

**Keyword 3:** pediatric neuropsychology

**Correspondence:** Sakina Butt, PsyD, ABPP-CN, Institute for Brain Protection Sciences, Johns Hopkins All Children's Hospital, St. Petersburg, FL, USA, sbutt1@jhmi.edu

### 75 Can the Children's Communication Checklist Differentiate Between Children with High Functioning Autism, ADHD, and Academically-Based Learning Disabilities?

Zane Shammass-Toma, Joseph E. Casey, Ava Flanagan  
University of Windsor, Windsor, Ontario, Canada

**Objective:** The Children's Communication Checklist-Second Edition (CCC-2) is a rating scale designed to assess domains of communication skills with emphasis on pragmatics (Bishop, 2006). The CCC comprises 10 subtests addressing various aspects of oral communication skills: Speech, Syntax, Semantics, Coherence, Initiation, Scripted Language, Context, Nonverbal Communication, Social Relations, and Interests. In a study conducted on the original CCC, Geurts et al. (2004) found that when compared to normal controls, pragmatic difficulties occurred in children with either high functioning autism (HFA) or ADHD. Since the initial version of the CCC, no study has examined whether the revised version can differentiate children with HFA, ADHD, and LD, the purpose of the present study. Focus was on derived factors of the structure/content of language and the pragmatics of language.

**Participants and Methods:** Forty-one participants grouped according to diagnosis were drawn from two archival data pools, one adapted from a previous study conducted by Casey and Scott (2016) and the other from a set of anonymized patients from a neuropsychological clinic. Fourteen participants met clinical criteria for autism ( $M_{age} = 11.95$ ), 12 participants met criteria for ADHD without co-morbid disorders ( $M_{age} = 9.5$ ), and 15 participants met criteria for a learning disability involving reading, writing, math, or some combination ( $M_{age} = 10.13$ ). Group-specific descriptive statistics were computed for the participants' age, full scale intelligence quotient (IQ), and General Communication Composite

(GCC). Two factor scores were computed, one composed of the subtests that constitute the structure/content aspects of language (Speech, Syntax, Semantics, and Coherence) and one composed of the pragmatic aspects of language (Initiation, Nonverbal Communication, Social Relations, and Interests), an area of particular weakness in HFA. Independent samples ANOVAs were conducted on both factor scores to determine whether the CCC-2 could differentiate the three groups. Post-hoc comparisons were planned for the subtests comprising the factor(s) that differentiated the groups.

**Results:** Participants in the ADHD ( $M = 9.45$ ,  $SD = 2.45$ ) group were significantly younger than those in the HFA group ( $M = 11.95$ ,  $SD = 2.24$ ) and LD group ( $M = 10.13$ ,  $SD = 2.58$ ), the latter two not differing significantly. The groups did not differ significantly on IQ, nor on the structure/content factor. On the pragmatic factor, the LD group ( $M = 10.18$ ,  $SD = 9.91$ ) had significantly higher scores than the ADHD group ( $M = 7.79$ ,  $SD = 6.54$ ), which in turn, had significantly higher scores than the HFA group ( $M = 5.48$ ,  $SD = 8.26$ ),  $F(2, 38) = 17.81$ ,  $p < .01$ . Within this composite, the same pattern was shown on Nonverbal Communication,  $F(2, 38) = 9.29$ ,  $p < .01$ , and Interests,  $F(2, 38) = 17.81$ ,  $p < .01$ .

**Conclusions:** Compared to children with an academically-based learning disability, children with ADHD and HFA demonstrated pragmatic difficulties on the CCC-2. Although there was overlap between the pragmatic language characteristics of children with ADHD and children with HFA, the CCC-2 demonstrated utility in distinguishing the two disorders on certain aspects of communication skills, suggesting that it is a useful tool in differential diagnosis.

#### Categories:

Assessment/Psychometrics/Methods (Child)

**Keyword 1:** test reliability

**Keyword 2:** speech

**Keyword 3:** neuropsychological assessment

**Correspondence:** Zane Shammass-Toma, University of Windsor, zshammass@uwo.ca

### 76 Cross-Cultural Utility of Performance Validity Indicators in a Community Sample from Kampala, Uganda