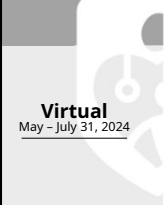


In-person
March 13-16, 2024




Virtual
May - July 31, 2024

**45th National Conference
on Pediatric Health Care**

**Cultural Considerations in Pediatric
Autism Spectrum Disorder Evaluations**

Co-presenters:
Daphna Shaw Zack, DNP, APRN CPNP-PC
Karen Dorsman, PhD
Beatriz MacDonald Wer, PhD
Veronica Bordes Edgar, PhD, ABPP



UT Southwestern
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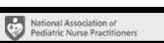
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Experts in pediatrics, Advocates for children.

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Speaker Disclosure

We have no disclosures.




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Learning Objectives

- Identify cultural and linguistic variables critical to autism spectrum disorder (ASD) assessment for children from diverse backgrounds.
- State the different components of the ECLECTIC framework.
- Demonstrate clinical application of the ECLECTIC framework.
- Discuss best practice recommendations for providing culturally-informed ASD evaluations.




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Autism Spectrum Disorders

- Collection of neurodevelopmental disorders that are characterized by **impairments in social interaction and communication**, as well as the presence of **restricted and repetitive behaviors and interests**.
- Affect approximately 1 in 36 children in the US (CDC, 3/2023; Maenner MJ, Warren Z, Williams AR, et al. 2023)
 - This is over 1.5 million children
- Global *estimate* 1 in 160 children
- Increased male to female ratio (~4.2:1)
- 35.2% had an IQ ≤70
- We do not have a specific cause
- Seen across all races, ethnic groups, socioeconomic strata, but...
Maenner et al., 2023.



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Cultural Differences - Longstanding Research

- Hispanic/Latinx children are often
 - **misdiagnosed** with ASD and are
 - diagnosed 2 ½ years **later** than their White peers
- Those with 2 US-born parents > 2 foreign-born parents
- Black youth are more likely to be
 - **misdiagnosed** with conduct disorder and adjustment disorder instead of ASD

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Longstanding Research cont.

- Black, Hispanic/Latinx, and other racial/ethnic and linguistically-diverse minority youth are
 - **less likely** to have documentation of ASD in their school and health records
- Children from a Hispanic/Latinx or Asian culture with an IQ in the intellectual disability range are
 - **less likely** to be diagnosed with ASD, while for Black children the disparity persists regardless of ID

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Cultural Differences- ADDM report 2022

- 2018 data
- Overall similar prevalence by race and ethnicity **at age 8**, but
 - American Indian/Alaska Native > White children
- Variability across sites demonstrated:
 - Hispanic/Latinx children < Black or White children for dx
 - Black children (49.8%) > White (29.7%) and Hispanic/Latinx (33.1%) to be diagnosed with intellectual disability

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ADDM report 2022 cont.

- Variability across sites with respect to median household income:
 - 5 of 11 sites demonstrated lower prevalence with higher MHI
 - 1 of 11 demonstrated higher prevalence with higher MHI
 - The other 5 did not demonstrate association with MHI

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Cultural Differences- ADDM report 2023

- 2020 data
- Increased ASD prevalence by race and ethnicity **at age 8**, compared to 2018
 - American Indian/Alaska Native (26.5) > White children (24.3) – no change
 - Black (29.3), Hispanic/Latinx (31.6) and Asian/Pacific Islander (33.4) > White children and those from 2 or more races (22.9) – **NEW change**
 - 30% increase for Asian, Black, and Hispanic/Latinx children
 - Similar trend for children age 4 in 2018

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ADDM report 2023 cont.

- Intellectual Disability
 - Remained similar for Black children (50.8%) > Asian/Pacific Islander (41.5%), Hispanic/Latinx (34.9%), and White (31.8%) children
 - Slightly higher percentages compared to 2018 for all
- Variability across sites with respect to median household income:
 - Lower prevalence with higher household income at 3 sites
 - No association at other 8 sites

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Other Cultural Differences

- Girls from cultural/ethnic minority groups
 - Gender-specific roles/expectations
 - Play and social interactions
- Gender diverse youth
 - Report more autistic traits than cisgender youth
- Intersectionality is key!

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So why the difference?

- Healthcare Access? Distrust?
- Healthcare Literacy and Awareness of ASD?
- Literacy or Acculturation?
- Clinician bias?
- Misdiagnosis?
- Cultural Stigma?

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Diagnostic Criteria according DSM-5-TR

1. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by **all** of the following, currently or by history:
 1. **Deficits in social-emotional reciprocity**, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
 2. **Deficits in nonverbal communicative behaviors** used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
 3. **Deficits in developing, maintaining, and understanding relationships**, ranging, for example, 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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And....

2. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least **two** of the following, currently or by history:
 1. **Stereotyped or repetitive motor movements**, use of objects, or speech (e.g., simple motor stereotypes, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
 2. **Insistence on sameness, inflexible adherence to routines**, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).
 3. **Highly restricted, fixated interests that are abnormal in intensity or focus** (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
 4. **Hyper- or hyporeactivity to sensory input** or unusual interest in sensory aspects of the environment (e.g. apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

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- Symptoms must be present in the **early developmental period** (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life)
- Symptoms cause **clinically significant impairment** in social, occupational, or other important areas of current functioning.
- These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay.

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Red flags: clearly diagnostic, classic symptoms

Pink flags: subtle associated features, less definitive symptoms- investigate and explore



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ASD Red Flags

- Lack of response to name
- Lack of social smile (even in response to parents)
- Deficits in joint attention
- Lack of sharing interests
- Inappropriate eye gaze
- Lack of pointing
- Inappropriate play with toys
- Repetitive movements with body or objects
- Unusual sensory exploration
- Intolerance of changes in routines and schedules
- Social and language regression ~ 1-2 yrs old
- Hand guiding or using other's hand as tool without EC

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ASD Pink Flags

- Pedantic speech
- Lining up items
- Over focus on parts of objects
- Flat or inappropriate facial expressions
- Avoids or resists physical contact
- Not easily comforted by others during distress
- Language delays w/ gesture compensation
- Trouble understanding others' feelings

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Screening & Diagnostic Tools

M-CHAT-R™

Please answer these questions about your child. Keep in mind how your child typically behaves. If you have seen your child do the behavior a few times, but he or she does not usually do it, then please answer no. Please circle yes or no for every question. Thank you very much.

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? (For EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?)	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 show? (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 noise such as a vacuum cleaner or loud music?)	Yes	No

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MCHAT

- High false positives in low socioeconomic and ethnically diverse settings within the United States

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ADOS-2

- Available in other languages
- Limited cultural adaptation (e.g. song/book)
- Black American children more likely to have higher atypical ratings on unusual eye contact, stereotyped/idiosyncratic use of words or phrases, and immediate echolalia
- Hispanic/Latinx children had higher ratings on unusual eye contact

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ADI-R

- Lower sensitivity and specificity on specific domains in Spanish speaking populations in the United States

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Who evaluates for ASD?

- Varies by state, insurance requirements, scope of training
 - Developmental behavioral pediatricians, advanced practice providers, general pediatricians
 - Educational diagnosticians
 - Psychologists and neuropsychologists
 - Speech/language pathologists
 - Neurologists
 - Psychiatrists

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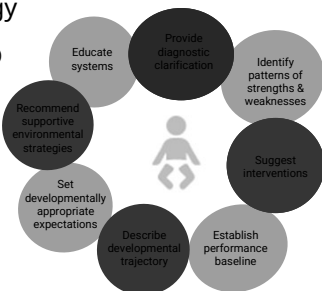
When is pediatric neuropsychology recommended?

- 1) To obtain information about developmental trajectories of learning, attention, adaptive skills, or behavior issues in the context of:
 - Brain based disorders or suspected brain insult
 - Genetic syndromes
 - Complex medical history
 - In utero exposures
 - Challenging diagnostic presentation
- 2) Gradual or sudden unexplained change in the child's usual functioning.

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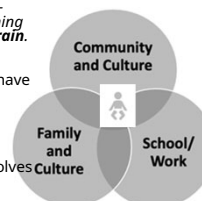
- Referral question
- Record review (medical, educational, etc)
- Review relevant literature/Consultation
- Caregiver, patient, teachers interview
- School/Teacher report
- Previous evaluations
- Social and cultural history
- Emotional/behavioral/psychiatric history
- Observations
- Assessment battery via Hypothesis Testing
- Conceptualization
- Feedback



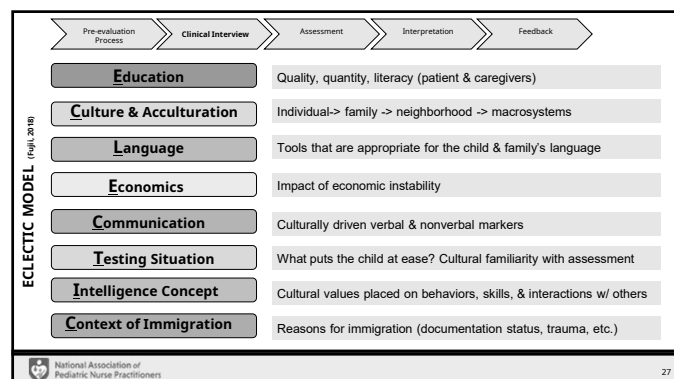
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- Dedicated to enhancing the understanding of *brain-behavior relationships (normal and abnormal functioning of the central nervous system (CNS) in a **developing brain***.

- Evaluate the impact a *neurological* condition might have on cognitive development and a person's ability to function and meet the demands of daily living (i.e., school, occupation, relationships, home life).
- Data collected from multiple systems and often involves interdisciplinary work.



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[illegible]

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Case One

- Developmental Behavioral Pediatrics Clinic
- Culturally informed evaluation: bilingual, bicultural board-certified pediatric neuropsychologist with expertise in neurodevelopmental disorders and medical complexity.
- Assessed over the course of a single day.

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Case One

A 3-year old girl of Latin American background referred by her developmental behavioral pediatrician for diagnostic clarification.

Background:

- PMH: prematurity (34 weeks), microcephaly, severe hypoxic ischemic encephalopathy in NICU course 2/2 seizures, and bilateral sensorineural hearing loss (received cochlear implants at 18 months.)
- Bilingual household (Spanish/English): her dominant language is Spanish.

Parents' Chief Complaint:

- Concern for developmental delays, attention/regulation, and sensory issues (biting self).

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Case One

Testing Observations

- Patient demonstrated social referencing, eye contact when requesting, pointing with whole hand, directed smiling.
- Limited speech, was able to vocalize few consonant-vowel combinations (ie. "Ma" "ta")
- Did not engage in relational play, engaged in pretend play by herself (drank from an empty cup, combed her hair)
- Able to complete puzzle pieces in a board, pegs in pegboard.
- Frequent fisting of hands, forceful motions when working with manipulatives
- No repetitive behaviors, no stereotypies other than one possible instance of flapping with brief excitement
- Unable to stand on her own or take steps without support

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Case One

Education

She is not in preschool yet, at home with parents. Mom completed 9th grade, dad completed 6th grade.

Culture & Acculturation

Parents are both from a Latin American country

Language

She spoke her first word at 7 months and combined words at 32 months old. Spanish is the primary language at home (by parents) and she is more dominant in Spanish. Her uncles occasionally use English with her.

Economics

Mom doesn't work outside the home. Dad works in a restaurant.

ECLECTIC MODEL
(Fujita, 2018)

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ECLECTIC MODEL (Fall 2018)

Case One

Communication

Speech/language therapy has primarily been in Spanish. Patient listens to music and watches TV in Spanish and English.

Testing Situation

Mom was present during testing. She was slow to warm up to the examiner but eventually became engaged. Generally happy throughout the assessment. Cooperation varied. Better with hands on manipulatives.

Intelligence Concept

She demonstrated developmental delays with all domains.

Context of Immigration

She was born in the United States and parents immigrated from a Latin American country.

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Case One

Testing performed: Bayley-4, ASRS, Vineland-3

Diagnostic impressions:

- Global Developmental Delay secondary to severe hearing loss and severe HIE
 - Overall developmental abilities ~15 months
 - Language ~ 11 to 13 months
 - Motor ~13 to 17 months
 - Adaptive abilities/personal care ~18 months
 - Social skills~ 14 to 16 months
- Recommended re-evaluation in 1 year, post speech/language therapy, enrollment in preschool with special education supports, re-consider ASD at that time

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Case Two

- Multidisciplinary Clinic
 - Speech pathologist, occupational therapies, trainees, developmental behavioral pediatrician/psychiatrist, and psychologist
- Assessed over the course of three appointments
- Access to language services and interpreters
- Culturally informed evaluation

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Case Two

A 6-year-old boy of Mexican background referred by PCP

Background:

- General good health and no prescribed medications.
- History of stuttering and language delays.
- Academic diagnosis of speech/language impairment and autism per IEP and speech and language therapy at school and community.
- Stronger understanding and expression in Spanish in comparison to English.

Parents' chief complaint:

- Concerns related to emotional regulation, communication, and social interactions at school.

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Case Two

• First day of testing observations

- Interacted with family members in the lobby when examiners were not near. There was an interpreter present.
- When being observed, he tended to shut down and not speak.
- Preschool Language Scales - 5 (PLS-5) was attempted by English speaking provider. However, he did not participate and administration was discontinued.
- When asked to identify pictures by pointing, he stood next to his father and appeared uncomfortable, turning away, and dropping eyes.
- When his father provided additional tactile and verbal prompts to point, he dropped his hand and looked away. He was visibly shaking.

Case Two

Education

Kindergartner who is reading single words in Spanish and counting to 100. He qualified for special education services under the eligibility of Speech/ Language Impairment. Parents obtained high school diplomas.

Culture & Acculturation

Parents are from Mexico and speak Spanish. Extended family lives with them and other family members live near. Cousins, who live with him, were invited to participate in the evaluation.

Language

Language milestones in Spanish were met within expected timeframes. Stronger Spanish skills than English, as English skills are emerging.

Economics

Both parents work (custodian and mechanic).

Case Two

Communication

Primary communication is in Spanish. Once comfortable, he uses eye gaze and gestures to support communication. He plays at school with other children but does speak to teachers.

Testing Situation

Scared of testing setting. It took him three sessions to be more comfortable. Testing completed in the lobby with a bilingual examiner, who spent one hour building rapport.

Intelligence Concept

With testing supports in place, he demonstrated average thinking skills and average language skills in Spanish.

Context of Immigration

He was born in the United States and parents immigrated from Mexico.

Case Two

Testing performed: DAS-II, Sensory Profile 2, CARS-2, BASC-3, Vineland-3

Diagnostic impressions:

- Selective Mutism
- Social Anxiety Disorder

Results:

- Average intellectual functioning
- Average verbal abilities in Spanish
- Age appropriate social overtures, nonverbal communication, and play with same age peers
- No reported restricted and repetitive behaviors
- Symptoms endorsed regarding anxiety around new social situations and not speaking (selective mutism) to teachers at school and new adults

Recommendations:

- Speech and language therapy, school services, and psychotherapy

Take-aways from the ECLECTIC Framework

- ADOS-2 can still be valid and impactful – BUT emphasis on scores without a cultural lens is problematic.
- Pre-think and preparing about how you ask questions.
 - Create a cultural interview and practice it!
 - Start slow and add as you grow in comfort
 - Be prepared to create space and spend time
- Think about symptoms within the cultural concept for that child, from that particular culture, living with that particular family.

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Special Considerations

- **Ethics:** Barriers to communication merit targeted efforts on the part of the clinician to disentangle cultural differences from developmental ones.
- Cultural differences in the use of eye contact, gestures, perceptions of social norms and behaviors, as well as varying educational experiences and comfort levels with clinicians represent some of the critical barriers to assessment and diagnosis of ASD.

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Special Considerations

- **Advocacy:** The ECLECTIC model provides a valuable framework for comprehensive assessment of children from various racial, linguistic, and ethnic groups.
- It can also serve as a reference point for entry into dialogue with patients and families when there are atypical social skills or behaviors and interests that may be indicative of ASD/SD.

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Special Considerations

- **Interprofessional practice:** encourage collaboration and interprofessional practice with a range of disciplines to clarify strengths and challenges (with goal of tailoring interventions accordingly).

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Practice Recommendations

- Determine the child's dominant language and language proficiency prior to the evaluation.
- Late diagnosis may require more intensive intervention to compensate for previous inappropriate or insufficient services or learning environments.
- Consider that **traumatic experiences may be associated with atypical behaviors and social interactions** that need to be distinguished from symptoms of autism.

Practice Recommendations

- Immigration status in the U.S. *may impact parents' desire to seek evaluation* for their child secondary to access to services as well as fears of how results can impact citizenship decisions.
- Document the educational level attained of the child and parent in reports, as well as how this could influence testing.
- Attempts should be made to understand a **family's cultural perception of behavioral and social norms** that affect educational expectations.
 - Identify family's knowledge, attitudes, and values re: child's development and behaviors.

References

- American Education Research Association, American Psychological Association, & the National Council on Measurement in Education. (2014). Standards for educational and psychological testing (2nd ed.). American Education Research Association.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).
- American Psychological Association. (2017b). Multicultural guidelines: An ecological approach to context, identity, and intersectionality. <http://www.apa.org/about/policy/multicultural-guidelines>.
- Attwood, T. (2006). Asperger syndrome and girls: The pattern of abilities and development of girls with Asperger's syndrome. *Future Horizons*.
- Bernier, R., Mao, A., & Yen, J. (2010). Psychopathology, families, and culture: Autism. *Child and Adolescent Psychiatric Clinics of North America*, 19, 859-867. <https://doi.org/10.1016/j.chc.2010.07.005>
- Bernier, R., Mao, A., & Yen, J. (2010). Psychopathology, families, and culture: autism. *Child Adolesc Psychiatr Clin N Am*, 19(4), 855-867. <https://doi.org/10.1016/j.chc.2010.07.005>
- Blanche, E. I., Diaz, J., Barretto, T., & Cemak, S. A. (2015). Caregiver experiences of Latino families with autism spectrum disorder. *American Journal of Occupational Therapy*, 69(5), 6905185010p1. <https://doi.org/10.5014/ajot.2015.017849>
- Bordes Edgar, V., Meneses, V., Shaw, D., Romero, R. A., Salinas, C. M., & Kissel, A. (2022). Clinical utility of the ECLICTIC framework in providing culturally-informed autism spectrum disorder evaluations: A pediatric case-based approach. *The Clinical neuropsychologist*, 36(5), 1148-1171. <https://doi.org/10.1080/13854046.2021.1936187>
- Burkett, K., Morris, E., Manning-Courtney, P., Anthony, J., & Shambley-Ebron, D. (2015). African American families on autism diagnosis and treatment: The influence of culture. *Journal of Autism and Developmental Disorders*, 45, 3244-3254. <https://doi.org/10.1007/s10803-015-2482-x>

References

- Canas, A., Bordes Edgar, V., & Neumann, J. (2020). Practical considerations in the Neuropsychological Assessment of Bilingual (Spanish-English) Children in the United States: Literature review and case series. *Developmental Neuropsychology*, 45(4), 211-231. <https://doi.org/10.1080/87565641.2020.1746314>
- Cardenas, A., Villavicencio, L., & Pavuluri, M. (2017). Considerations in the neuropsychological evaluation and treatment of children with limited English proficiency. *The Permanente Journal*, 21(3), 16-149. <https://doi.org/10.7812/TPP/16-149>
- Committee on Practice and Ambulatory Medicine, American Academy of Pediatrics (AAP) Bright Futures Periodicity Schedule Workgroup. (2020). 2020 recommendations for preventive pediatric health care. *Pediatrics*, 145(3), e20200013.
- Constantino, et al. (2020). Timing of the diagnosis of autism in African American children. *Pediatrics*, 146(3), e20193629. <https://doi.org/10.1542/peds.2019-3629>
- Comier, D., Davidson, E., Young, A., & Augustyn, M. (2018). A young man with Trisomy 21 and sudden behavioral changes. *Journal of Developmental and Behavioral Pediatrics*, 39, 1-3.
- Cory, J. M. (2021). White privilege in neuropsychology: An 'invisible knapsack' in need of unpacking? *The Clinical Neuropsychologist*, 35(2), 206-213. <https://doi.org/10.1080/13854046.2020.1801845>
- Daugherty, J. C., Puente, A. E., Fasfous, A. F., Hidalgo-Ruizante, N., & Perez-Garcia, M. (2017). Diagnostic mistakes of culturally diverse individuals when using North American neuropsychological tests. *Applied Neuropsychology Adult*, 24, 16-22. <https://doi.org/10.1080/23279095.2015.1036992>
- Dean, M., Harwood, R., & Kasari, C. (2017). The art of camouflage: Gender differences in the social behaviors of girls and boys with autism spectrum disorder. *Autism*, 21(6), 678-689. <https://doi.org/10.1177/1362361316671845>

References

- Dean, M., Kasari, C., Shih, W., Frankel, F., Whitney, R., Landa, R., Lord, C., Orlich, F., King, B., & Harwood, R. (2014). The peer relationships of girls with ASD at school: comparison to boys and girls with and without ASD. *Journal of Child Psychology and Psychiatry*, 55(11), 1218–1225. <https://doi.org/10.1111/jcpp.12242>
- Denmark, T., Atkinson, J., Campbell, R., & Swettenham, J. (2019). Signing with the face: Emotional expression in narrative production in deaf children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 49, 294–306. <https://doi.org/10.1007/s10803-018-3758-x>
- Durkin, M. S., Maenner, M. J., Baio, J., Christensen, D., Daniels, J., Fitzgerald, R., Imm, P., Lee, L., Schieve, L. A., Braun, K. V. N., Wingate, M. S., & Yeargin-Allsopp, M. (2017, November). Autism spectrum disorder among US children (2002–2010): Socioeconomic, racial, and ethnic disparities. *American Journal of Public Health*, 107(11), 1818–1826. <https://doi.org/10.2105/AJPH.2017.304032>
- Dyches, T. T. (2011). Assessing diverse students with autism and the role of SLPs: ASHA documents offer guidance. *Leader*, 16, 11–15. www.asha.org/leader.aspx
- El-Ghoroury, N. H., & Krackow, E. (2012). Enhancing the identification of autism spectrum disorders via a model of culturally sensitive childhood assessment. *Professional Psychology: Research and Practice*, 43(3), 249–255. <https://doi.org/10.1037/a0027254>
- Elabbagh, M., Divan, G., Koh, Y., Kim, Y. S., Kauchali, S., Marcin, C., Montiel-Nava, C., Patel, V., Paula, C. S., Wang, C., Yeasmy, M. T., & Fombonne, E. (2012). Global prevalence of autism and other pervasive developmental disorders. *Autism Research*, 5, 160–179. <https://doi.org/10.1002/aur.238>
- Farver, J. M., Kim, Y. K., & Lee, Y. (1995). Cultural differences in Korean- and Anglo-American preschoolers' social interaction and play behaviors. *Child Development*, 66, 1088–1099. <https://doi.org/10.2307/1131800>

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References

- Fujii, D. E. M. (2018). Developing a cultural context for conducting a neuropsychological evaluation within a culturally diverse client: the ECLECTIC framework. *The Clinical Neuropsychologist*, 32(8), 1356–1392. <https://doi.org/10.1080/13854046.2018.1435626>
- Maenner, M. J., Warren, Z., Williams, A. R., Amoakohene, E., Bakken, A. V., Bilder, D. A., Durkin, M. S., Fitzgerald, R. T., Furrer, S. M., Hughes, M. M., Ladit-Akosta, C. M., McArthur, D., Pas, E. T., Salinas, A., Vehorn, A., Williams, S., Estler, A., Grzybowski, A., Hall-Lande, J., Nguyen, R. H. N., ... Shaw, K. A. (2023). Prevalence and Characteristics of Autism Spectrum Disorder Among Children Aged 8 Years - Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2020. *Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C. : 2002)*, 72(9), 1–14. <https://doi.org/10.15585/mmwr.mm7209a1>
- S. N., & Rice, C. (2012). Association between parental nativity and autism spectrum disorder among US-born non-Hispanic white and Hispanic children, 2007 National Survey of Children's Health. *Disability Health Journal*, 5(1), 18–25. <https://doi.org/10.1016/j.dhjo.2011.09.001>
- Shorey, S., Ng, E. D., Haugan, G., & Law, E. (2020). The parenting experiences and needs of Asian primary caregivers of children with autism: A meta-analysis. *Autism*, 24(3), 591–604. <https://doi.org/10.1177/1362361319886513>
- Stein, D., Munir, K., Karweck, A., Davidson, E., & Stein, M. (2013). Developmental regression, depression, and psychosocial stress in an adolescent with DS. *Journal of Developmental & Behavioral Pediatrics*, 34(3), 216–218. <https://doi.org/10.1097/DBP.0b013e3182862b42>
- Stoll, C., Palluel-Germain, R., Caldara, R., Lao, J., Dye, M. W., Aptel, F., & Pascalis, O. (2018, January). Face recognition is shaped by the use of sign language. *The Journal of Deaf Studies and Deaf Education*, 23(1), 62–70. <https://doi.org/10.1093/deaf/edx034>
- Sweet, J. J., Kilpel, K. K., Nelson, N. W., & Moberg, P. J. (2021). Professional practices, beliefs, and incomes of U.S. neuropsychologists: The AACN, NAN, SCN 2020 practice and "salary survey. *The Clinical Neuropsychologist*, 35(1), 7–80. <https://doi.org/10.1080/13854046.2020.1849803>
- Szarkowski, A., Mood, D., Shield, A., Wiley, S., & Yoshinaga-Itano, C. (2014). A summary of current understanding regarding children with autism spectrum disorder who are deaf or hard of hearing. *Seminars in Speech and Language*, 35(4), 241–259. <https://doi.org/10.1055/s-0034-1389097>

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References

- Thurm, A., Farmer, C., Salzman, E., Lord, C., & Bishop, S. (2019). State of the field: Differentiating intellectual disability from autism spectrum disorder. *Frontiers in Psychiatry*, 10, 526. <https://doi.org/10.3389/fpsyg.2019.00526>
- Valicenti-McDermott, M., Tarshis, N., Schouls, M., Galdston, M., Hottinger, K., Seijo, R., Shulman, L., & Shinnar, S. (2013). Language differences between monolingual English and bilingual English-Spanish young children with autism spectrum disorders. *Journal of Child Neurology*, 28(7), 945–948. <https://doi.org/10.1177/0883273812453204>
- World Health Organization. (2019, November 7). Autism spectrum disorders key facts. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>
- Zablotsky, B., Black, L. I., Maenner, M. J., Schieve, L. A., Danielson, M. L., Bitsko, R. H., Blumberg, S. J., Kogan, M. D., & Boyle, C. A. (2019). Prevalence and trends of developmental disabilities among children in the United States: 2009–2017. *Pediatrics*, 144(4), e20190811. <https://doi.org/10.1542/peds.2019-0811>
- Zuckerman, K. E., Mattox, K., Donelan, K., Batbayar, O., Baghaee, A., & Bethell, C. (2013). Pediatrician identification of Latino children at risk for autism spectrum disorder. *Pediatrics*, 132(3), 445–453. doi: 10.1542/peds.2013-0383

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