

# WHAT ARE TESTS TESTING?

UNDERSTANDING PSYCHOLOGICAL AND NEUROPSYCHOLOGICAL ASSESSMENT

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## Who should be evaluated?

A typical pediatric neuropsychology practice will include children with a wide variety of presenting concerns. These include children who are experiencing difficulties in the development of language, academic skills, social skills, self-regulatory abilities, attention, or organization.

Some children first come to the attention of a neuropsychologist in the pre-school years or even earlier, others as they transition into and begin the school years, and still others as they encounter the escalating demands of middle school and high school.

In terms of “diagnostic groups”, a pediatric neuropsychologist will often diagnose and work with children and adolescents with learning disabilities, attention disorders, autism spectrum disorders, executive functioning problems, genetic disorders, and neurological injuries.

An evaluation can serve many purposes:

- Identification of learning and developmental challenges
- Diagnostic clarification
- Determination of eligibility for special education services
- Development of educational and treatment plans
- Assessment of academic and developmental progress

A good neuropsychologist should give parents more than a label. Parents should gain a better understanding of their child’s developmental profile: their strengths and challenges, and how their child experiences the world. Parents should also expect to be

supported in translating this understanding into a plan for helping their child with whatever challenges have prompted the evaluation.

### **What is the difference between different kinds of evaluations and evaluators?**

A pediatric neuropsychologist is a doctoral level psychologist who is a licensed psychologist health provider, and who also has particular training and expertise in the diagnosis and management of neurologically based developmental, learning, and behavioral disorders of childhood.

Other evaluators who may become involved in child assessment are school psychologists (who may have a master's degree or a doctorate); child psychologists (who have a doctorate but may not have an academic background in neuropsychology); speech-language pathologists (to assess oral and written language functioning); occupational and physical therapists (to assess sensory-motor skills); and educational specialists (to assess academic functioning).

### **What is done in an evaluation, and how is it translated into usable recommendations?**

A good neuropsychological evaluation will take a holistic focus and will assess multiple aspects of a child's functioning. It will include intellectual assessment, academic testing, emotional assessment, and assessment of a broad range of neuropsychological domains (such as memory, language, visual-spatial skills, and executive functioning). It will typically not include assessment of gross motor skills, sensory integration, or any sort of medical evaluation.

It is important to understand the difference between evaluation and testing. A complete evaluation look at the testing in context; it integrates test data with history and clinical observation.

One of the most confusing parts of an evaluation is untangling the numerous tests used. Here is a brief sampling of tests you might encounter:

#### *Intelligence Tests*

Wechsler Intelligence Scale for Children – 4<sup>th</sup> Edition (WISC-IV)  
Wechsler Preschool and Primary Scale of Intelligence – 3<sup>rd</sup> Edition (WPPSI-III)  
Kaufman Assessment Battery for Children – Second Edition (K ABC-II)  
Leiter International Performance Scales - Revised

#### *Academic Tests*

Wechsler Individual Achievement Test – 2<sup>nd</sup> Edition (WIAT-2)  
Woodcock Johnson Academic Test Battery  
Gray Silent Reading Tests (GSRT)

Gray Oral Reading Tests – 4<sup>th</sup> Edition (GORT-4)  
Test of Written Language – 3<sup>rd</sup> Edition (TOWL-3)  
Test of Word Reading Efficiency (TOWRE)

### *Neuropsychological Tests*

Comprehensive Test of Phonological Processing (CTOPP; subtest)  
Boston Naming Test-2<sup>nd</sup> Edition  
Beery-Buktenica Test of Visual-Motor Integration (VMI)  
Peabody Picture Vocabulary Test – Third Edition (PPVT-III)  
Wide Range Assessment of Memory and Learning-2<sup>nd</sup> Edition (WRAML-2)  
Grooved Pegboard  
Rey-Osterreith Complex Figure Test (ROCFT)  
NEPSY-2  
Delis-Kaplan Executive Functioning System (D-KEFS)

### *Emotional Measures*

Children's Depression Inventory (CDI)  
Revised Clinical Manifest Anxiety Scale (RCMAS)  
Achenbach Youth Self-Report (YSR)  
Personality Assessment Inventory –Adolescent (PAI-A)

The evaluator must have a though understanding of the instruments...not all tests are the same, even if they purport to measure the same thing.

### **How do you interpret an evaluation report?**

Here are some questions to ask when looking at a report:

- What is the question the evaluator was addressing?
- Was the appropriate test used?
- What was the validity of the administration?
- What is the basis of the conclusion?
- Do the recommendations follow from the conclusion?

### **What happens after the evaluation?**

No matter how skilled the clinician, or how good the evaluation, it will be of limited effectiveness if the understanding that is gained from it stops at the office door. Ideally, a neuropsychologist should be available to collaborate with families in the long term. A family might choose to bring the clinician into the special education process by inviting them to observe the child in school or to participate in a team meeting. They may also wish for the clinician to consult with other professionals involved in the care of the child: teachers, therapists, and health care professionals. The clinician should also be available as a resource to the parents themselves, to help them to cope with emerging challenges.

With older children, the neuropsychologist might work with the child directly, to develop greater self-awareness and self-advocacy skills.

## **Resources for Parents**

### Books

“Children’s Psychological Testing: A Guide for Nonpsychologists” by David Wodrich, Ph.D.

“Your Child and Tests: What Every Parent Should Know about Educational and Psychological Testing” by Joseph Rocchio, Ph.D.

“Straight Talk about Psychological Testing for Kids” by Ellen Braaten, Ph.D. and Gretchen Felopulus, Ph.D.,

### Testing FAQ’s

American Psychological Association  
[www.apa.org/science/faq-findtests.html](http://www.apa.org/science/faq-findtests.html)

### Assessment and Special Education

[www.wrightslaw.com/info/test.index.htm](http://www.wrightslaw.com/info/test.index.htm)

### Intelligence and Intelligence Testing

Stalking the Wild Taboo - Intelligence: Knowns and Unknowns  
American Psychological Association  
Available online at [http://www.lrainc.com/swtaboo/taboo/apa\\_01.html](http://www.lrainc.com/swtaboo/taboo/apa_01.html)

*The Integrated Center for Child Development (ICCD) is a multi-disciplinary center located in Newton and Canton. The ICCD specializes in assessment and treatment options for children and adolescents with learning, developmental, and neurological disorders. Information regarding the ICCD is available at 781.619.1580, or at [www.iccdpartners.org](http://www.iccdpartners.org).*