

Diagnosing Autism Spectrum Disorder in Toddlers

Patricia K. Zemantic, Christian S. Courson,
& Alice Shillingsburg



1

Goals

- ☒ Describe characteristics of autism in toddlers (16-30 months)
- ☒ Describe how autism is diagnosed
- ☒ Provide information on new diagnostic tool

2

Autism Spectrum Disorder

Diagnostic Criteria from DSM-5-TR

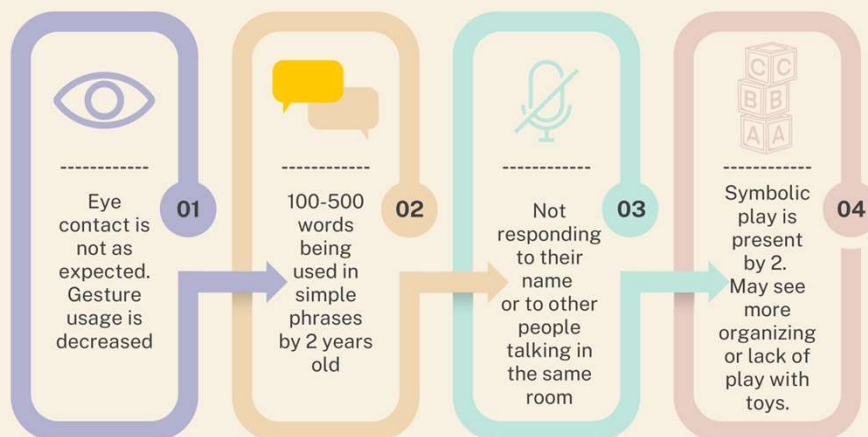
Difficulties in
Social Interaction
and Social
Communication

Restricted and
Repetitive
Interests

American Psychiatric Association, 2022

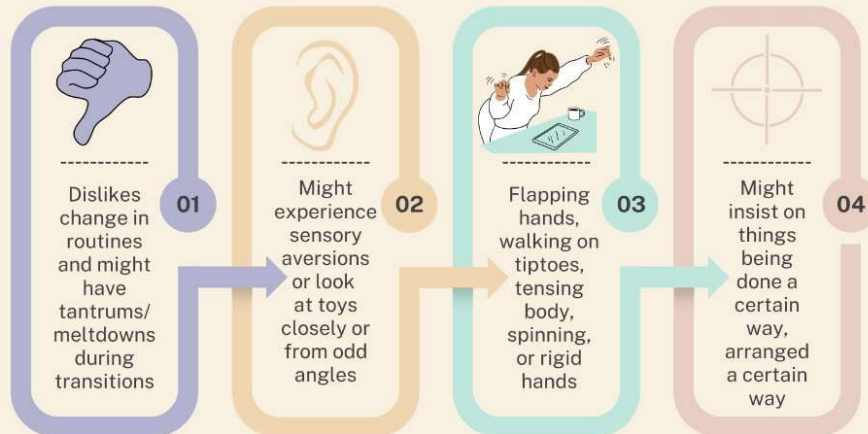
3

DIFFERENCES IN SOCIAL COMMUNICATION



4

PRESENCE OF RESTRICTED, REPETITIVE BEHAVIOR



5

Autism Spectrum Disorder



2000: 1/150
 2004: 1/125
 2006: 1/110
 2008: 1/88
 2010: 1/68
 2016: 1/54
 2018: 1/44
 2020: 1/36
 2025: 1/31

Shaw et al., 2025

6

Increasing Prevalence



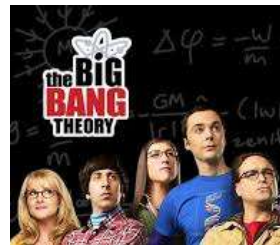
Screening Practices



Changes in diagnostic criteria



Awareness of the full spectrum

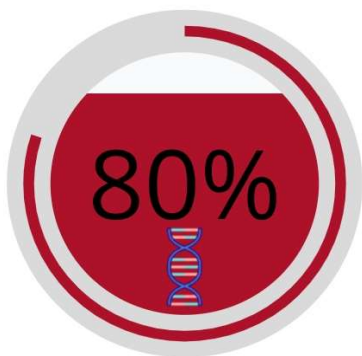


Grosvenor et al., 2024; Harris, 2023; Johnson, et al., 2007

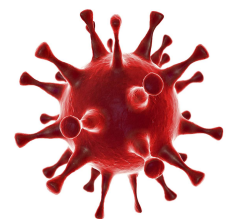
7

What causes autism spectrum disorder?

Genetic Factors



Environmental Factors



Bai et al., 2019; Love et al., 2024; Taylor et al., 2020

8

Autism Spectrum Disorder



Smith et al., 2023

9

Autism Spectrum Disorder

Diagnosis



Wait times in the US
are 1+ years



Mackenzie, Mazefsky, & Eack, 2018

10

Autism Spectrum Disorder

Diagnosis



There is no
medical test for
autism spectrum
disorder



11

Autism Spectrum Disorder

Diagnosis



Full psychological
evaluation
Appointment time: 4-5
hours total
Testing time: 2-3 hours



12

Autism Spectrum Disorder



Autism Diagnosis



Caregiver Interview



Adaptive Skills



Developmental or Cognitive Skills



Autism Characteristics

13

Autism Spectrum Disorder



Autism Specific Services



Applied Behavior Analysis



Cognitive Skills



Communication skills



Motor Skills



Social-emotional Skills



Adaptive Skills

14

Autism Spectrum Disorder

Medical Monitoring



Feeding Disorders



Genetic Conditions



Gastrointestinal Conditions



Seizure Disorders

15

Autism Spectrum Disorder

Psychological monitoring



Intellectual
Developmental Disorder



Attention-Deficit/
Hyperactivity Disorder



Mood Disorders



Anxiety Disorders

16



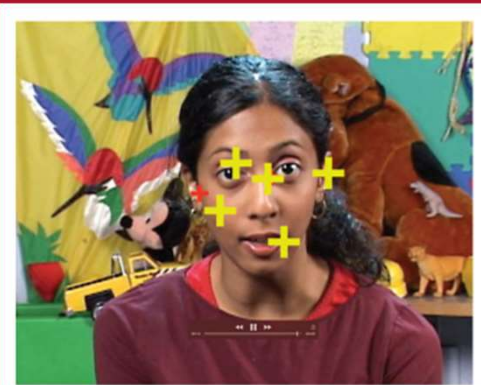
Eye-Tracking to Diagnose Autism

17

EarliPoint

Development

Neurotypical/
Non-ASD Viewer



ASD
Viewer



18



EarliPoint



Appointment time:
2 hours

EarliPoint:
15 minutes

Total Testing Time:
30 minutes

19

EarliPoint



Measures Child's Looking Behavior (i.e., social visual engagement)



**Correctly identifies 4/5
children with ASD aged
16 to 30 months**

Earlitec Diagnostics, Inc (2024)

20

EarliPoint

Earlitec Diagnostics Inc, 2024

Building and Testing the Model



Train the Model

Gold Standard Diagnostic
Evaluation

ASD

Non-
ASD/TD

Non-
ASD DD

EarliPoint

Test the Model

EarliPoint

ASD

Non-
ASD/TD

Non-
ASD DD

Gold Standard Diagnostic
Evaluation

21

Autism Diagnostic Evaluations

Autism Evaluation for Toddlers in Autism Diagnostic Clinic



EarliPoint (15-20 min)

Play Based Observation (10-15 min)

EarliPoint = ASD

Feedback (30 min)

EarliPoint = no ASD

Additional Testing

Feedback (30+ min)

22

EarliPoint

Considerations



Earlitec Diagnostics, Inc, 2024



FDA authorized for toddlers
16 to 30 months



Must be able to see and hear
videos



New

English & Spanish

23

EarliPoint

Considerations



Earlitec Diagnostics, Inc, 2024

Coming
Soon
(2026)

FDA authorization for kids
age 31 months to 8



Must be able to see and hear
videos



English

24

Where Can People Access EarliPoint?



Now

- Autism Diagnostic Clinic at MMI



Now

- Psychology Department at MMI



- Early Intervention
- Schools
- Doctor's offices



25

Getting An Evaluation



Medical Provider Referral



Caregiver Referral

- Call 402-559-6418
- To access and EarliPoint evaluation, ask to be seen for an autism evaluation with a provider in the Autism Diagnostic Clinic in iCASP

26

Identifying Autism Concerns

Medical Provider Screening



9-Month-Old Child



18-Month-Old Child



24-Month-Old Child



Developmental and behavioral monitoring at 9, 18, and 30 months



Autism specific screenings at 18 and 24 months

Hyman, et al, 2020

27

Medical Providers

Screening for Autism Spectrum Disorder

M-CHAT-R™

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1. If you point at something across the room, does your child look at it? (FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?)	Yes	No
2. Have you ever wondered if your child might be deaf?	Yes	No
3. Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?)	Yes	No
4. Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs)	Yes	No
5. Does your child make (unusual) finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?)	Yes	No
6. Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach)	Yes	No
7. Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road)	Yes	No
8. Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?)	Yes	No
9. Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck)	Yes	No
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?)	Yes	No
11. When you smile at your child, does he or she smile back at you?	Yes	No
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noises such as a vacuum cleaner or loud music?)	Yes	No

Common screening tools may not detect autism in



Girls



Average or above average cognitive skills

Eldeeb, et al., 2023

28

Caregivers

Developmental Monitoring



CDC Milestone's Tracker App

Developmental Monitoring

English and Spanish

Activities and tips to promote development

Prompts to talk with providers about concerns

29

Support for Developmental Concerns

Early Intervention



- Free supports for kids birth to three
- Call 1-888-806-6287

30

Watch and Wait



31

Acknowledgements



The Nebraska Council on Developmental Disabilities is supported by the Administration for Community Living (ACL), U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$527,344.00 with 100% funding by ACL/HHS. Grantees undertaking projects with government sponsorship are encouraged to express freely their findings and conclusions. Points of view or opinions do not, therefore, necessarily represent official ACL policy and do not necessarily represent the official views of, nor an endorsement, by ACL/HHS, or the U.S. Government.

Funding for this training has been provided by the Nebraska Council on Developmental Disabilities (NCDD).

32



Q&A

- We can be reached via email at patricia.zemantic@unmc.edu or ccourson@unmc.edu
- Full references available upon request

33



34