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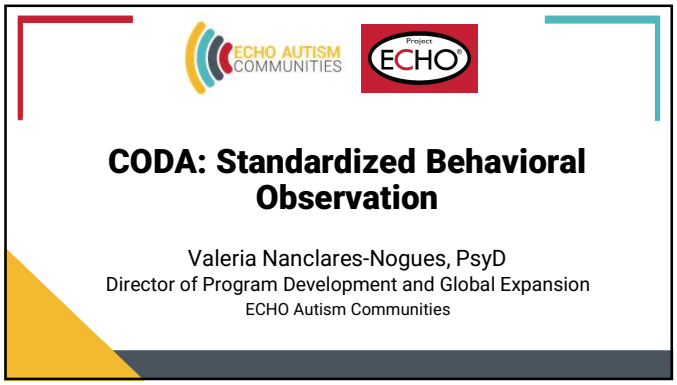

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ECHO Autism: Psychology Continuing Education

- **Target audience:** Pediatricians, family practitioners, nurse practitioners, psychiatrists, therapists, psychologists, community mental health professionals.
- **Objective:** To increase provider knowledge of how to diagnose and treat autism spectrum disorders in managing common psychiatric co-occurring conditions and challenging behavior in people with autism to maximize family-centered, best practice interventions and care in the least restricted environment.
- *The Office of Continuing Education, School of Medicine, University of Missouri is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.*
- *The Office of Continuing Education, School of Medicine, University of Missouri designates this live educational activity for a maximum of **1.5 AMA PRA Category 1 Credit**(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.*

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ECHO Autism: Psychology Speaker Disclosure

Current ACCME (Accreditation Council for Continuing Medical Education) rules state that participants in CME activities should be made aware of any relevant affiliation or financial interest in the previous 12 months that may affect the planning of an educational activity or a speaker's presentation(s). Each planning committee member and speaker has been requested to complete a conflict of interest statement for the ***ECHO Autism: Psychology***.

Speaker Disclosures:

Kristin Sohl, MD,FAAP has the following relationships:

- **Cognoa – research consultant and advisor**
- **Quadrant Biosciences – advisory board**
- **Autism Navigator – consultant**

Valeria Nanclares-Nogues, PsyD has the following relationships:

- **WPS –as an independent certified ADOS-2 and ADI-R trainer**
- **TEA Ediciones – as an independent certified ADOS-2 and ADI-R trainer**
- **Vanderbilt University – as an independent certified STAT trainer**

No other speaker or planning committee member has a relevant financial interest

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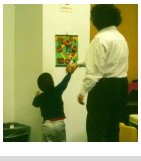
Diagnosing ASD: Let's review!

- Both presence of atypical/unusual behaviors and the absence of expected behaviors required to make a diagnosis of ASD
- Age, developmental level (e.g., IQ, mental age), expressive language level, sex, culture, and context (e.g., different settings or social circumstances) can significantly affect how behaviors manifest



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Essential Components

- *At a Minimum*:
  - Thorough **History** and **Current** Functioning
  - Direct **Observation** of Behavior and Interactions

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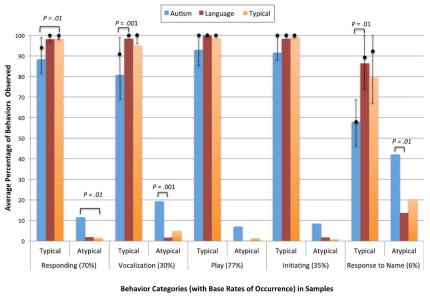
Pitfalls in Identifying Autism in a Brief Clinical Observation

Gabrielsen et al., 2015



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Pitfalls in Identifying Autism in a Brief Clinical Observation

- Results of study:
  - Children with ASD showed "typical" behaviors 89% of the time
  - Expert reviewers missed 39% of cases
- What about checklists, screeners, tests?

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Why were standardized assessments developed (i.e., ADI-R and ADOS-2)?

- Main reason: **reduce variability**
- Instruments were created to enhance the process through which individual clinicians gather information
- To provide an opportunity to observe social-communication impairments and restricted and repetitive behaviors associated with ASD
- To standardize observation across different children, clinicians, and sites
  - What we observe is affected by the context we create

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"Gold-Standard" and Reliable Measures

- Screening
  - MCHAT-R/F
  - SCQ
  - SRS
- Interview
  - ADI-R
  - DSM-5 Interview
- **Observation**
  - ADOS-2
  - CARS-2
  - STAT
  - ADEC

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Autism Diagnostic Observation Schedule-Second Edition (ADOS-2)

- Challenge: Variability in how direct observations are conducted (setting, clinician behavior, materials, demands on participant)
- Solution: The ADOS-2 provides a means of standardizing direct observation to promote consistency across clinicians and sites
- Module system to account for impact of language and developmental changes (Toddler Module, Module 1, 2, 3, and 4 based on language level and age)

ADOS-2 is standardized by:

✓ Materials
✓ Behavior of the examiner
✓ Behaviors to be observed
✓ How the individual's behaviors are quantified
✓ Training of examiner

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Childhood Autism Rating Scale, Second Edition (CARS2)

- Includes:
  - Standard Version Rating (ST)
    - Younger than 6, communication, or ID
  - High Functioning Rating Scale (HF)
    - Older kids, those with average IQ
  - Questionnaire for Parent / Caregiver (QPC)
    - Unscored
- 15-item behavior rating scale
- Children 2 years and older

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Childhood Autism Rating Scale, Second Edition (CARS-2)

- Observe and Rate:
  - Direct observation and a developmental history MUST always be included in the assessment process
  - Testing, parent report, history
  - Assign ratings after all data is collected
  - Compare to typical child of same age
  - Get anecdotal data on peculiarity, frequency, intensity, and duration of behaviors
  - Rating of 1 – 4 with midpoints
  - Total score by summing 15 items

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The Screening Tool for Autism in Toddlers and Young Children (STAT)

- Originally designed to assess children 24 to 36 months
  - Can be informative in children 12 to 23 months and 37-48 months
- The STAT consists of 12 interactive activities that are administered to the child within the context of play activities (15-20 minute assessment)
- Sensitivity and Specificity very good
- Need:
  - direct observation
  - Need lots of training

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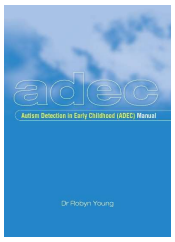
Autism Detection in Early Childhood (ADEC)

- 12 months to 3 years of age
- 16 discreet behaviors (10-15 min assessment)
- Also direct observation and clinician rating
  - Items are coded 0 to 2 (0 implies age-appropriate response, 1 indicates somewhat inappropriate response, 2 indicates clearly inappropriate response)
  - Risk determined by overall score:
    - Low risk 0-10
    - Moderate 11-13
    - High 14-19
    - Very high >19
- Good sensitivity, but poorer specificity



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- "Brief clinical observations may not provide enough information about atypical behaviors to reliably detect autism risk."
- "High prevalence of typical behaviors in brief samples may distort clinical impressions of atypical behaviors."
- "Formal screening tools and general developmental testing provide critical data for accurate referrals."
- NO MEASURE is PERFECT, but having norms and standards enhance our detection and referral process!

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