

# AUTISM SPECTRUM DISORDER: CAUSES, PRESENTATION, TESTING AND TREATMENTS

Kathy LaFortune, J.D., Ph.D.  
Oklahoma Judicial Conference  
July 7, 2026

# AGENDA

**DSM5 Definition  
and Criteria**

**Causes**

**Presentations  
and Behaviors**

**Testing**

**Treatments**



# DSM5 DEFINITIONS AND CRITERIA

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## DIAGNOSTIC CRITERIA FOR AUTISM SPECTRUM DISORDER (299.0) AS OUTLINED IN THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS, FIFTH EDITION (DSM-5)

- A. Persistent deficits in social communication and interactions across multiple contexts, as manifested by the following **currently or by history**:
1. Deficits in social-emotional reciprocity
  2. Deficits in nonverbal communication behaviors used for social interaction
  3. Deficits in developing, maintaining, and understanding relationships, ranging, e.g., from difficulties adjusting behavior to suit various social contexts: to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.



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B. Restricted, repetitive patterns of behavior, interests, and activities, as manifested by at least **TWO** of the following, **currently or by history**:

1. Stereotyped or repetitive speech, motor movements, or use of objects
2. Excessive adherence to routines, ritualized patterns of verbal or nonverbal behavior, or excessive resistance to sameness
3. Highly restricted, fixated interests
4. Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of behavior



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- C. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities)
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning
- E. Disturbances are not better explained by intellectual disability or global developmental delay.

Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder, or PDD-NOS should be given the diagnosis of ASD.



## DIAGNOSTIC CRITERIA FOR AUTISM SPECTRUM DISORDER (299.0) AS OUTLINED IN THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS, FIFTH EDITION (DSM-5)-CLINICAL SPECIFIERS

1. With or without accompanying intellectual impairment
2. With or without accompanying language impairment (“no intelligible speech” vs. “phrase speech”)
3. Associated with a known medical or genetic condition or environmental factor
4. Associated with another neurodevelopmental, mental, or behavioral disorder (may now include ADHD)
5. With catatonia

DIAGNOSTIC CRITERIA FOR AUTISM SPECTRUM DISORDER (299.0)  
AS OUTLINED IN THE DIAGNOSTIC AND STATISTICAL MANUAL OF  
MENTAL DISORDERS, FIFTH EDITION (DSM-5)-SEVERITY LEVELS

Level 1: Requiring Support

Level 2: Requiring Substantial Support

Level 3: Requiring Very Substantial Support



## WHAT DOES IT MEAN TO BE NEURODIVERGENT?

Neurodivergence refers to a difference in the way the brain works and something different than “typical”.

It includes several disorders, including autism, ADHD and dyslexia.

Scientists now understand that it is a different way of learning and processing information.

The concept recognizes that both brain function and behavioral traits are simply indicators of how diverse the human population is.

The term was coined in 1997 by Judy Singer who is autistic.

Two categories, neurotypical and neurodivergent.

## Some Characteristics to Consider of ASD

STARTS EARLY IN LIFE  
TROUBLE MAKING EYE CONTACT  
SEEMS AWKWARD IN SOCIAL SITUATIONS  
DOES NOT KNOW WHAT TO SAY OR HOW TO RESPOND WHEN TALKING  
MISS SOCIAL CUES THAT ARE OBVIOUS TO OTHERS-BODY LANGUAGE AND  
FACIAL EXPRESSIONS  
MAY SHOW FEW EMOTIONS. MAY SPEAK IN A FLAT, ROBOTIC TONE  
MAY TALK ABOUT THEMSELVES MOST OF THE TIME.  
REPEAT THEMSELVES A LOT, ESPECIALLY ON A TOPIC THEY ARE INTERESTED IN  
MAY DO THE SAME MOVEMENTS OVER AND OVER  
MAY DISLIKE CHANGE-WANT SAME FOOD FOR MEALS AND DON'T LIKE MOVING  
TO ANOTHER CLASS

# Proposed Causes of Autism Spectrum Disorder

- What do we know and what do we not know?

# POTENTIAL CAUSES OF ASD-A REAL COMPLEX PROBLEM

1 in 31 children are now diagnosed with autism.

Genetics

Pharmaceuticals of different types

Father's and mother's ages

Air Pollution

Fever

Microbiomes

Infections

Pre-term births

Environmental effects

Pesticides

The reported prevalence of ASD has been higher in recent years, and this trend is consistent across data sources. It is unclear how much this is due to changes to the clinical definition of ASD (which may include more people than previous definitions) and better efforts to diagnose ASD (which would identify people with ASD who were not previously identified).

## POTENTIAL CAUSES OF ASD-A REAL COMPLEX PROBLEM

It is actually not a disease, not an illness. There is no one “smoking gun” causal agent.

It is a really diverse group of conditions that are defined by the presence of certain social and developmental and behavioral symptoms.

## POTENTIAL CAUSES OF ASD-A REAL COMPLEX PROBLEM

Even though the name ASD gets across the idea that it is not a one-size-fits-all or a line from less to more autistic, more experts think of ASD as a wheel. Experts no longer look at ASD as low or high functioning. It is now diagnosed in levels as defined in the DSM5.

## POTENTIAL CAUSES OF ASD-A REAL COMPLEX PROBLEM

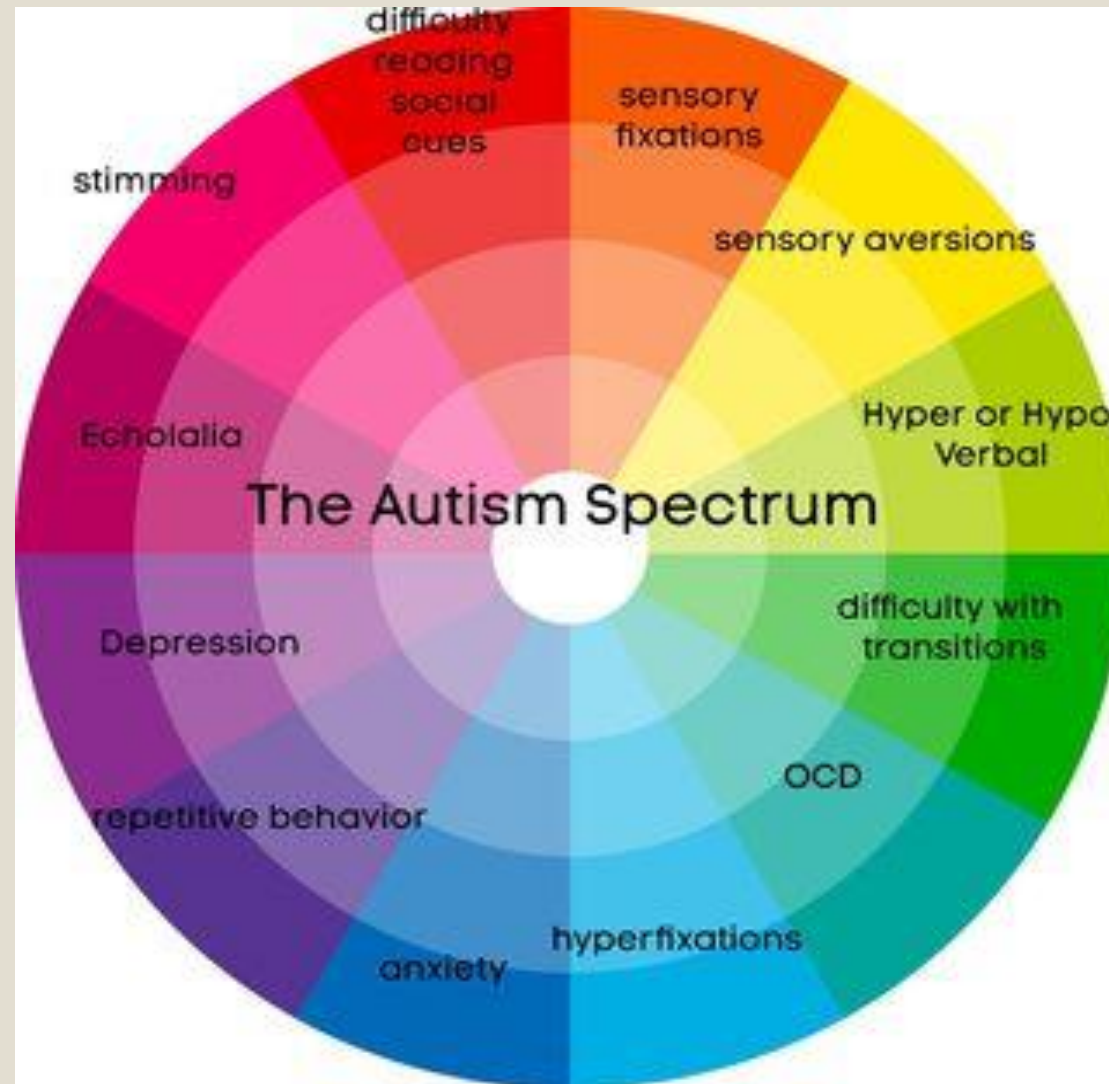
ASD is looked at as a wheel of various symptoms observed on the outside but there is so much more that is just beginning to be discovered.

Lower density of synapses than typical brains.

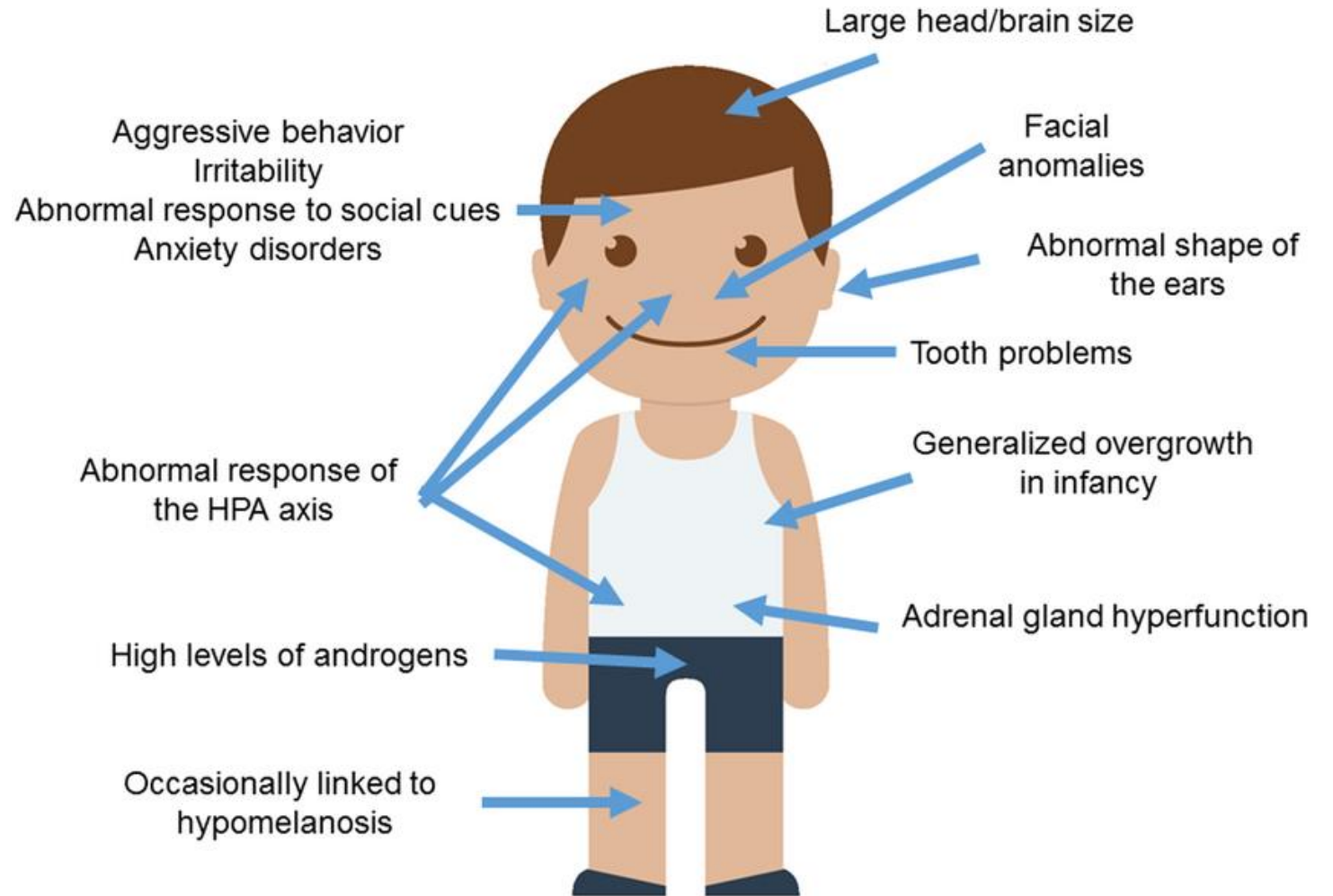
Lots of different lines of research look at in utero.

Is the rise in autism due to true changes over time?

# ASD Wheel of Characteristics



# Presentations and Behaviors





## ASD WHEEL CHARACTERISTICS

Motor sensory coordination    Repetitive behavior

Cognitive flexibility

Intense interests

Executive functions

Perception

Nonverbal communication

Sensory sensitivities

Speech

Social interaction

Emotional regulation



## BIOLOGY AND GENETICS BEHIND ASD

20245 study-lower density of synapses

Real differences between the two groups

Starting at the earliest stages of life, even before a baby is born.

# HISTORY OF ASD

Eugen Bleuler Swiss psychiatrist called it autism and autistic in childhood schizophrenia-1910

Russian doctor Grunya Sukhareva-1926 publishing case studies similar to how we diagnose Autism today. Ignored her work.

Leo Kanner-1943 published his own study that coined it as a separate diagnosis.

Hans Asperger-1944-described traits of autism.

1980 included as its own diagnosis in DSM.

2013 DSM5 combined Asperger's and Autism as ASD.

One other reason we don't use Asperger's any longer is because of his work with the Nazi regime.

# WELL KNOWN PERSONS WITH ASD

Elon Musk  
Bill Gates  
Sir Anthony Hopkins  
Dan Aykroyd  
Tim Burton  
Daryl Hannah



Elon Musk-  
admitted having  
a diagnosis of  
Asperger's on  
Saturday Night  
Live  
Discussion of SNL  
Monologue

# Testing for Autism Spectrum Disorder

- What instruments have been added to the available assessment instruments for ASD?

- **ADOS-2:** Autism Diagnostic Observation Schedule (2nd Edition). Considered the "gold standard" interactive assessment for diagnosing autism across various ages, including toddlers and adults. [1, 2, 3, 4, 5]
- **ADI-R:** Autism Diagnostic Interview-Revised. A structured interview conducted with parents or caregivers about a child's developmental history and current behaviors. [1, 2, 3, 4, 5]

## CURRENT TESTS IN USE

**ADOS-2:** Autism Diagnostic Observation Schedule-Second Edition. Considered the “gold standard” interactive assessment for diagnosing autism across various ages, including toddlers and adults.

**M-CHAT-R/F:** The Modified Checklist for Autism in Toddlers. It is the most common parent-completed screening tool for children between 16 and 30 months.

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## CURRENT TESTS IN USE

**ADI-R:** Autism Diagnostic Interview-Revised. A structured interview conducted with parents or caregivers about a child's developmental history and current behaviors.

**AQ:** Autism Spectrum Quotient Test is a self-administered 50-question questionnaire used to measure autistic traits in adolescents and adults aged 16+. The questionnaire is suitable for people with an IQ over 80. (screening measure).

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## CURRENT TESTS IN USE

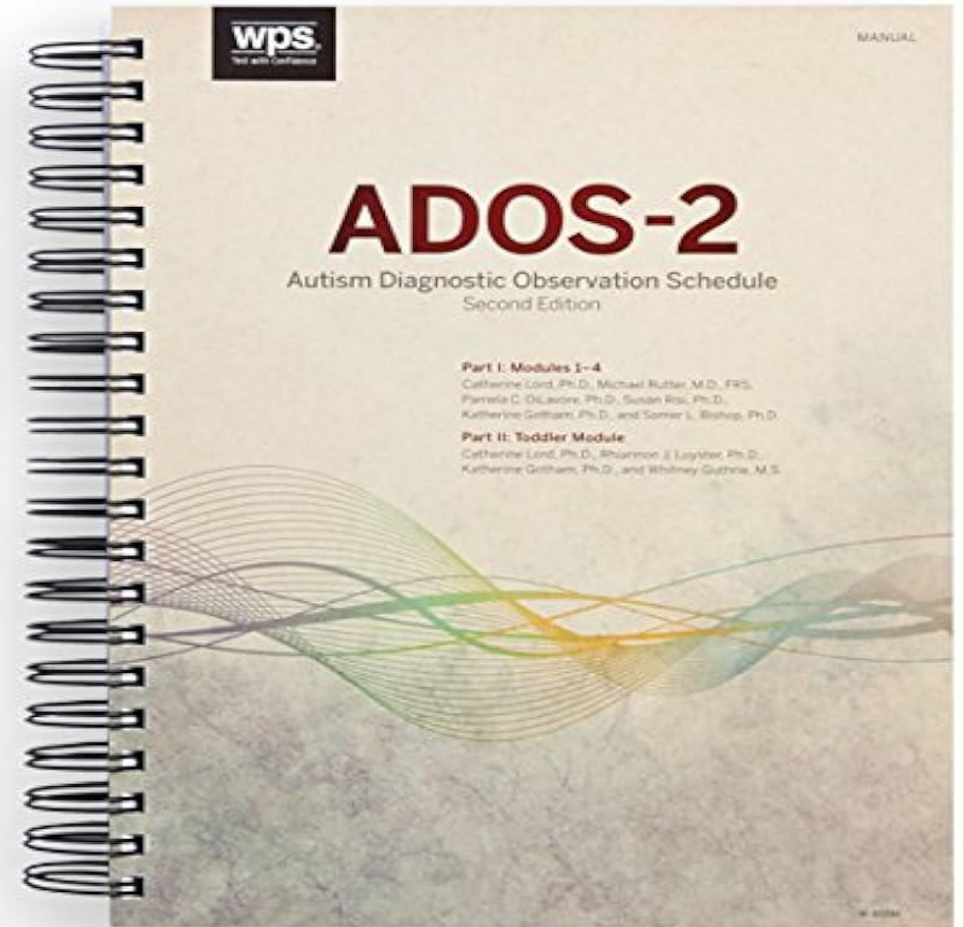
**GARS-2:** The Gilliam Autism Rating Scale-Second Edition (GARS-2) is a norm-referenced 42 item screening tool used to identify Autism Spectrum Disorder (ASD) in individuals ages 3 to 22. It is typically completed by parents, teachers, or clinicians who have known the individual for at least two weeks.

Looks at Stereotyped Behaviors, Communication, Social Interaction.

Provides an Autism Index. GARS-2 is not a standalone instrument.

**CARS-2:** Childhood Autism Rating Scale, 2<sup>nd</sup> Edition.

# ADOS-2 Test Kit and Manual



## HOW TO READ AN EVALUATION

Look for the Discussion, Results and Summary Sections including Diagnosis and Severity Level.

Severity specifiers are used to describe succinctly the current symptoms noting that this can fluctuate over time.

Impact is rated from 1 to 3-degree of impairment an individual experiences.

Severity is rated from 1 to 3-degree of impairment the individual experiences.

Specifier "with or without accompanying intellectual impairment, understanding the often uneven intellectual profile of a child or adult with ASD is necessary for interpreting diagnostic features.

Separate estimates of verbal and nonverbal skills are necessary (e.g., using untimed nonverbal tests to assess potential strengths in individuals with limited language).

When looking at specific tests, remember they usually have specific cutoff scores. However, obtaining a score above a certain threshold does not guarantee that an individual has ASD.

Always consider scores in conjunction with observation and other factors.



## EXAMPLES OF SOCIAL AND COMMUNICATION IMPAIRMENTS

Difficulty understanding social situations, may misread social cues from others.

Difficulty integrating verbal and non-verbal communication, speaking, smiling, making eye contact to regulate social interactions.

Difficulty forming appropriate social relationships.



## EXAMPLES OF RESTRICTED/REPETITIVE BEHAVIORS

Repeating words or phrases also called scripting or echolalia which are not contextually appropriate.

May be prone to this under intense emotions either positive or negative.

May present with abnormal and repetitive movements which can involve their whole body such as body rocking or an isolated part such as finger flicking. These are called motor stereotypes and also are more likely to be exhibited when an individual is experiencing extreme emotion (positive or negative).



## EXAMPLES OF OTHER CO-OCCURRING PROBLEMS

Facial tics or history of seizures.

Approximately 33% have a co-occurring intellectual disability and seizures as well.

Complex communication needs-40% of persons with ASD and more likely to have an intellectual disability and 67% do not have effective communication strategies to let others know their needs, sometimes becoming a precipitating factor for aggressive behavior.

# OTHER CO-OCCURRING DISORDERS

Anxiety disorders are extremely common for individuals with ASD, likely over 50%.

This anxiety takes the form of “intolerance of uncertainty, not being able to cope with changes in the environment or unexpected social interactions which can lead to excessive panic or fight or flight reactions.

Depression is also common with the prevalence increasing over the lifespan. Peak onset appears in the adolescent early adult years with a high risk of recurrence during adulthood.

Suicide thoughts and attempts are now more common than in the general population.

Acute anxiety states are also a high risk for self-injurious and suicidal thoughts and gestures. This leaves individuals with ASD highly vulnerable to impulsivity.

Psychosis is more common than in the general population and often negative symptoms predominate. Withdrawal, loss of skills, greater problems processing information efficiently and correctly.

High rates of victimization.

## CO-OCCURRING PROBLEMS IN THE JUSTICE SYSTEM

### **The Relationship Between Autism and Aggression**

Aggression in autistic individuals is generally not an indicator of criminal intent.

Instead, it is usually a stress response caused by specific triggers:

**Sensory Overload:** Hypersensitivity to light, noise, or touch can trigger an impulsive "fight-or-flight" reaction meant to escape or regulate the environment, rather than harm others.

**Routine Disruptions:** Drastic or unexpected changes in daily schedules can cause intense frustration and meltdowns.

**Social and Communication Challenges:** Frustration from being misunderstood, combined with an inability to verbally express feelings, can escalate into physical aggression.

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## CO-OCCURRING PROBLEMS IN THE JUSTICE SYSTEM

ASD are disproportionately represented in police interactions and the court system due to communication hurdles. During encounters with law enforcement, autistic individuals may experience:

**Misinterpretation:** A lack of eye contact, failure to respond to verbal commands, or repetitive movements may be perceived by officers as aggression, defiance, or guilt.

**False Confessions:** Autistic individuals may be highly suggestible, easily confused by standard, aggressive interrogation techniques, and prone to saying whatever they think will end a stressful conversation.

# Treatments



## TREATMENTS FOR AUTISM SPECTRUM DISORDER

1. Social skills training in groups or one-on-one sessions, teaching children how to interact with others and express themselves in more appropriate ways. These skills are best learned by modeling of typical behavior.
2. Speech-language therapy to help improve communication skills. For example, they will learn how to use an up and down pattern when they speak rather than a flat tone. They will also have lessons on how to keep up a two-way conversation and understand social cues like hand gestures and eye contact.
3. Cognitive behavioral therapy helps to change the way of thinking so they can better control their emotions and repetitive behaviors, like outbursts, meltdowns and obsessions.
4. Parent education and training to learn many of the techniques the child is taught so they can work on social cues at home. Some parents also see a counselor to help.
5. Applied behavior analysis to encourage positive social and communication skills and discourage behavior you would rather not see.
6. Medications have not been approved specifically for ASD , but some can help with related symptoms like depression and anxiety.

## LATEST TREATMENT OFFERINGS FOR AUTISM SPECTRUM DISORDER

Life coaching for children with Autism. Why not traditional therapies for some of these children?

This treatment is called NLP-certified Neurodiversity Coaching. One of the life coaches in the Tulsa area is Mickey Uphold who is founder of **The Journey Coach**.

## LATEST TREATMENT OFFERINGS FOR AUTISM SPECTRUM DISORDER

Core benefits of Autism Life Coaching include:

**Building Confidence:** Coaches help teens navigate executive functioning challenges, goal-setting, and daily routines.

**Social and Professional Growth:** Coaching provides strategies to build social communication skills, manage sensory overload, and eventually transition into the workplace.

**Transitioning to Adulthood:** It gives young adults the tools to advocate for themselves as they prepare for college or independent living.

## KEY TAKEAWAYS FOR ASD LIFE COACHING RESULTS

Fosters independence and self-confidence

Essential skills development

Personalized approaches

Autonomy in adulthood

Community engagement

Empowerment and happiness

Support through transition

Website: [ndfya.com](http://ndfya.com)

## LOVE ON THE SPECTRUM AS ILLUSTRATIONS OF REAL PEOPLE WITH ASD DIAGNOSES

In this romantic documentary series, people on the autism spectrum look for love and navigate the changing world of dating and relationships.



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THANK YOU.

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