Riverside Insights

Woodcock Johnson IV

WJ Perspectives

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Use of the *Woodcock-Johnson* IV in School Neuropsychological Assessments

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The three core ***Woodcock-Johnson*® IV** (***WJ* IV™**) (Schrank, McGrew, & Mather, 2014) batteries (**Tests of Cognitive Abilities** [***WJ* IV COG**], **Tests of Oral Language** [***WJ* IV OL**], and **Tests of Achievement** [***WJ* IV ACH**]) are useful baseline measures for a school/ pediatric neuropsychological evaluation (Miller, 2013; Miller, McGill, & Bauman Johnson, in press).

Richard W. Woodcock originally developed the *Woodcock-Johnson* Revised (*WJ-R: Woodcock & Johnson*, 1989) with neuropsychological assessment in mind.

In 2013, Miller updated his school neuropsychological conceptual model by providing additional integration between neuropsychological constructs and CHC theory. Miller's revised model is now referred to as the Integrated School Neuropsychological/ Cattell-Horn-Carroll (Integrated SNP/CHC) Model. The model: 1) provides an organizational framework for interpreting assessment data; 2) strengthens the linkage between assessment and evidence-based interventions; and 3) offers a common frame of reference for evaluating the effects of neurodevelopmental disorders on neurocognitive processes (Miller, 2013).

On the reverse side of this sheet, Table 1 presents the ***WJ*** tests classified into the Integrated SNP/ CHC Model. While the ***WJ* IV** batteries cover a comprehensive representation of the broad and narrow neurocognitive processes and skills as outlined in the Integrated SNP/CHC Model (Miller, 2013), administering only those tests does not constitute a comprehensive neuropsychological assessment. The ***WJ*** typically serves as baseline testing for a more comprehensive neuropsychological assessment. Hypotheses about an examinee's strengths and weaknesses are generated based on the ***WJ*** tests results and then the clinician chooses additional crossbattery assessments to validate or refute those hypotheses.

Compared to all of the other major co-normed tests of cognitive abilities and academic achievement, the *WJ* IV provides the most coverage across the classifications defined by the Integrated SNP/CHC Model (Miller et al., in press).

References

Miller, D. C. (2013). Essentials of School Neuropsychological Assessment—Second Ed. Hoboken, NJ: Wiley.

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Schrank, F. A., McGrew, K. S., & Mather, N. (2014). Woodcock-Johnson IV. Rolling Meadows, IL: Riverside Publishing.

Woodcock, R. W., & Johnson, M. B. (1989). Woodcock-Johnson Psychoeducational Battery—Revised. Chicago: Riverside.

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Integrated SNP/CHC Broad Classifications	Integrated SNP/CHC 2nd Order Classifications	*WJ* IV Test (Battery)
Cognitive Processes: Visuospatial	• Visuospatial perception • Visuospatial reasoning	• Sound Awareness (**OL**) • Nonword Repetition (**COG**) • Phonological Processing (**COG**) • Segmentation (**OL**) • Sound Blending (**OL**)
Cognitive Processes: Learning and Memory	Immediate verbal memory	• Memory for Words (**COG**) • Sentence Repetition (**OL**) • Story Recall (**COG**)
	Visual immediate memory	Picture Recognition (**COG**)
	Verbal-visual associative memory	Visual-Auditory Learning (**COG**)
Cognitive Processes: Executive Functions	Problem solving, fluid reasoning, and planning	• Concept Formation (**COG**) • Analysis/Synthesis (**COG**) • Number Matrices (**ACH**) • Number Series (**COG**)
Facilitators/Inhibitors: Allocating and Maintaining Attention	Selective/focused and sustained attention	Pair Cancellation (**COG**)
	Attentional capacity	• Sentence Repetition (**OL**) • Memory for Words (**COG**) • Story Recall (**COG**)
Facilitators/Inhibitors: Working Memory	Working memory	• Object-Number Sequencing (**COG**) • Numbers Reversed (**COG**) • Verbal Attention (**COG**)
Facilitators/Inhibitors: Speed, Fluency, and Efficiency of Processing	Performance fluency	• Letter-Pattern Matching (**COG**) • Number-Pattern Matching (**COG**) • Rapid Picture Naming (**COG**)
	Acquired knowledge fluency	• Oral Reading (**ACH**) • Word-Reading Fluency (**ACH**) • Sentence-Reading Fluency (**ACH**) • Sentence-Writing Fluency (**ACH**) • Math Facts Fluency (**ACH**)
Acquired Knowledge: Acculturation Knowledge	Semantic memory: General information	• Oral Vocabulary (**COG**) • General Information (**COG**)
Acquired Knowledge: Language Abilities	Oral expression	Picture Vocabulary (**COG**)
	Receptive language (listening comprehension)	• Oral Comprehension (**OL**) • Understanding Directions (**OL**)
Acquired Knowledge: Reading Achievement	Basic reading skills: Phonological decoding	• Letter-Word Identification (**ACH**) • Word Attack (**ACH**)
	Reading comprehension skills	• Passage Comprehension (**ACH**) • Reading Recall (**ACH**) • Reading Vocabulary (**ACH**)
Acquired Knowledge: Written Language Achievement	Written expression	Editing (**ACH**)
	Expository composition	Writing Samples (**ACH**)
	Orthographic spelling	• Spelling (**ACH**) • Spelling of Sounds (**ACH**)
Acquired Knowledge: Mathematics Achievement	Mathematical calculations	Calculations (**ACH**)
	Mathematical reasoning	Applied Problems (**ACH**)

Table 1

Coverage of the Basic Neurocognitive Constructs by the ***WJ IV Tests of Cognitive Abilities, Oral Language,*** *and* ***Achievement*** *(Miller et al, in press).*