Parent Report of Nonverbal Joint Attention Symptoms in ASD: Validating the Childhood Joint Attention Rating Scale

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HUMAN DEVELOPMENT Graduate Group

Check out our accompanying talk!

"Gender and Parent Report of Childhood Joint Attention"

Presenter: Sandy Birkeneder

BACKGROUND

Differences in joint attention and spontaneous sharing of experience is preschool symptom of ASD, but little is known about its development in school-aged children[1].

One study suggests that total Childhood Joint Attention Rating Scale (C-JARS) scores provide a valid measure of this dimension in childhood[2].

This study examined the reliability and validity of the C-JARS subscale scores. 1) The 14 item **Asocial Scale (ASC)** measures symptoms, Example: "Does not look to other people when interested in an object or event" and 2) The 56 item **Prosocial Scale (PSC)** measures prosocial shared attention, Example: "Shares exciting events with you that happened at school".

OBJECTIVES

1. Examine the 15-month test-retest reliability of C-JARS ASC and PSC scales.
2. Determine if subscale scores are different between a verbal, typical IQ autism group and comparison group.
3. Examine the Diagnostic Group discriminant validity of the C-JARS.
4. Predictive validity of objective ADOS SA scores & SRS across 30-months for C-JARS

References

[1] Lord, C., & Jones, R. M. (2012). Annual research review: Re-thinking the classification of autism spectrum disorders. *Journal of Child Psychology and Psychiatry, 53*(5), 490–509.

[2] Mundy, P., Novotny, S., Swain-Lerro, L., McIntyre, N., Zajic, M., & Oswald, T. (2017). Joint-attention and the social phenotype of school-aged children with ASD. *Journal of autism and developmental disorders*, *47*(5), 1423-1435

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PARTICIPANTS

	Age	FIQ
ASD (N = 68)	11.27 yr (2.12)	99.74 (12.42)
NT (N =39)	11.47 yr (2.31)	115.33 (13.37)

> ***"The C-JARS provides reliable and meaningful information about the joint attention abilities in a sample of autistic children without co-occurring intellectual disabilities."***

METHOD

ASD Symptomatology. ADOS-2, ASSQ, SRS, SCQ. **WASI-2.** Full-scale IQ (FIQ)

The Childhood Joint Attention Rating Scale

- Asocial Scale (ASC): 14-items that measure non-verbal problems in sharing attention and experience. *Higher scores more joint attention symptoms.*
- Prosocial Scale (PSC): 46-items that measure verbal and nonverbal spontaneous sharing of a point or reference and experience. *Higher scores more prosocial sharing.*

RESULTS

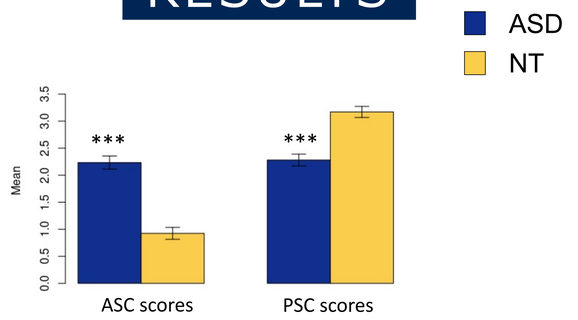

Figure 1. Illustration of the significantly higher ASC and lower PSC C-JARS scale scores in the ASD group.

- 15 month test-retest reliability *p*s < .001

ASD		NT	
ASC	PSC	ASC	PSC
r =.74	*r* =.80	*r* =.77	*r* = .87

- 88% of ASD participants correctly identified by ASC scores alone.
- ROC, 95% of the area under the curve explained, p < .001, cutoff = 1.51.54

ASD Group	Social Affect	Eye Contact	Shared Enjoyment
CJARS ASC Scaled Scores	.23[t]	.15	.13
CJARS PSC Scaled Scores	-.24*	-.27	-.26*

SRS → ASC & PSC = .47, p < .001 & - .52. p <.001

CONCLUSIONS

The results indicate: 1) The C-JARS subscales are valid measures childhood symptoms and prosocial sharing of experience, 2) The subscales are related to but not identical to other symptom measures. Hypothetically, the C-JARS measures social strengths and weaknesses that are useful for or child development and outcome research.