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ABSTRACT BOOK

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Methods: Participants were 320 children (M_{Age} = 48.23 months, SD_{Age} = 23.13 months) who participated in online autism evaluations during the COVID-19 pandemic. Information used to complete the CARS2-ST was obtained via observation of a caregiver-administered, play-based assessment and a clinical interview with their caregiver. Confirmatory factor analysis (with the *lavaan* package in R) was used to test both a single-factor model and the Moulton et al. (2019) three-factor model. Full information maximum likelihood estimation was used. The sample was then split into White (n = 204) and Non-White (e.g., Black, African American, Hispanic, Native American; n = 105) groups; MI between these two groups was assessed at configural, metric, and scalar levels.

Results: The Moulton et al. (2019) three-factor model had a better fit than the single-factor model, using standard fit indices. Using the three-factor model to assess MI, both the White (CFI = 0.91, TLI = 0.89, RMSEA = 0.80) and Non-White groups (CFI = 0.95, TLI = 0.93, RMSEA = 0.69) demonstrated acceptable model fit. At the configural level, the data had acceptable model fit (CFI = 0.92, TLI = 0.90, RMSEA = 0.77). Moving to the metric model showed acceptable change in model fit (ΔCFI = -0.011, ΔRMSEA = 0.002, ΔSRMR = 0.017) as did the scalar model (ΔCFI = -0.003, ΔRMSEA = -0.002, ΔSRMR = 0.002).

Conclusions: When completed based on virtual observations, scores on the CARS2-ST appear to adhere to the same factor structure as those based on in-person observations. This supports the validity of the CARS2-ST for use in ASD evaluations conducted virtually. For groups of White and Non-White children, this data suggests that the three-factor model of the CARS2-ST is appropriate and supports its use for these groups in virtual clinical autism evaluations. Further research should explore the suitability of the CARS2-ST in other groups and ways to further improve its construct validity across groups.

409.042 *(Poster)* Cross-Cultural Differences in Reporting Autistic Symptoms in Toddlers: A Study with the M-CHAT(-R) Data from Ten Countries

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Background: Evidence has emerged over the past decade that reporting autism spectrum disorder (ASD) symptoms with available instruments may vary across regional and linguistically diverse samples. The extent to which differences in reporting ASD symptoms are inherent characteristics of the disorder, reflected in the variability in responding across cultures, or the effects of differential measurements with these instruments across cultures is still unclear. The Modified Checklist for Autism in Toddlers (M-CHAT), and its revised form (M-CHAT-R), are the most frequently used ASD screeners in toddlers, even from low-resource regions, and one of the most promising instruments to identify ASD risk.

Objectives: The aim of this study was to evaluate the endorsement rates of the M-CHAT(-R) items by parents/caregivers of toddlers with ASD from ten countries: Albania, Chile, Georgia, Macedonia, Malaysia, Mexico, Serbia, Turkey, United Kingdom (UK), and the United States of America (USA).

Methods: Data were aggregated for toddlers aged 14 – 36 months who participated in previous studies or completed screening and evaluation for clinical purposes: Albania (n = 17), Chile (n = 15), Georgia (n = 189), Macedonia (n = 95), Malaysia (n = 52), Mexico (n = 46), Serbia (n = 30), Turkey (n = 150), UK (n = 28), and USA (n = 312). Item endorsement was classified as low (< 30%), moderate (30-60%), or high (> 60%).

Results: All items had a low endorsement rate in at least one country and moderate to high in others. There were 14 items with a moderate to high endorsement rate in seven to nine countries. Of these, seven items had moderate to high across nine countries: *point to show* and *understand what is said* had a high endorsement rate for six (and moderate for three); *follow your gaze* and *get parent to watch* had high for five (and moderate for four); and *point to get help*, *brings things to show*, and *follow a point* had a high for four (and moderate for five). The other items with frequent moderate or high endorsements were *interest in other children* (for 8 countries), *play pretend* (for 8), *imitate action* (for 8) *respond to name* (for 7), *unusual finger movements* (for 7), *hearing concerns* (for 7), and *social referencing* (for 8). Looking at performance within countries, Mexico had moderate or high endorsement on all 20 items; Albania, Georgia, Macedonia, Serbia, and Turkey had moderate or high endorsement on 14-17 items; Chile, UK, and USA had moderate or high endorsement on 11-12 items; and Malaysia only had moderate endorsement on one item (and low on all others).

Conclusions: There were differences in responding to M-CHAT(-R) items related to typical behaviors affected in toddlers with ASD as well as atypical behaviors common in ASD by parents/primary caregivers across ten countries, which may indicate cross-country variations in the recognition and evaluation of early autistic symptoms in toddlers. Items related to joint attention, imitation, social engagement, and language comprehension may be less variable and potentially interpreted as universal atypical behaviors in toddlers with ASD.

409.043 *(Poster)* Developing the Signposting Questionnaire for Autistic Adults (SQ-A Adult)