

What is the Difference Between Psycho-Educational Evaluation and a Neuropsychological Evaluation?

The main difference between psycho-educational and neuropsychological is the depth and breadth of the evaluation. Additionally, with the neuropsychological evaluation we examine underlying neurocognitive processes that contribute to the specific challenges that children face with learning so as to be able to provide greater specificity in the intervention process so as to maximize their potential for remediation and compensating weaknesses that were identified. Additionally, psycho-educational evaluation is great at quantifying and identifying the end product of children's efforts, whereas neuropsychological evaluation will be able to look at the underlying neurocognitive processes and qualify the very specific weaknesses and use those strengths to his/her advantage with learning. Additionally, psycho-educational evaluation does not typically identify or formally assess attention and concentration, executive functioning, sensory and motor difficulties, inductive and deductive reasoning skills, speed of processing, specificity of learning style, and emotional components and the impact of these areas upon overall development and learning.

Finally, and perhaps the largest the difference, is the way that the information is interpreted. Whereas some of the same instruments are used in both evaluations, the method of interpretation provided by a pediatric neuropsychologist focuses on brain behavior relationships. We have additional training in understanding brain functioning and neurodevelopmental issues and the identification of challenges with inefficient or differences in brain functioning. Accurate identification and diagnoses, as well as providing an understanding of the etiology for these differences at an early age, allows for the development of very exact and efficient strategies for each child relative to his/her strengths and weaknesses to maximize opportunities for remediation at an early age so as to allow him/her to continue to acquire the foundations and "building blocks" of learning to minimize any widening of a potential developmental gap that may widen without effective diagnosis and remediation.

Listed below are some "bullet points" that outline the major areas included in a full neuropsychological evaluation. The listing of tests is for reference only, and may or may not be used with your child, depending upon your child's unique abilities, referral issues, and functional capacities. Additional measures may be selected and administered during the evaluation to better diagnose learning strengths and challenges, and to pinpoint potential intervention strategies for maximizing your child's abilities. Further discussion of the evaluation tailored to your child will be discussed during the parent interview on the day of your child's appointment.

Key Aspects of Neuropsychological Assessment

- Intelligence
- Fine Motor Skills
- Sensory Perception
- Attention & Concentration
- Memory & New Learning
- Executive Functioning
- Academic Achievement
- Personality Assessment

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Intellectual Assessment

(proposed measure – Wechsler Intelligence Scale for Children - Fourth Edition (WISC-IV))

- Provides measure of global ability levels
- Allows for comparison of verbal and non-verbal differences,
- Gross assessment of immediate attention/concentration with verbal and visual information
- Gross assessment of speed of processing with pencil and paper activities

Fine Motor Skills

(proposed measures – Lateral Dominance Examination, Finger Oscillation Test, Assessment of Grip Strength, Grooved Pegboard Test)

- Excellent at demonstrating lateralizing signs
- Pre-frontal lobe abilities

Sensory Perception

(proposed measures – Development Test of Visual-Motor Integration (VMI), Motor-Free Visual Perception Test – 3 (MVPT-3), Tactile Fingertip Recognition, Fingertip Number Writing)

- Simple & Complex Tactile Measures
- Auditory and Phonemic
- Visual perception
- Non-verbal auditory discrimination

Language Abilities

(proposed measures – Verbal Subtests from WISC-IV, Peabody Picture Vocabulary Test – Revised (Form L), Expressive One-Word Picture Vocabulary Test – Revised (EOWPVT-R), Verbal Fluency Test, Seashore Rhythm Test)

- Expressive
- Receptive
- Confrontational Naming
- Written
- Social Pragmatics
- Fluency and Prosody

Attention & Concentration

(proposed measures - Conners Continuous Performance Test – II (CPT-II), Trail Making Test - Parts A & B, Digit Span Subtest from WISC-IV, Letter Number Sequencing from WISC-IV, Observations, Teacher report, Parent report)

- Important for ALL aspects of functioning
- Ability to maintain focus for intervention
- Assess different levels of Attention
- Sustained
- Divided
- Return to task following interruption

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Memory & New Learning

(proposed measures – Children’s Memory Scale CMS) or Wide Range Assessment of Memory & Learning – II, California Verbal Learning Test – Children’s Version (CVLT-C), Rey Complex Figure Test (RCFT)

- Ability to effectively encode information
- Verbally and Visually
- Efficient retrieval of information
- Ability to learn from mistakes

Executive Functioning

(proposed measures - Wisconsin Card Sorting Test – Computer Version IV (WCST-CV:4)

- Inductive / deductive reasoning
- Mental flexibility
- Ability to incorporate feedback
- Persistence – rigidity in thinking

Academic Achievement

(proposed measures – Woodcock-Johnson Tests of Achievement – Third Edition (WJ-III), and any additional subject-specific testing deemed necessary)

Personality/Behavior

(proposed measures – Children’s Depression Inventory – II (CDI-II), Revised Children's Manifest Anxiety Scale (RCMAS), Piers-Harris Children's Self-Concept Scale, Conners’ Parent Rating Scale – Revised: Long Version, Conners’ Teacher Rating Scale, Child Interview, Parent Interview)