

TRI-STATE WEBINAR SERIES

ASD Identification within Culturally and Linguistically Diverse Populations

Presented by:
Bryn Harris, PhD



Presenter Information

- Bryn Harris, PhD
- Associate Professor, University of Colorado Denver
- Dual appointment in the School of Education and Human Development and the Department of Pediatrics (Developmental Pediatrics)
- Part-time School Psychologist – Denver Public Schools
- Licensed Psychologist & School Psychologist (CO)
- Bilingual (Spanish)



Learner Objectives

- 1) Awareness in national trends pertaining to ASD identification in culturally and linguistically diverse populations
- 2) Investigation of several ASD specific assessment tools for their cultural and linguistic responsiveness
- 3) Review of promising practices to encourage more culturally and linguistically responsive ASD identification

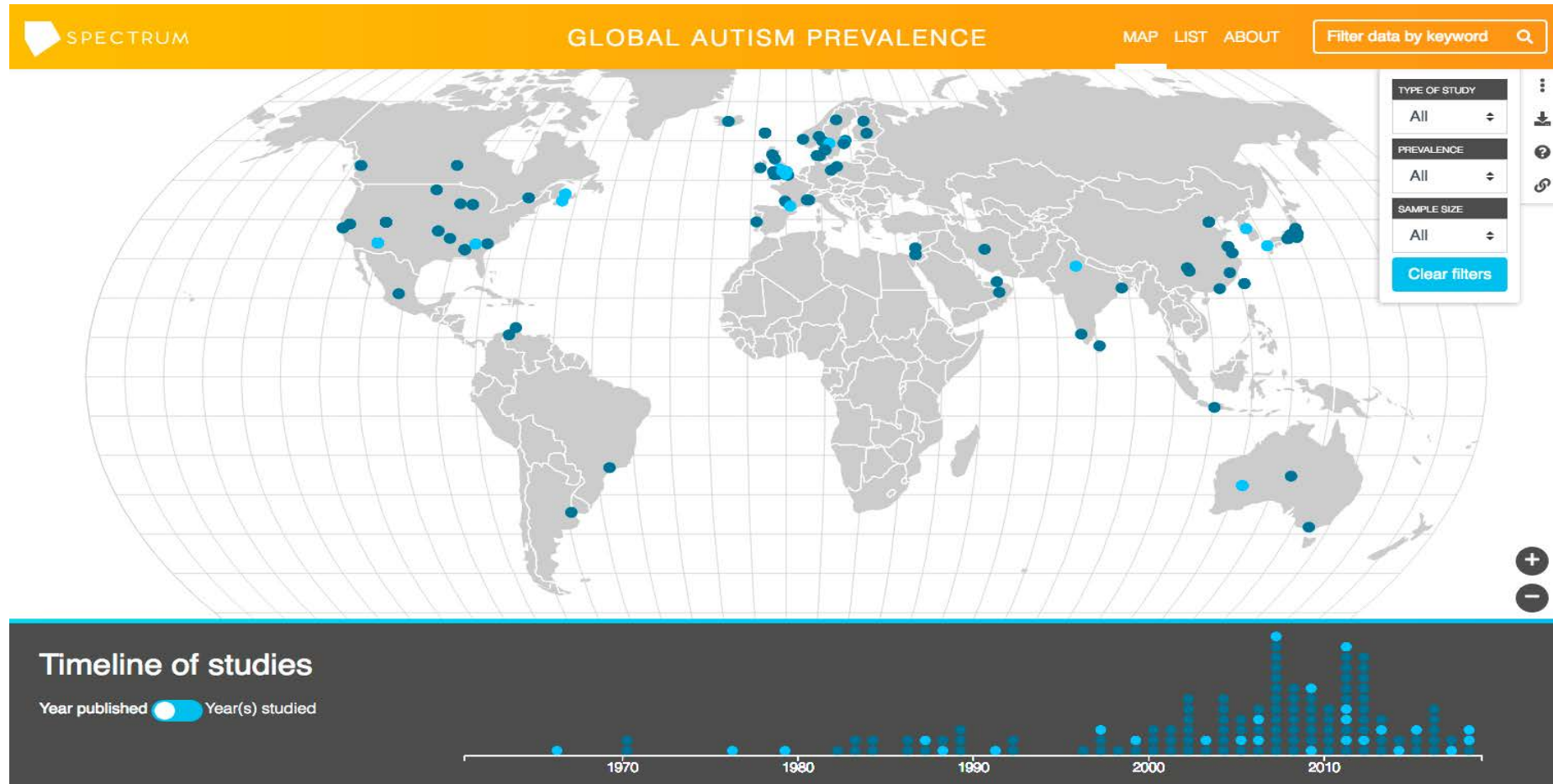
ASD Prevalence Trends Over Time

Estimated Autism Prevalence 2018



* Centers for Disease Control and Prevention (CDC) prevalence estimates are for 4 years prior to the report date (e.g. 2018 figures are from 2014)

Worldwide ASD Prevalence (spectrumnews.org, 2019)



Changing Demographics (Population Estimates and Projections, US Census, 2018)

Table 3.

Population by Race and Ethnicity: Projections 2030 to 2060

The non-Hispanic White population is projected to shrink by 19 million people by 2060.
(In thousands)

Characteristics	Population						Change from 2016 to 2060	
	2016		2030		2060		Number	Percent
	Number	Percent	Number	Percent	Number	Percent		
Total population	323,128	100.0	354,840	100.0	403,697	100.0	80,569	24.9
One race								
White	248,503	76.9	263,302	74.2	274,576	68.0	26,073	10.5
Non-Hispanic White	197,970	61.3	197,888	55.8	178,884	44.3	-19,086	-9.6
Black or African American	43,001	13.3	48,934	13.8	60,471	15.0	17,470	40.6
American Indian and Alaska Native	4,055	1.3	4,657	1.3	5,567	1.4	1,512	37.3
Asian	18,319	5.7	24,382	6.9	36,778	9.1	18,459	100.8
Native Hawaiian and Other Pacific Islander	771	0.2	912	0.3	1,124	0.3	353	45.8
Two or More Races	8,480	2.6	12,652	3.6	25,181	6.2	16,701	196.9
Hispanic	57,470	17.8	74,751	21.1	111,022	27.5	53,552	93.2

Changing Demographics

- Bilingual learners made up 9.4% of the public school population in 2014–2015 (National Center for Education Statistics, 2019)
 - 16.7% of kindergarten students identified as bilingual

ADDM Data – National Disparities (ADDM, 2018)

- White children are 1.2x more likely to receive an ASD identification than Hispanic Children
- In past surveillance years, Black children were also less likely to obtain an ASD identification although no significant differences were found in 2018
- Black and Hispanic children are more likely to receive an ASD identification in school, and are more likely to have a delayed identification (Bio et al., 2018)

ASD Disparities: Children from CLD Populations

- Children from culturally and linguistically diverse (CLD) groups are, on average, misdiagnosed more often and identified later than non-Hispanic White children (Mandell et al., 2009; Baio et al., 2018)
- Low-SES populations are less likely to be diagnosed with ASD (Durkin et al., 2017)

Disparities in Children with ASD in the Educational Setting

- Sullivan (2013) found that 1 in 228 students nationwide was identified with autism for special education eligibility
- Hispanic and American Indian/Alaskan Native students were often less likely to be identified with autism relative to White students, whereas Asian/Pacific Islander students were more likely to be identified with autism than White students
- Travers et al. (2014) found that between 2000-2007, there was a trend towards decreased ASD educational identification in Latino and Black students

To consider....

- If children from Latino and Black populations are more likely to be misidentified and not given the appropriate diagnosis or educational identification of ASD, what diagnoses/educational identification do you think they are receiving?

Poll Question #1

- If children from Latino and Black populations are more likely to be misidentified and not given the appropriate diagnosis or educational identification of ASD, what diagnoses/educational identification do you think they are receiving?
 - A. Intellectual Disability
 - B. Other Health Impairment (Attentional Concerns)
 - C. Emotional Disability
 - D. All of the above

Poll Question #1 - Answer

- If children from Latino and Black populations are more likely to be misidentified and not given the appropriate diagnosis or educational identification of ASD, what diagnoses/educational identification do you think they are receiving?
- D. All of the above

Bottom Line

This research suggests that professionals are missing behavioral indicators of ASD in CLD children, especially Latinos and Black children; thus, these children are unlikely to receive the appropriate interventions to address ASD symptomatology.

Cultural and Language Considerations

- “While autism itself, the neuropathology of it, may not be culturally determined, our determination of those behaviours, and our interpretation of those behaviours is”
- Dr. Mandell (CHOP)

Research Pertaining to Cultural Influences

- Zhang et al. (2006) noted that eye contact with adults and pointing with the index finger is considered inappropriate behavior within the Chinese culture
- Norbury and Sparks (2013) note potential cultural differences surrounding pretend play, public displays of emotion, and the extent to which children (especially boys) play with toy dolls
- These culturally imbedded behaviors and experiences will significantly impact the results of ASD assessments

Parent First Concern(s)

- Hispanic mothers reported significantly fewer concerns specific to ASD criteria than non-Hispanic mothers (Blacher et al., 2014)
- Black parents reported fewer concerns about their child's ASD-specific behaviors than White parents. Specifically, Black parents were less likely than White parents to report concerns about two ASD symptoms – social and RRB – in their child with ASD (Blacher et al., 2014)
- Parents from distinct cultural backgrounds may emphasize different symptoms of concern depending on the cultural importance (Mandell and Novak, 2005)

Bilingualism and ASD

- A review of the literature by Drysdale et al., 2015 suggests that bilingualism does not have a negative impact on language development for children with ASD
- However, the majority of parents report that practitioners predominantly advised against providing a bilingual environment (Drysdale et al., 2015)

Poll Question #2

- For a bilingual child, ASD symptoms will occur
 - A. Only in English, the language of instruction in the school
 - B. Only in the native language, the first language learned
 - C. In both languages

Poll Question #2 - Answer

- For a bilingual child, ASD symptoms will occur
- C. In both languages

ASD Assessment for Educational Identification - Potential Components

- Record Review
- Interview:
 - School Staff
 - Student
 - Parent
- Medical History
- Developmental History
- Adaptive Rating Scales
- Multiple Informants/Settings
- Range of Functioning
- Observations
 - Structured
 - Unstructured/Semi Structured
- Standardized Testing
 - Cognitive/Developmental
- Language
- Academic
- Executive Function
- ASD Specific Measures
- Social Skills

Parent Interview

- ❖ Most critical component for CLD children!
- ❖ Child cannot have ASD symptoms only at school or in one language
- ❖ Learn about family expectations for communication
- ❖ Language history
- ❖ Cultural factors (immigrant, refugee, other family members living at home etc.)
- ❖ Considerations when working with an interpreter

Observations (Dennison et al., 2019)

- When conducting observations, consider:
- The difference between the student's skills communicating in the native language and in English
- Looking for symptoms of ASD that are not characteristic of a student acquiring a second language (e.g., lack of response to name, sensitivity to sensory stimuli, stereotypic behaviors)
- The frequency and quality of attempts at social overtures, whether verbal or nonverbal
- Observations in different settings (e.g. classroom, PE class, recess, lunch)
- Conduct joint observations with another professional

Reviewing the Psychometrics of an Assessment

- Theoretical basis and empirical information
- Standardization
- Reliability
- Validity

Psychometrics of ASD Specific Assessments

- Mainly standardized with white, middle to upper class males
- Small samples of racially/culturally diverse children
- All Spanish language ASD diagnostic assessments are direct translations, not standardized
- What about other languages?
- Extremely limited research in this area

Harris et al. (2014) ASD Assessment Study

- Authors conducted a comprehensive review of ASD assessments pertaining to culturally and linguistically responsive psychometrics and design
- Diagnostic tools assessed: ADOS, ADI-R, ASRS, CARS-2
- Screening tools assessed: ASQ:SE, ASSQ, GARS, M-CHAT, Q-CHAT, SCQ
- Findings: ASD screening tools had higher checklist scores than ASD diagnostic tools, practitioners need stronger tools for CLD populations

Selected ASD Specific Assessments - Most Commonly Used in Educational Evaluations

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

Gilliam Autism Rating Scale, Third Edition (GARS-3)

Checklist for Autism Spectrum Disorder (CASD)

Autism Diagnostic Interview- Revised (ADI-R)

Autism Spectrum Rating Scales (ASRS)

Social Responsiveness Scale (SRS-2)

Autism Diagnostic Observation Schedule (ADOS -2)

- Consider individual child, culture/language considerations, psychometrics, what assessments other team members are using, usefulness for intervention

Limitations of the ADOS-2

- Training, expense, logistics with extensive testing materials, limitations of ASD teams that travel to do ASD assessment, limited research of ADOS with diverse cultural groups, Spanish version is a translation, not a standardization, play behaviors may be culturally influenced, not required for educational identification of ASD

Selected Assessments of Social Skills/Social Emotional

Social Responsiveness Scale (SRS-2)

Social Communication Questionnaire (SCQ)

Assessment of Social Skills for Children with Autism (adapted)

Social Interaction Observation Form

Triad Social Skills Assessment, Second Edition

Behavior Assessment Scale for Children (BASC-3)

Conners 3

- Consider individual child, culture/language considerations, psychometrics, what assessments other team members are using, intervention

Cognitive Assessment with CLD Pops

- Approximately 30% of children with ASD also have ID
- Nonverbal assessment vs. the assessment of nonverbal abilities
- Issues related to gestures & pointing
- School professionals need to obtain information pertaining to verbal language abilities
- KABC and DAS has less language and cultural loading than many other cognitive assessments
- All assessments have limitations and disclaimers should be provided

Investigating Assessments for CLD Populations

- Know language abilities (WIDA ACCESS, family interview etc.)
- Standardization sample?
- Direct translation or also adaptation?
- Subsamples?
- Will the information contribute to intervention planning?

IDEIA Law

- The law stipulates that assessments must be “provided and administered in the language most likely to yield accurate information, used only for the purposes for which they are valid and reliable, and administered by trained and knowledgeable personnel” in all areas of suspected disability

[P.L. 108-446 §614(b)(3)(A)(ii-iv)]

Direct Translation of Assessments

Voids
standardization

Is indefensible in
legal contexts

Likely assesses
different contexts
and levels of
difficulty than the
examiner believes

Should not be
done!



Polling Question #3

- Are obtaining scores on standardized assessments required for ASD eligibility?
 - A. Yes
 - B. No
 - C. Don't know

Polling Question #3 - Answer

- Are obtaining scores on standardized assessments required for ASD eligibility?
- B. No

Interpretation of Scores

- When to report scores?
- Qualitative score?
- Range of scores? CI?
- No scores provided?

Sample Disclaimer for Your Reports/IFSPs/IEPs etc.



It is advised that this data be interpreted with caution due to John's limited English proficiency. It is likely that the scores on this assessment are impacted by John's progress through English language development.



Write your own disclaimer based on your context

In Summary: Investigating Practices

- During your ASD evaluations, how are you:
 - Bringing everyone to the table that needs to be there
 - Considering language abilities of the child and family
 - Selecting instruments to minimize cultural and language loading
 - Interpreting the data with culture and language in mind
 - Selecting interventions that are responsive to cultural and language
- More research is needed!

Practices to Promote – ASD Assessment

- Family interview! Developmental history is key!
 - This may occur with an interpreter

Practices to Promote (cont.)

- Obtain more qualitative information (more interviews, observations, comparisons to other like-bilingual peers, record reviews)

Practices to Promote (cont.)

- Consult with English language development teachers and Speech Language Pathologist regarding the impact of language acquisition

Practices to Promote (cont.)

- If conducting standardized measures, take extensive notes about current areas of functioning and need. Paint a picture of that child's current functioning in the report – much more useful than a number for intervention purposes

Practices to Promote (cont.)

- Rely on a body of evidence – one assessment should never “trump” other data

Practices to Promote (cont.)

- Do not wait to assess the child so they can obtain more English language proficiency

Practices to Promote (cont.)

- Utilize community resources (faith-based organizations, family services agencies, community partners with strong connections to the families to advocate for early identification)

Practices to Promote (cont.)

- Advocate for more assessments that have strong psychometrics with racially/ethnically and linguistically diverse children

Practices to Promote (cont.)

- All decisions about eligibility are made as a team. Arrange meetings with the team prior to the IEP to review data and consider if there are holes in the information gathered

Practices to Promote (cont.)

- As we currently don't have optimal standardized ASD assessments for CLD populations, obtain more qualitative data and collaborate with the team in a more purposeful way

Goal Setting

- What is something that you can modify regarding your ASD assessment practice this month based on this presentation?
 - In the next 6 months?
 - Within one year?
- Share with a colleague for accountability!

Conclusion

- 1) CLD populations are increasing in the US, yet are less likely to be identified with ASD than white populations
- 2) Current standardized assessments commonly used in ASD evaluations have limited research to support their use in non-White populations
- 3) Practitioners must obtain more qualitative information when conducting evaluations in CLD populations and interpret the data with culture and language in mind

References

- Baio J, Wiggins L, Christensen DL, et al. Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years – Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014. *MMWR Surveillance Summary* 2018;67(No. SS-6):1–23. doi: <http://dx.doi.org/10.15585/mmwr.ss6706a1>
- Blacher, J., Cohen, L., Azad, G. (2014). In the eye of the beholder: Reports of autism symptoms by Anglo and Latino mothers. *Research in Autism Spectrum Disorders* 8(12):1648–1656. DOI: 10.1016/j.rasd.2014.08.017
- Dennison, A., Hall, S., Leal, J., Madres, D. (2019). SD or ELL? Distinguishing differences in patterns of communication and behavior. *Contemporary School Psychology*, 23(1), 57-67.
- Durkin, M., Maenner, M., Baio, J. et al. (2017). Autism Spectrum Disorder Among US Children (2002–2010): Socioeconomic, Racial, and Ethnic Disparities. *American Journal of Public Health*, 107, 1818-1826, <https://doi.org/10.2105/AJPH.2017.304032>
- Drysdale, H., van der Meer, L. & Kagohara, D. Rev. (2015). *Journal of Autism and Developmental Disorders*, 2: 26. <https://doi.org/10.1007/s40489-014-0032-7>
- Harris, B., Barton, E.E. & Albert, C. (2013). Evaluating autism diagnostic and screening tools for cultural and linguistic responsiveness. *Journal of Autism and Developmental Disorders*, 44(6), 1275-1287.
- U.S. Department of Education, National Center for Education Statistics. (2019). *The Condition of Education 2019* (2019-144), English Language Learners in Public Schools.
- Mandell, D., Wiggins, L., Carpenter, L. et al., (2009). Racial/ethnic disparities in the identification of children with autism spectrum disorders. *American Journal of Public Health*. doi: 10.2105/AJPH.2007.131243.
- Norbury, C. F., & Sparks, A. (2013). Difference or disorder? Cultural issues in understanding neurodevelopmental disorders. *Developmental Psychology*, 49(1), 45–58. doi: 10.1037/a0027446.
- Sullivan, A. L. (2013). School-based autism identification: Prevalence, racial disparities, and systemic correlates. *School Psychology Review*, 42, 298-316.
- Travers, J. & Krezmein, M. (2014). Racial Disparities in Autism Identification in the United States During 2014. *Exceptional Children*. doi: <https://doi.org/10.1177/0014402918771337>

THANK YOU!

Bryn Harris

bryn.harris@ucdenver.edu

