

The Discriminatory Ability of the Dean Woodcock Sensory Motor Battery

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These data were drawn from an archival sample of 231 mixed clinical case studies and interpolated scores conducted by students in the School Neuropsychology Post-Graduate Certification Program (2001 - 2010). Clinical groups include children diagnosed with one of the following: learning disability (LD; $n = 92$); attention-deficit/hyperactivity disorder (ADHD; $n = 66$); neurologically/medical impaired (NMI; $n = 46$); and autism spectrum disorder (ASD; $n = 27$).

Subtest Description	Chi-square	p	Classification Difference	Subtest Description	Chi-square	p	Classification Difference
Near Point Visual Acuity - Left Examinee covers left eye and reads a number chart 14 inches away	7.78	.005	LD < ADHD	Auditory Perception - Both Examinee indicates when sounds are heard in both ears by raising both hands	4.53	.033	LD < NMI
	8.34	.004	LD < NMI		8.96	.003	LD < ADHD
	5.53	.019	LD < ASD				
Near Point Visual Acuity - Right Examinee covers right eye and reads a number chart 14 inches away	9.28	.002	LD < ADHD	Finger Identification - Right With eyes closed, examinee identifies which fingers are being touched on the right hand	6.56	.010	LD < ADHD
	3.85	.050	LD < ASD				
Visual Confrontation - Left Examinee looks at examiner's nose and indicates when movement is detected	12.66	<.001	LD < ADHD	Finger Identification - Non-dominant With eyes closed, examinee identifies which fingers are being touched on the non-dominant hand	8.59	.003	LD < NMI
	4.12	.042	NMI < ADHD		5.27	.022	LD < ADHD
Visual Confrontation - Right Examinee looks at examiner's nose and indicates when movement is detected	10.90	.001	LD < ADHD	Simultaneous Localization (Hand) - Left With eyes closed, examinee identifies when the left hand is touched	7.50	.006	LD < ADHD
Visual Confrontation - Both Examinee looks at examiner's nose and indicates when movement is detected	9.80	.002	LD < ADHD	Simultaneous Localization (Hand) - Right With eyes closed, examinee identifies when the right hand is touched	7.29	.007	LD < ADHD
				3.98	.046	LD < ASD	
Auditory Perception - Left Examinee indicates when a sound is heard in the left ear by raising the left hand	8.96	.003	LD < ADHD	Simultaneous Localization (Hand & Cheek) - Left & Right With eyes closed, examinee identifies when both hands are touched simultaneously	8.32	.004	LD < ADHD
	5.71	.017	LD < NMI				
Auditory Perception - Right Examinee indicates when a sound is heard in the right ear by raising the right hand	7.44	.006	LD < NMI	Expressive Speech Examinee repeats word and phrases which increase in difficulty	7.51	.006	LD < NMI
	10.19	.001	LD < ADHD		7.99	.005	LD < ADHD

Implications:

- The individual subtests of the Dean Woodcock Sensory Motor Battery do not consistently discriminate between clinical groups, particularly between ASD, ADHD, and NMI.
- Directions for future research include broadening the scope of research to compare differences between levels of severity and comparing different clinical groups.