

performance on Benton's (1965) sentence repetition task. Language, working memory, fluid reasoning, visual perception, and processing speed were measured with Index scores from the Wechsler Intelligence Scale for Children (5th edition). The association of each of these cognitive domains with SR was determined by multiple linear regression. The effects of age and sex on SR were also examined ($N = 226$; 64% males).

Results: A multiple linear regression model including the five independent variables significantly predicted SR performance, $F(5, 185) = 30.306$, $p < .001$, $adj. R^2 = .435$. Only language and working memory added significantly to the prediction, $p < .05$. A mediation analysis demonstrated that processing speed indirectly predicted SR performance through working memory, $b = .0241$, [95% BCa CI .0132, .0355]. A moderate positive correlation was found between age and SR performance, $r(226) = .416$, $p < .001$. Sex was unrelated to SR performance.

Conclusions: The findings from this study are consistent with other studies indicating that SR taps multiple cognitive abilities. In a large and representative clinical sample of children referred for assessment due to academic or other learning difficulties, language plays a significant role in SR performance as does auditory verbal attention and working memory. An advantage of the present study was the use of clinically relevant summary measures of cognitive domains associated with intelligence testing.

Categories:

Assessment/Psychometrics/Methods (Child)

Keyword 1: psychometrics

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74 Embedded Performance Validity Utilizing the WISC-V Figure Weights Subtest

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Objective: This study aimed to explore the possibility of using the Figure Weights subtest of the Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V) as an embedded validity test (EVT).

Participants and Methods: We conducted a retrospective cohort study of patients seen in the Johns Hopkins All Children's Hospital (JHACH) Neuropsychology program between 2015 and 2019. Patient age ranged from 6-15 years (median age 11 years). All patients were administered the WISC-V as a portion of their neuropsychological evaluation. The sample included 75 patients who were generally male (63%), White (77%), English dominant (97%), and right-handed (81%).

Results: Effort determination based on RDS identified more patients as having invalid effort. Clinicians identified only 7% of patients with invalid effort; whereas, 16% of patients with invalid effort were identified using the WISC-V RDS. Although patients having valid effort generally performed better on all WISC-V subtests, no significant differences between groups were found. Over 90% of patients were able to get items 1-10 correct on the WISC-V Figure Weights subtest regardless of their effort determination. WISC-V Figure Weights item analysis showed participants in the invalid group sometimes answered more difficult questions correctly while failing easier items which supports inconsistent effort. Further statistical analyses, including discriminant validity tests, were unable to be completed given the study was underpowered due to significant disparity between effort groups.

Conclusions: This study shows support for WISC-V Figure Weights subtest items 1-10 as an embedded EVT given these items were sufficiently easy to pass regardless of whether participant gave valid or invalid effort. As this is an exploratory study, results will need to be replicated in other pediatric samples. Additionally, the discriminant ability of the WISC-V Figure Weights subtest EVT will need to be further investigated.

Categories:

Assessment/Psychometrics/Methods (Child)

Keyword 1: effort testing

Keyword 2: performance validity

Keyword 3: pediatric neuropsychology

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

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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

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