

Understanding Autism in Young Children

Developed by the Central Missouri Rapid Response Collaborative

Rapid Response is a cooperative effort among state and local agencies with a goal of screening children for Autism Spectrum Disorders and providing early interventions.

- *The information in this presentation does not indicate an exclusive course of treatment or serve as a standard for care. Variations, taking into account individual circumstances, may be appropriate. Resources and websites in the presentation are as current as possible, but may change at any time.*
- **Funded by the Missouri Department of Mental Health Division of Developmental Disabilities.**

Did you know?

The US Centers for Disease Control (CDC) estimate that 1 in 88 persons have an autism spectrum disorder (ASD)

Did you know?

Autism is four to five times more likely to be diagnosed in males than in females

Did you know?

More prevalent than
childhood cancer,
AIDS and diabetes
combined

Did you know?

At least \$137 billion in costs annually

Estimated lifetime costs for one
individual with ASD:

- Without an intellectual disability to be more than \$1.4 million
- With intellectual disability costs \$2.3 million

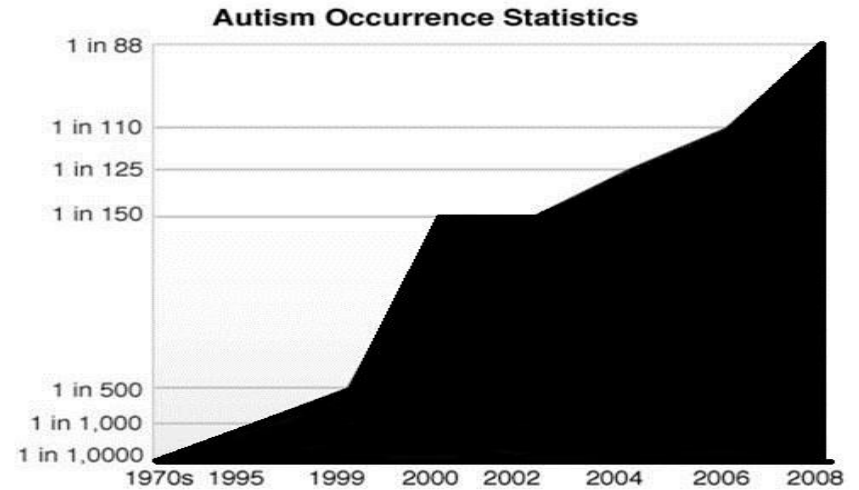
Did you know?

There is no medical test or
cure for autism

Autism Epidemic?

Identified Prevalence of Autism Spectrum Disorders
 ADDM Network 2000-2008
 Combining Data from All Sites

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (Range)	This is about 1 in X children...
2000	1992	6	6.7 (4.5-9.9)	1 in 150
2002	1994	14	6.6 (3.3-10.6)	1 in 150
2004	1996	8	8.0 (4.6-9.8)	1 in 125
2006	1998	11	9.0 (4.2-12.1)	1 in 110
2008	2000	14	11.3 (4.8-21.2)	1 in 88



Why the increase?

- Greater public awareness
- Change in diagnostic criteria
- Improved child counts
- Environmental

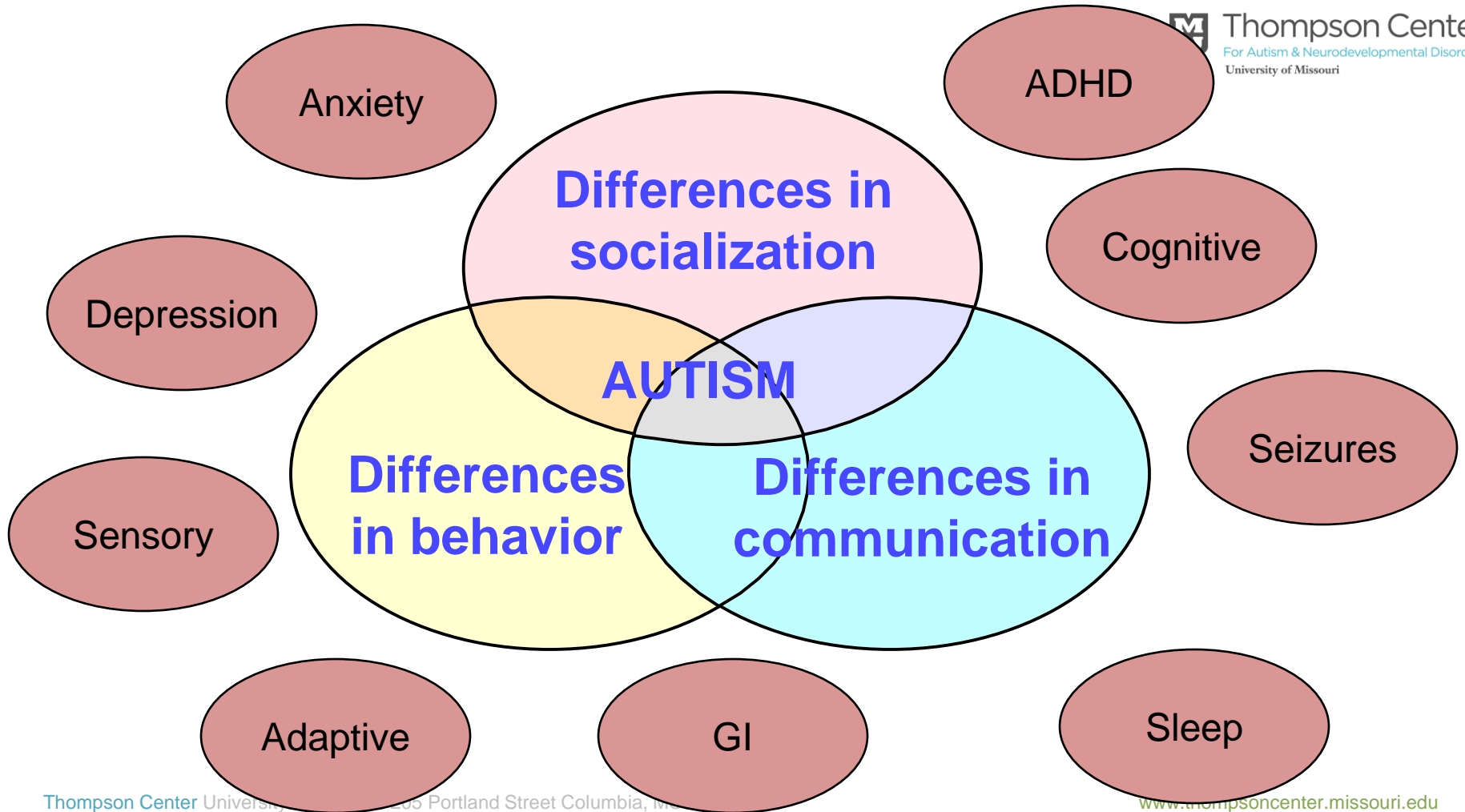
What is an Autism Spectrum Disorder? (ASD)



Autism Spectrum Disorder

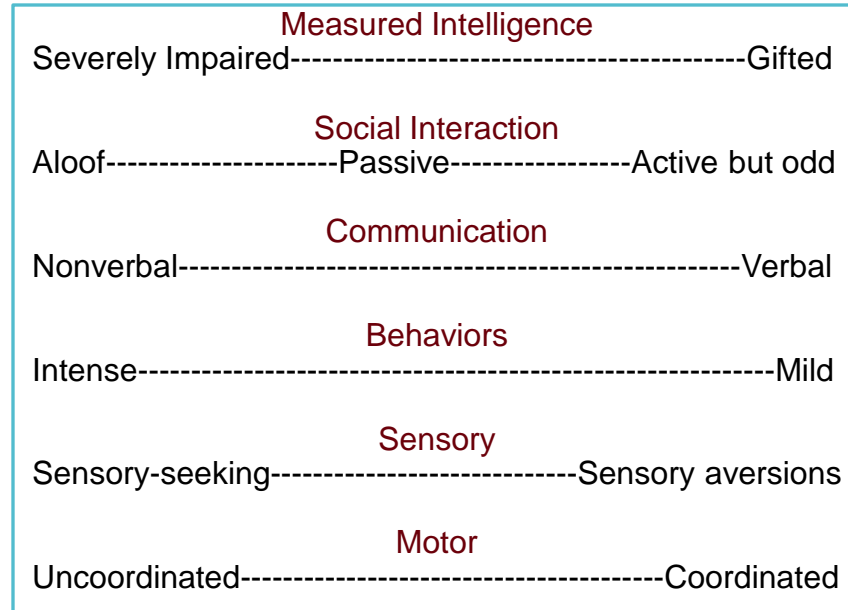
Two main domains where people with ASD show persistent deficits

- Social communication and social interaction
- Restricted and repetitive patterns of behavior



Autism Spectrum Disorder

Defies generalization



Autism Spectrum Disorder

Causes

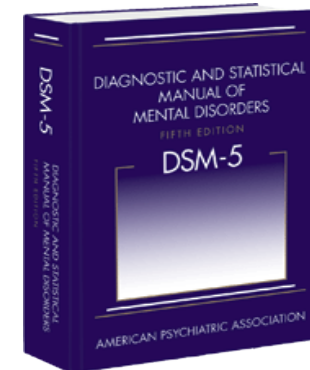
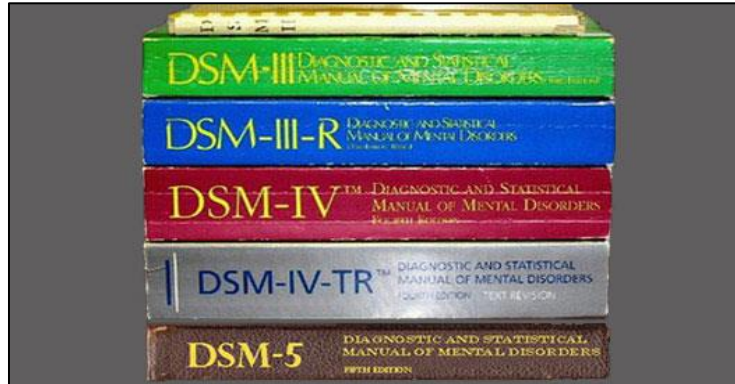
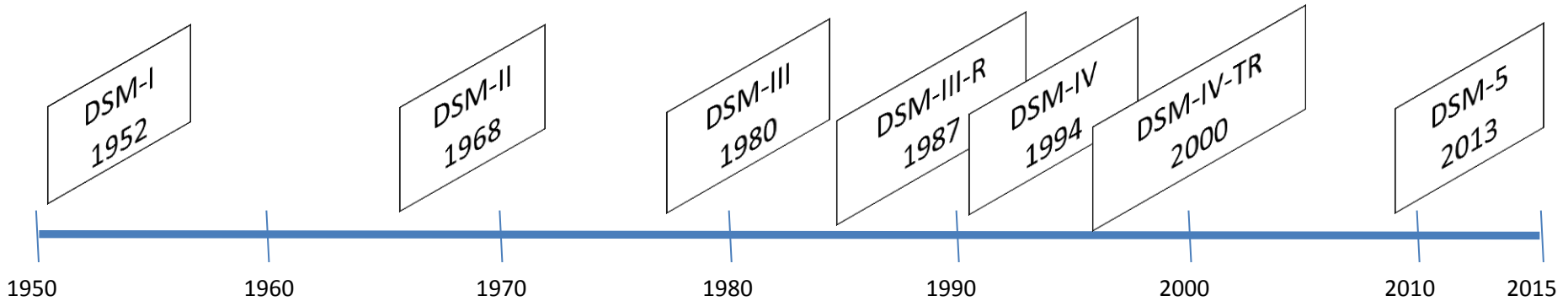
- Not just one kind of ASD
- ASD has a genetic basis
- ASD has been associated with a number of different genes (>300), but no single cause has been found
- Environmental factors may play a role, but these have not been clearly identified

Autism Spectrum Disorder

Course

- Symptoms present before age 3
- Lifelong
- Two early developmental patterns
 - Atypical or delayed
 - Typical then loses (regression)
- Can be diagnosed at any age
 - Diagnostic and Statistical Manual, 5th Edition (DSM-5)

DSM Versions




Big DSM change

DSM-IV: 3 main categories used to be:

- Autistic Disorder
- Asperger Syndrome
- Pervasive Developmental Disorder – Not Otherwise Specified

Changes in ASD in the DSM-5

- Single diagnostic category: PDD  ASD
 - No more Autistic Disorder, Asperger's, or PDD-NOS
 - No more explaining what PDD means

Changes in ASD in the DSM-5

- 3-domains to 2-domains
 - Communication deficits combined under social
- Stricter criteria in repetitive behavior domain now
- By history or current
- Added sensory
- New specificity

Autism Spectrum Disorder in DSM-5

Must meet criteria A, B, C, D, & E

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples illustrative, not exhaustive):

- Deficits in social-emotional reciprocity
- Deficits in nonverbal communicative behaviors used for social interaction
- Deficits in developing, maintaining, and understanding relationships

Core Area

Social/Communication: Early signs

- Early characteristics may include:
 - Infrequent response to name
 - More interest in objects than people
 - Lack of social play (e.g., peek-a-boo)
 - Lack of orienting to others
 - Lack of enjoyment of others
 - Lack of interest in peers

Core Area

Social/Communication: Imitation

- Young children with ASD are less likely to imitate:
 - Other children's play
 - Facial expressions
 - Adult activities
 - Physical actions
- Skills must be taught explicitly because children with ASD don't typically engage socially or learn by watching

Core Area

Social/Communication: Pre-Language

- Pre-language characteristics include:
 - Lack of babbling
 - Lack of gestures (e.g., pointing, waving)
 - Lack of joint attention

Core Area

Social/Communication: Joint Attention

- **Joint attention** is used to share an experience with others by communicating through eye gaze, gestures, and vocalizations
- Typical infants in the first year:
 - Shift their gaze from toys to people
 - Follow other's point
 - Monitor the gaze of others
 - Point to objects or events to share interest
 - Show toys to others

Core Area

Social/Communication: Language

- First words may develop late or not at all
- First words may not be typical

Core Area

Social/Communication: Language

- May have idiosyncratic/peculiar speech (e.g., “Thanksgiving is upon us!” when anxious)
- May have odd or robotic intonation
- May sound as if giving a lecture

Core Area

Social/Communication: Language

- Higher functioning may have no significant general delay in early language milestones or other cognitive abilities
- Communication challenges
 - May talk excessively about their own special interests
 - Perseveration (“stuck” on one idea)
 - Decreased abstract language
 - Inappropriate social remarks
 - Difficulty understanding humor
 - Difficulty with conversational skills

Autism Spectrum Disorder

in DSM-5

B. Restricted, repetitive patterns of behavior, interests, or activities as manifested by at least two of the following, currently or by history (examples illustrative, not exhaustive):

- Stereotyped or repetitive motor movements, use of objects, or speech
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior
- Highly restricted, fixated interests that are abnormal in intensity or focus
- Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment

Core Area

Restricted and Repetitive Behaviors

- Repetitive-Sensory Mannerisms
 - Hand flapping
 - Finger movements
 - Posturing
 - Spinning
 - Head banging

Core Area

Restricted and Repetitive Behaviors

- Trouble with pretend play
 - May have rigidly scripted play routines
- Plays with toys in idiosyncratic and peculiar ways
 - Lines things up
 - Focuses on parts of objects
 - Does not use toys for intended use or function

Core Area

Restricted and Repetitive Behaviors

- Child may respond to a question or statement by repeating what was said (echoing)
- Child may imitate commercials or videos (scripting)

Core Area

Restricted and Repetitive Behaviors

- Insistence on sameness
 - May have rigidly held routines
 - May be inconsolable when changes happen
- Unusual attachments
 - May have unusual favorite objects (e.g., string, vacuum cleaner)

Core Area

Restricted and Repetitive Behaviors

- Circumscribed interests
 - All consuming
 - Unusual in intensity
 - E.g., Star Wars, Pokémon, trains

Core Area

Restricted and Repetitive Behaviors

- May be tactilely defensive
 - May have unusual responses to being touched
 - May be bothered by the texture of clothing
 - May be an extremely picky eater
- May seek sensations
- May over-respond or under-respond to sensory stimuli
 - May experience some sounds as painful
 - May be bothered by fluorescent lights

ASD in DSM-5

- C. Symptoms must be present in early developmental period (but may not become fully manifested until social demands exceed limited capacities, or may be masked by learned strategies in later life).

- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

ASD in DSM-5

- E. These disturbances not better explained by intellectual disability (intellectual developmental disorder) or global developmental delays. Intellectual disability and autism spectrum disorder frequently co-occur, to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

ASD in DSM-5

- Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder.
- Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for autism spectrum disorder, should be evaluated for social (pragmatic) communication disorder.

ASD in DSM-5

- Specify:
 - Associated with medical/genetic/environmental
 - Associated with neurodev./mental/bx disorder
 - Severity level
 - With or without intellectual impairment
 - Advise verbal and nonverbal due to unevenness
 - With or without structural language impairment with level of language
 - Catatonia

New Disorder

- What happens to the individuals who do not show repetitive behaviors?
- Social (Pragmatic) Communication Disorder

Early Concerns

- Early concerns include both:
 - Atypical behaviors
 - Absence or low rates of typical behaviors
- The absence of certain behaviors may be more difficult to pinpoint than the presence of atypical behaviors

Early Concerns

The child infrequently responds to his or her name when called by the caregiver

- Young children with ASD
 - Seldom turn toward the person who called them, they respond only about 20% of the time
 - May respond more to objects than people
- Parents may suspect a hearing loss

Early Concerns

The child does not engage in joint attention

- Children with ASD seldom
 - Follow another's point or gaze
 - Shift their gaze back and forth from objects to people
 - Show a toy to the parent

Early Concerns

The child has trouble with eye contact

- Children with ASD often have trouble
 - Making direct eye contact
 - Integrating eye contact with other forms of social contact

Early Concerns

The child does not imitate others

- Children with ASD
 - Show less imitation of body and facial movements (waving, making faces, playing infant games) and less imitation with objects

Early Concerns

The child does not respond emotionally to others

- Children with ASD
 - Often seem unaware of the emotions of others
 - May seem oblivious to social approaches of others
 - May not look and smile in response to others' smiles
 - May ignore the distress of others

Early Concerns

The child does not engage in pretend play

- Young children with ASD
 - Seldom engage in imaginative play
 - May not be interested in toys at all
 - Usually have a narrow range of toys they like and may use them in a rigid, repetitive, non-functional way

Parent Concerns

Pay attention to the parents!

- When parents have a concern they are usually right
 - 30 to 54% of parents of children with ASD had concerns before the first birthday.
 - 80 to 90% had concerns by the second birthday
- However, if parents are not concerned, that does not mean that there isn't a problem

Next Steps

- If concerns are noted, the child should be referred for developmental and autism screenings
- If screening results indicate concerns, the child should be referred to a qualified professional for evaluation and diagnosis

Helping Children with ASD

- Research indicates that intensive and evidence-based intervention by competent professionals, particularly when partnering with parents, can result in positive outcomes for many children

Where to Get Help

- If child is under 3, contact First Steps ([866-583-2392](tel:866-583-2392)) and the nearest Department of Mental Health Regional Office ([800-207-9329](tel:800-207-9329))
- If child is over 3, contact the nearest Department of Mental Health Regional Office ([800-207-9329](tel:800-207-9329)) and your local school district

Resources

- www.iancommunity.org/
- www.firstsigns.org
- www.cdc.gov/ncbddd/autism/
- www.autismspeaks.org
- kcatc.net/parenttraining.html
- ocali.org



Thompson Center

For Autism & Neurodevelopmental Disorders

University of Missouri