



# Pathways to Professional Development

Building Foundations in Infant  
and Early Childhood Mental Health

Current Perspectives on Autism Spectrum Disorder and  
Neurodiversity in Infants and Young Children

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# Pathways to Professional Development: Building Foundations in Infant and Early Childhood Mental Health



**Pathways to Professional Development** was developed to build workforce competence and to prepare professionals working in the perinatal and birth to 5 periods

- 21 webinars focused on the foundations of Infant and Early Childhood Mental Health.
  - Provided live virtually
  - Recorded for viewing as LMS modules
- Diagnostic Classification of Mental Health And Developmental Disorders of Infancy and Early Childhood (DC:0-5) offered virtually and in-person.
- View all offerings here → <https://www.ctacny.org/special-initiatives/pathways-to-professional-development/>

The aim is to develop a well prepared and competent workforce trained to **identify** and address mental health concerns early, to **promote** awareness of mental health, to **prevent** long-term problems and to **intervene** to help children stay on developmental track.



# Pathways to Professional Development Webinar Series



- **Module I:** Developmental and Psychodynamic Foundations of Infant and Early Childhood Mental Health – 6 Webinars
- **Module II:** Assessment, Diagnosis, Formulation and Professional Development – 4 Webinars
- **Module III:** Risk, Stress, Protection and Resilience – 2 Webinars
- **Module IV:** Through the Lens of Family, Community and Culture – 2 Webinars
- **Module V:** Specific Disorders: A Closer Look: 4 Webinars
- **Module VI:** Helping in Infant and Early Childhood Mental Health – 3 Webinars



# Who we are



These trainings are funded by the New York State Office of Mental Health (OMH) and provided by the New York Center for Child Development (NYCCD) in collaboration with CTAC.

- **New York Center for Child Development** (NYCCD) has been a major provider of early childhood mental health services in New York with a long history of providing system-level expertise to inform policy and support the field of Early Childhood Mental Health through training and direct practice.
- **NYU McSilver Institute for Poverty Policy and Research** houses the Community and Managed Care Technical Assistance Centers (CTAC & MCTAC), Peer TAC, and the Center for Workforce Excellence (CWE). These TA centers offer clinic, business, and system transformation supports statewide to all behavioral healthcare providers across NYS.
- **NYCCD and McSilver** also run the **NYC Perinatal & Early Childhood Mental Health Training and Technical Assistance Center (TTAC)** which offers ongoing training and technical assistance for those working during the perinatal period to age 5

<https://ttacny.org/>



# Overview of Topic

This session explores current perspectives on autism spectrum disorder (ASD) and the ways in which the multidisciplinary sciences offer a deeper understanding of developmental profiles. The session will also explore the therapeutic and educational interventions to support infants, children and their families. Participants will review definitions and diagnostic criteria as well as assessments and prevalence rates. They will be challenged to reframe common misunderstandings of (ASD) and explore ways to support the social emotional development of infants and young children with neurobiological differences. The shift towards an understanding of ASD as a reflection of neurodiversity will be emphasized.



# Learning Objectives



As an outcome of participating in this learning module, you will be able to:

1. Define autism spectrum disorder (using the current DC:0-5 and DSM-5 diagnostic criteria)
2. Explain connections between underlying biological factors and ASD characteristics
3. Identify ways to Support Social Engagement for young children with neurobiological differences.
4. Define neurodiversity and the distinction between disability and identity.



# Signs and Diagnoses



# Early Signs of Autism

[mayoclinic.org/parenting/early-signs-of-autism/](https://mayoclinic.org/parenting/early-signs-of-autism/)

- By 12 months, a child may not:
  - Babble or coo
  - Respond to their name
  - React to back-and-forth interactions
  - Look at objects another person is pointing to
- By 16 months, a child may not:
  - Say single words
- By 18 to 24 months, a child may not:
  - Engage in pretend play
- By 24 months, a child may not:
  - Say meaningful two-word phrases
  - Show any interest in objects by pointing at them

# Early Signs of Autism [mayoclinic.org/parenting/early-signs-of-autism/](https://mayoclinic.org/parenting/early-signs-of-autism/)

- Signs to be aware of at any age:
  - Losing language or social skills
  - Repeating words or phrases without meaning
  - Preferring to look at objects rather than people
  - Avoiding eye contact
  - Showing a strong preference to be alone
  - Having extreme difficulty with small changes in daily routines or surroundings
- Engaging in repetitive movements such as rocking, spinning, or hand flapping
- Showing a high sensitivity to sounds, tastes, texture, lights or colors
- Not seeming to be sensitive to pain or temperature
- Showing little or no desire to be picked up or held
- Showing little interest in toys or repeatedly focusing on one aspect of a toy

## Diagnostic Statistical Manual-5 (DSM-5) Autism Spectrum Disorder (ASD) - Criteria A

Persistent deficits in social communication and social interactions across contexts not accounted for by general developmental delays and manifested by all three of the following:

- Deficits in social emotional reciprocity
- Deficits in non-verbal communication behaviors used for social interactions
- Deficits in developing and maintaining relationships appropriate to developmental level

## Diagnostic Statistical Manual-5 (DSM-5) Autism Spectrum Disorder (ASD) - Criteria B

Restricted, repetitive patterns of behavior, interests, or activities  
(at least two of the following):

- Stereotyped or repetitive muscle movements
- Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior
- Highly restricted, fixated interests
- Sensory hyper- or hypo-sensitivities



# DSM-5 Autism Spectrum Disorder Additional Factors

In order to meet diagnostic criteria, the symptoms in Criteria A and B:

- Must be present in the early developmental period
- Must cause clinically significant impairment in functioning
- Must not be better explained by intellectual disability

# DSM-5 ASD Severity Levels

## Level 1: (Requiring Support)

- Without supports in place, deficits in social communication cause noticeable challenges

## Level 2: (Requiring Substantial Support)

- Deficits in verbal and non-verbal social communication skills
- Social challenges apparent even with supports in place

## Level 3: (Requiring Very Substantial Support)

- Severe deficits in verbal and nonverbal social communication skills

# DC:0-5

## Axis I Clinical Disorders

- Neurodevelopmental Disorders
  - Autism Spectrum Disorder (ASD)
  - Early Atypical Autism Spectrum Disorder (EAASD)

# DC:0-5 Autism Spectrum Disorder (ASD)

- **Social Communication Symptoms**
- *All three symptoms must be present*
  - Limited or atypical social-emotional responsivity, sustained social attention, and/or social reciprocity
  - Deficits in nonverbal social-communication behaviors
  - Peer interaction difficulties

- **Restricted/Repetitive Behaviors**
- *Two of the four symptom must be present*
  - Stereotyped or repetitive babbling/speech, motor movements. or use of objects
  - Insistence on sameness/ritualized behaviors
  - Restricted interests
  - Atypical sensory behaviors

# DC:0-5 Autism Spectrum Disorder (ASD)

Symptoms of the disorder, or caregiver accommodations in response to the symptoms, significantly affect the infant's/young child's and family's functioning in one or more ways:

- Cause distress to the infant/young child
- Interfere with the infant's/young child's relationships
- Limit the infant's/young child's participation in developmentally expected activities or routines
- Limit the family's participation in everyday activities or routines
- Limit the infant's/young child's ability to learn and develop new skills or interfere with developmental progress

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## DC:0-5 Early Atypical Autism Spectrum Disorder (EAASD)

- Children who evidence early signs of impairment and symptoms of ASD, but do not yet meet full criteria of ASD
- 9 months to 36 months

## DC:0-5 Early Atypical Autism Spectrum Disorder (EAASD)

- **Social Communication Symptoms**
- *Two of three symptoms must be present*
  - Limited or atypical social-emotional responsivity, sustained social attention, and/or social reciprocity
  - Deficits in nonverbal social-communication behaviors
  - Peer interaction difficulties

- **Restricted/Repetitive Behaviors**
- *One of the four symptom must be present*
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# Prevalence, Assessments, and Causes



# Current Autism Prevalence

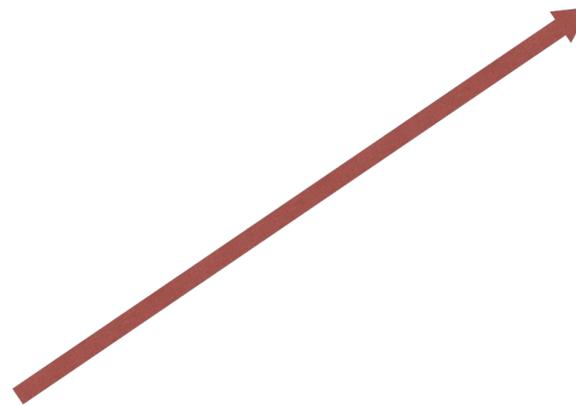


1 in 36 children nationally  
(Maenner et al., 2023)

# Increase in Prevalence



- 2020: 1 in 36 children
- 2018: 1 in 44 children
- 2016: 1 in 54 children
- 2010: 1 in 68 children
- 2008: 1 in 88 children
- 2006: 1 in 110 children
- 2004: 1 in 125 children
- 2000: 1 in 150 children



# Autism Screener



## Modified Checklist for Autism in Toddlers, Revised (MCHAT-R)

- (2009 Robins, Fein, & Barton).
- Parent report screening tool
- 20 questions
- Intended for toddlers 16 to 30 months of age
- Can be administered and scored as part of a well-child care visit
- Used by professionals to assess risk for ASD



# Autism Observation Measure



## Autism Diagnostic Observation Schedule, 2<sup>nd</sup> Edition (ADOS-2)

- (2012, Lord, et al.)
- A systematic method for obtaining direct observation of the individual's social and communication behaviors, as part of a comprehensive evaluation.
- Should not be used alone to make a diagnosis, as it does not account for the presence or absence of stereotyped behaviors and interests, and does not include information about the developmental history.
- Intended for use with ambulatory children with a developmental age of at least 12 months through adults



# What causes autism?



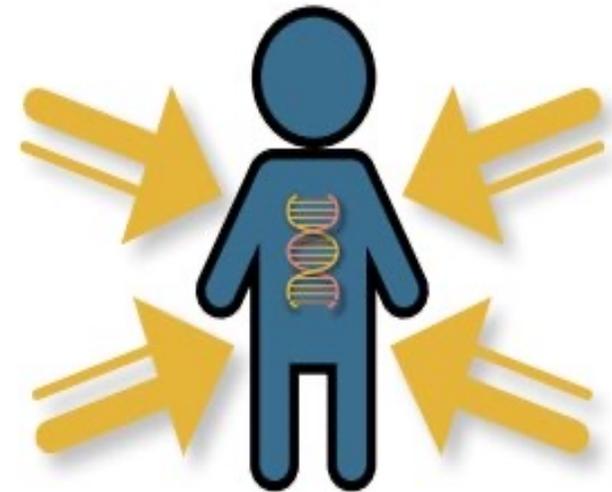
- There is NO single answer
- No one condition, but rather there are many disorders - *different children, same diagnosis*
- Scientists have found some '**associations**' such as:
  - Paternal Age
  - Exposure to Drug Agents (e.g. valproic acid)
  - Maternal Infection
  - Low Folate Levels
  - Prematurity
  - Hormone levels (high levels of fetal testosterone)



# Epigenetics



- An area of scientific research that shows how environmental influences affect the expression of genes.
- Suspected drivers behind epigenetic processes include many agents.
- Combined with the effects of our environment, changes in these genes can also determine if we are *at risk* for various disorders.
- DNA mutations that are *de novo*, mean that they occur spontaneously rather than being inherited from a parent.



National Scientific Council on the Developing Child, 2010

# Vaccines do not cause autism



- There is no link between the development of ASD and immunization.
- Many theories have been offered to explain the link between vaccination and the development of autism, including changes in immune system function and the link between MMR and autism.
- All these theories remain theoretical.
- There is no scientific evidence of a link between them and the development of autism.

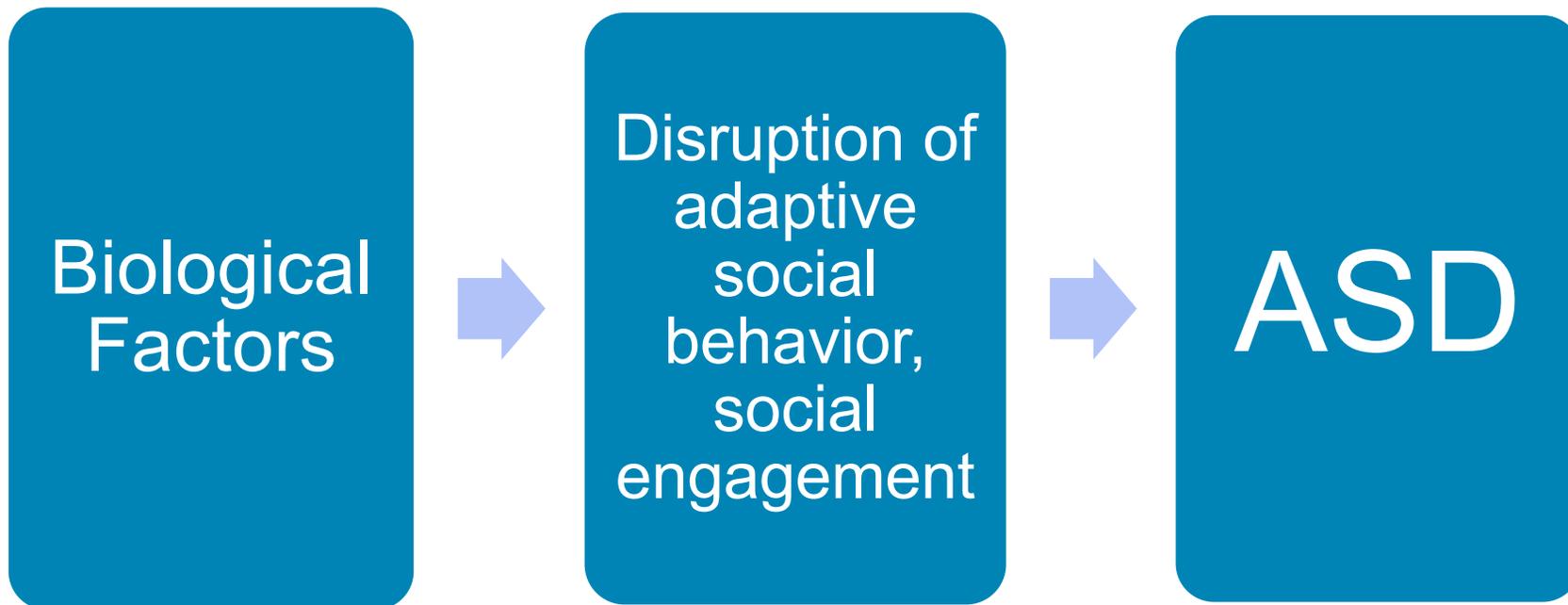
(Mohammed, et al. 2022)



# Reframing Our Understanding of Autism



# Common Pathways to ASD



(Singletary, 2015)



# An Integrative Model of ASD

1. Abnormal brain development interferes with the infant's ability to make use of opportunities for social reciprocity to develop the capacity for social engagement and communication. (Pelphrey et al., 2011)
  2. This disruption of child-caregiver interactions, results in experienced (environmental) deprivation of crucial social and emotional experiences.
  3. Environmental deprivation leads to toxic levels of early life stress.
- (Singletary, 2015)



# Integrative Model



Deprivation and stress overload, in the context of existing neurobiological factors, drives maladaptive changes in the brain (neuroplasticity) leading to ASD characteristics (the behaviors we observe).

(Singletary, 2015)



## Case example



- Autistic Behaviors or Coping Strategies?
- Where do we focus our interventions?



# Modalities of Intervention

- **Behavioral**

- Identify what the child loves and use it as a reward ...a carrot.. that they receive when they perform a desired behavior or discontinue a non-desired behavior

- **Developmental**

- Identify what the child loves and use it as a spark... join the child and follow their lead to extend and expand their developmental capacities

# Ways to Support Social Engagement



# Autism and Anxiety



- As many as 84% of children diagnosed with ASD are reported to also present with significant symptoms of anxiety despite the fact that anxiety is not part of the diagnostic criteria for ASD.
- Researchers have reported that higher levels of anxiety have been associated with restricted and repetitive behaviors (RRB) in ASD.
- When challenging behaviors are reframed and seen through the lens of stress and anxiety, the focus of intervention shifts to interventions that serve to help children feel calm and safe.
- Efforts should be aimed at soothing the child's reactive nervous systems and reducing unpredictability by providing consistent, predictable routines and relationships.

(Catalano & McKeating, 2020)



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# Co-regulation

“...the neuroception of familiar individuals and individuals with the appropriately prosodic voices and warm expressive faces translates into a social interaction that down-regulates defense and enables feelings of safety.”

(Porges, 2015)



**CO-REGULATE**

<b>A</b>		<b>Affect</b>	expression
<b>G</b>		<b>Gesture</b>	movements
<b>I</b>		<b>Intonation</b>	voice
<b>L</b>		<b>Latency</b>	pacing
<b>E</b>		<b>Engagement</b>	

**LEND YOUR CALM.**

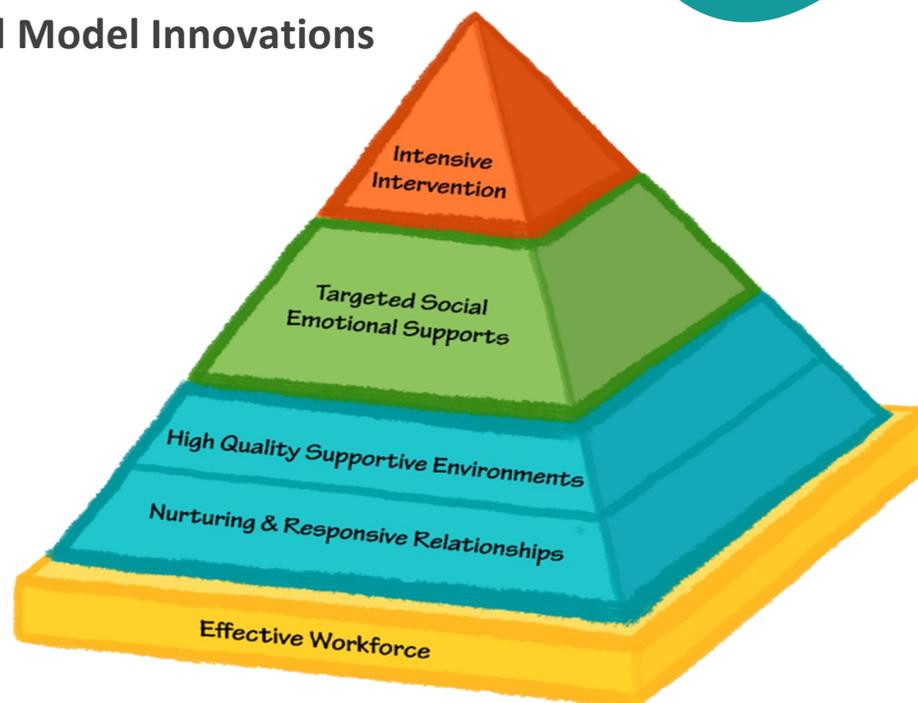
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# Multi-tiered Systems of Support



## Pyramid Model: NCPMI-National Center for Pyramid Model Innovations

- Pyramid Model is an adult-directed framework that supports teachers in their efforts to build the social-emotional capacities of young children.
- Social-emotional development is the responsibility of ANYONE who interacts with young children, not just those titled “mental health” professionals.
- Most social-emotional development and behavior is promoted through positive preventive measures.
- Most children’s behavior and development does not require intensive intervention.



# ASD as a Reflection of Neurodiversity



# Neurodiversity



Neurodiversity describes the idea that people experience and interact with the world around them in many different ways; there is no one "right" way of thinking, learning, and behaving, and differences are not viewed as deficits.

(Baumer & Frueh, 2021)



# Neurodiversity within the Spectrum of Autism



- Less than one third of children with an ASD diagnosis have an intellectual disability based on standardized measures and 42% have *average to above average* intellectual ability. (Maenner et al., 2020)
- Approximately one third of children diagnosed with ASD are non-verbal while others have varying verbal abilities. (Tager-Flusberg, 2006)
- 80% - 95% of children diagnosed with ASD have significant sensory differences but the sensory profiles vary (Tomchek & Dunn, 2007)



# Language Matters



- “Autistic child”: Disability first
- “Child with autism” or “Child with an autism diagnosis”:  
Person First
- “Autistic adult”: Identity



# Thank you

## Time for questions



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