  + Circumlocution—attending to a specific part of a stimulus rather than to the stimulus as a whole
* Cognitive Deficits
  + Mental retardation, regressing of acquired skills, scattered learning curves

Impaired Social Development

* Failure to initiate or respond to conversation
* Inability to read non-verbal cues (gestures, idioms, etc.)
* Reduced sharing of interests, emotions, affect
* Poor eye contact, body language, facial expressions
* Difficulty in imaginative play, making friends, adjusting behavior to suit various social context

Restricted Repetitive Behavior

* Restricted interests, activities
* Perseveration on topics, fixated interests
* Sometimes rigid, inflexible
* Insistence on sameness
* Stereotypic behavior (“Stimming”)
* Hyper/Hypo-activity to sensory input
* Can affect executive functioning/organization

Autism Prevalence

* 1 in 54 children in USA diagnosed with ASD (2020, CDC)
  + 1 in 34 boys identified with autism
  + 1 in 144 girls identified with autism
* Boys are four times more likely to be diagnosed with autism than girls.
* Autism ranges from mild to severe:
  + 44% have IQ scores in the average to above average range (i.e., IQ >85)
  + 25% are in the borderline range (IQ 71–85)
  + 31% of children with ASD have an intellectual disability (intelligence quotient [IQ] <70)
* Autism affects all ethnic and socioeconomic groups.
* Early intervention affords the best opportunity to support healthy development and deliver benefits across the lifespan.
* There is no medical detection for autism.

Causes of Autism Spectrum Disorder

*Research indicates:*

* Genetics are involved in the vast majority of cases.
* Children born to older parents are at a higher risk for having autism.
* Parents who have a child with ASD have a 2 to 18 percent chance of having a second child who is also affected.
* Among identical twins, if one child has autism, the other will be affected about 36 to 95 percent of the time.
* In non-identical twins, if one child has autism, then the other is affected about 31 percent of the time.
* Vaccines do not cause autism.

Associated Health Conditions

* 30-61% also have Attention Deficient Hyperactivity Disorder (ADHD)
* More than 50% have chronic sleep problems
* 11-40% are also affected by anxiety disorders
* Depression affects an estimated 7% of children and 26% of adults with autism
* Chronic gastrointestinal disorders are 8x more likely in children with ASD
* 1/3 of people with autism have epilepsy (seizure disorder)
* Schizophrenia affects 4-35% of adults with autism.
  + (Schizophrenia affects an estimated 1.1 percent of the general population)
* 1/3 of 2–5-year-old's with ASD are overweight; 16% are obese.
  + (23% of 2-5-year-old’s in the general population are overweight; 10% medically obese)
* Autism-associated health problems extend across the life span
  + From young children to senior citizens.

Treatment:

* Applied Behavior Analysis (ABA) is one of the only scientifically valid treatments for autism
* Treatment should begin young because the plasticity of the young brain allows for greater progress
* There is not any known cure for this life-long disorder. However, some individuals show significant progress with treatment.
  + Progress varies greatly among individuals
  + Some may even become indistinguishable from typically developing peers
* Note: ABA is not conversation therapy – ABA strives to enhance lifestyle, not change an individual

Non-Scientific Treatment

*No data to support the acquisition of skills and the reduction of autistic tendencies)*

* Sensory Integration
* Floor Time (Greenspan)
* Facilitated Communication
* Music Therapy
* Play Therapy
* Dolphin Therapy
* Etc.

*\*\* It is important to question treatments based on what we know about autism (i.e., that it is diagnosed in terms of behavioral deficits and excesses)*

References

* American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.)
* [https://www.autismspeaks.org](https://www.autismspeaks.org/)
* <https://www.mayoclinic.org/diseases-conditions/autism-spectrum-disorder/symptoms-causes/syc-20352928>
* <https://www.cdc.gov/ncbddd/autism/facts.html>