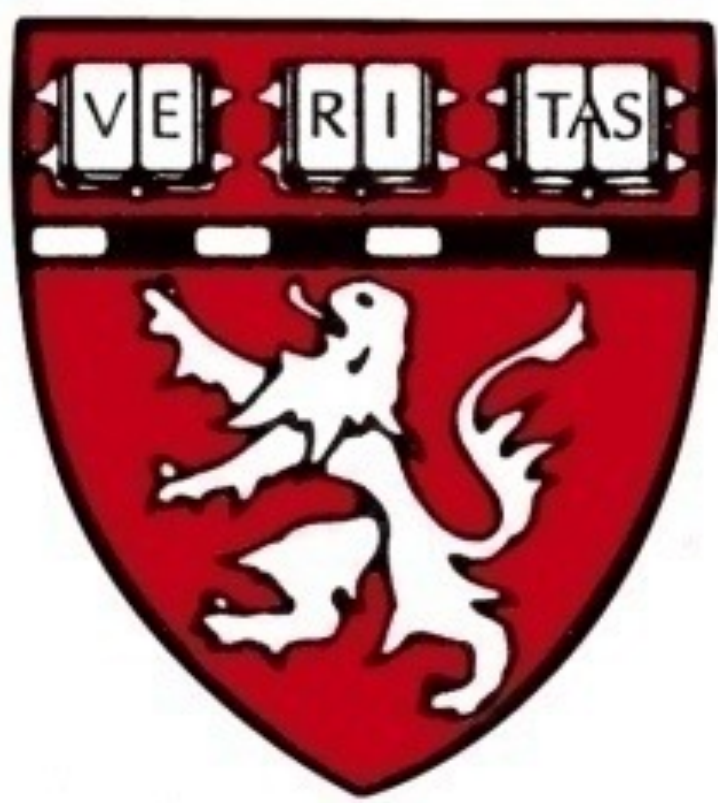




A comparison of psychometric and clinical properties of the BSIQ and ABC-C as a measure of RRBs in ASD research and clinical practice

Jack Murray¹ & Lindsey Rosenthal¹, Brian Rozumny¹, Sadiah Mussarrat, BSc,PgDip¹, Ellen Hanson, PhD^{1,2}
¹Boston Children's Hospital, ²Harvard Medical School



BACKGROUND

- Restricted and repetitive behaviors (RRBs) represent a core diagnostic feature of autism spectrum disorder (ASD), interfering with environmental exploration, development of play skills, and learning and academic performance in children with ASD (Lam & Aman, 2007).
- There are currently a number of measures which measure RRBs. One commonly used measure is the Aberrant Behavior Checklist – Community (ABC-C, Marshburn and Aman, 1992). The ABC-C is a caregiver-filled-out measure of the severity of 58 behaviors across 5 subscales.
- The Behavior Sensory Interest Questionnaire (BSIQ) is a newer measure that uses a comprehensive listing of 74 individual RRBs across 13 subscales (Hanson et al, 2016).
- The BSIQ covers a wider breadth of behaviors and provides more comprehensive data, which may have particular merits for use in the research setting. While not as comprehensive for RRBs, the ABC-C provides an overview of a range of these and other behaviors, with briefer administration time which may be more beneficial in clinical practice.
- A comparison of the psychometric and clinical properties of the specific subscales have yet to be explored between the BSIQ and ABC-C.

OBJECTIVES

This study examines correlations between RRB subscales of the BSIQ and the ABC-C.

METHODS

Retrospective data on individuals with ASD were used from Boston Children's Hospital Phenotypic and Genetic Factors in ASD study, Autism Consortium, and Simons Variation in Individuals Project.

METHODS

Inclusion criteria included an ASD diagnosis confirmed by cutoff scores on the Autism Diagnostic Observation Schedule, Second Edition (ADOS-2, Lord et al., 2012) and Autism Diagnostic Interview-Revised (Rutter et al., 2003). Additionally, a parent-filled out BSIQ and ABC-C was required.

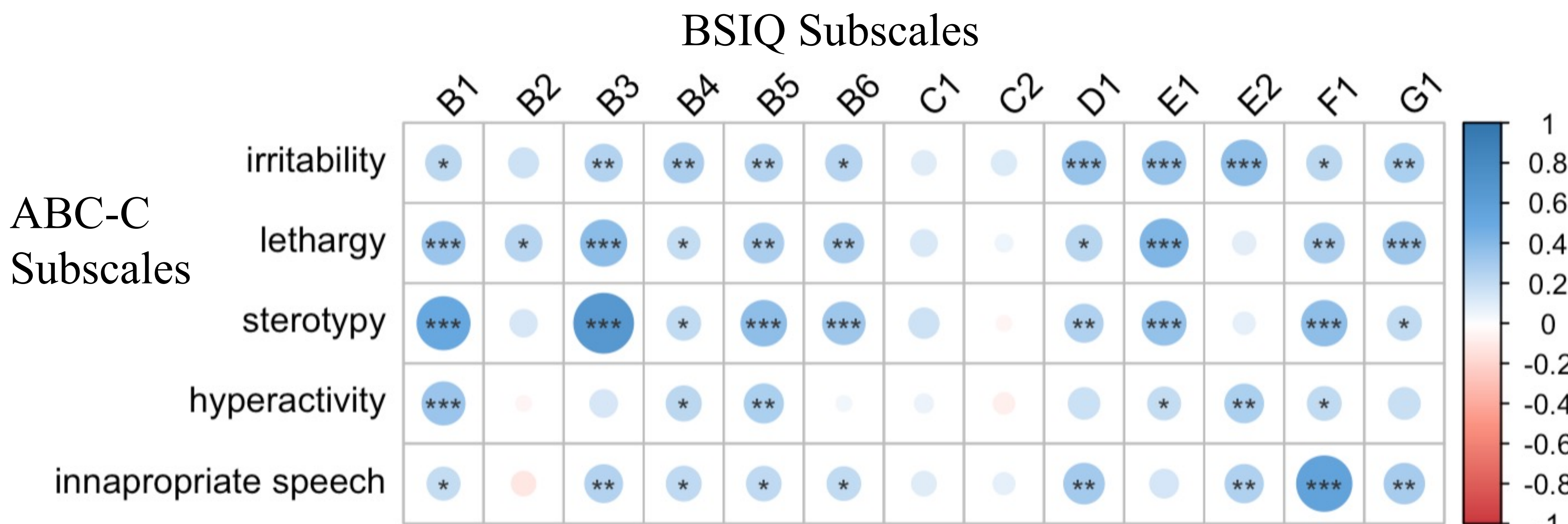
Participants: The sample included 108 individuals (75% male) between the ages of 28 to 265 months ($m = 92$, $SD = 55.4$).

Analysis: ABC-C and BSIQ subscale scores were compared using Spearman's rank correlations test.

Measure	Subscales
ABC-C	Stereotypy
	Hyperactivity
	Inappropriate Speech
	Irritability
	Lethargy
BSIQ	B1 Complex Mannerisms/Stereotyped Body Movements
	B2 Head & Face Movements
	B3 Hand/Finger Mannerisms
	B4 Repetitive Use of Objects/Interest in Parts of Objects
	B5 Unusual Sensory Interests
	B6 Sensory Aversions
	C1 Compulsions
	C2 Rituals
	D1 Difficulty with Transitions/Change
	E1 Self-Injurious Behavior
	E2 Aggression Toward Others
	F1 Language Perseveration
	G1 Perseverative Interests

RESULTS

Figure 1. Strength of correlations between ABC-C and BSIQ subscale scores.



Significance indicated by * $p < .05$, ** $p < .01$, *** $p < .001$

RESULTS continued

Results show that many of the subscales between the two measures are strongly correlated, indicating validity of caregiver reporting of child behaviors.

- The Stereotypy subscale of ABC-C was most significantly positively correlated with the B1, B3, E1, and F1 subscales of the BSIQ
- The Irritability subscale of the ABC-C was most significantly positively correlated with D1, E1, and E2 subscales of the BSIQ.
- The Lethargy subscale of the ABC-C was significantly correlated with the B1, B3, E1, and G1 subscales of the BSIQ.
- Interestingly, the Hyperactivity subscale of the ABC-C was correlated with the fewest BSIQ scales.

CONCLUSIONS

The two measures provide different levels of behavior description. The high number of significant correlations between subscales provides enhanced validity for a newer measure like the BSIQ. Although there are clear merits for each of the measures, in order to gain a full picture of RRBs in individuals with ASD, researchers and clinicians should consider using multiple measures, or a single more comprehensive measure like the BSIQ.

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CONTACT

Jack Murray
Human Neurobehavioral Core Service
2 Brookline Place, Brookline, MA, 02445
jack.murray@childrens.harvard.edu