

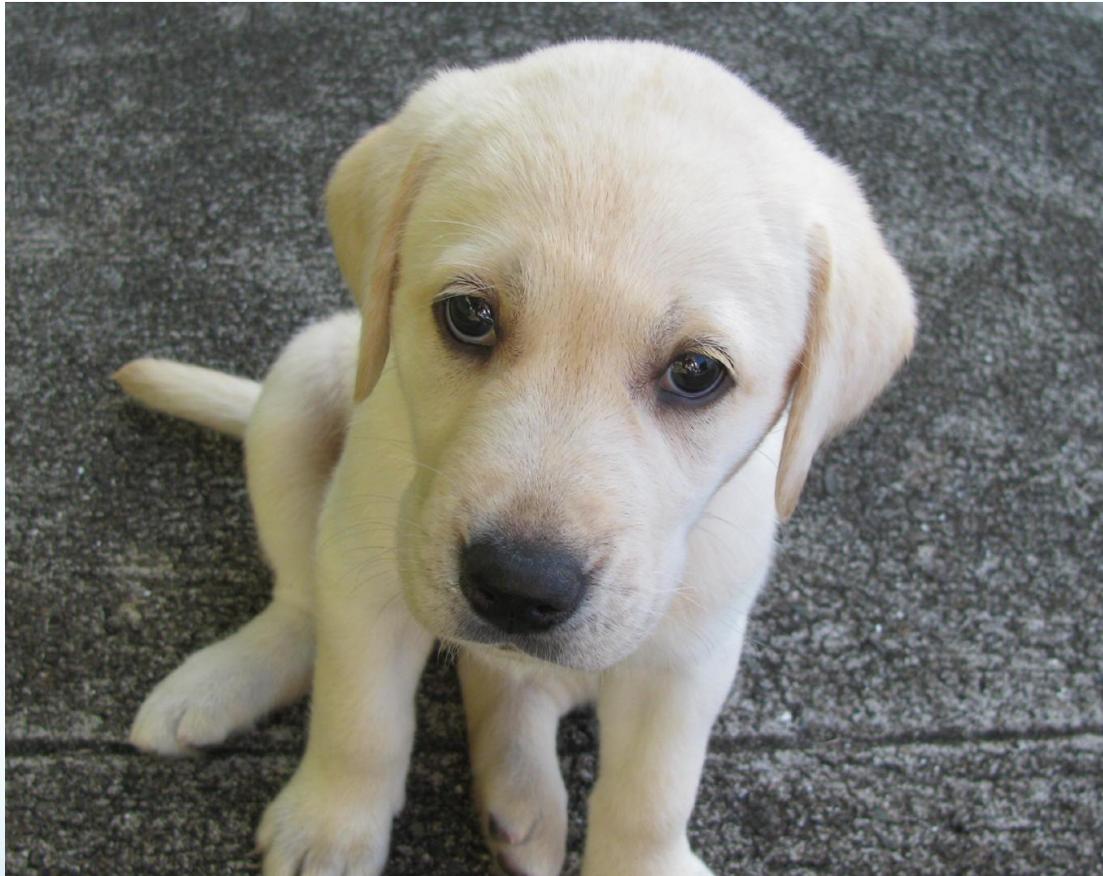
Interpreting Psychological Reports

Stephanie Verlinden, PsyD
May 4, 2015

Interpreting Psychological Reports

- Why Psychological reports?
- What do they say?
- What do they mean?
- What should be in them?
- How do they help?

Our Client:



“Duke”

CONFIDENTIAL

Psychological Evaluation

DUKE

B.D.: May 5, 2007

C.A.: 8

Evaluator: Stephanie Verlinden, Psy.D.

Reason for Referral: DUKE is an eight year old, second grade student at Garden Variety Elementary School. His parents report that he is struggling with reading. In kindergarten, his teachers felt he was behind in reading and writing, and memorizing information was difficult for him. As a first grader, he had a very slow pace in his work. He reversed letters and his spelling was very poor. He was described as a reluctant writer. His parents believe he has been behind in most subjects since starting kindergarten. He was evaluated in kindergarten due to issues with word recognition. He was placed on an IEP in kindergarten, which persisted into first grade. At age six, he was diagnosed with an attention deficit disorder; however, no formal testing was done and no medicine or other treatment was prescribed. He was placed in a small group for reading help three times weekly in the first grade. He seemed to do somewhat better, but still struggled.

Reasons for Referral

- Why is Duke here?
- Global vs specific?
 - 30-40% comorbidity
- What do we need to know?
- Who needs this information?
- How will the information be used?

Background information

- Brief history
- Concerns
- Behavior
- Adjustment
- Health
- Sensory
- Early development
- Education
- Previous evaluations

Behaviorally, DUKE is described as respectful and a child who follows rules well. He sometimes gets overwhelmed with his schoolwork. He is not able to work independently on his homework and needs a parent with him at all times. His parents also note that he can be forgetful and disorganized. He has trouble being on time for things.

DUKE is a generally happy child who does not have any particular worries or fears. He is in good health. Baseball and swim team after school. With respect to DUKE's early development, his motor skills developed on time; however, his language was a bit slow to develop.

Currently, DUKE's parents estimate that he is approximately a year behind in his skills. He does not remember words after being reminded. Reading decoding and spelling are his most difficult areas. He tries to sound out words, but ends up making guesses related to the context. DUKE has strong verbal skills. His hearing and vision are within normal limits.

DUKE's parents are seeking an evaluation in order to gain a better understanding of those factors that underlie DUKE's difficulties with reading and written language. They are looking for suggestions on how to assist him. They are also wondering whether DUKE's previous diagnosis of ADHD is accurate, and whether he needs any form of treatment for this. They are also wondering about school accommodations and supports, as well as resources outside of school that would benefit him.

Tools:

- Thoroughness with empathy
- Experience for the child
- Why test cognitive ability
- What tests are appropriate
- Dyslexia specific assessments
 - phonological processing
 - Rapid automatic naming
 - Memory
 - Language (if indicated)
 - Visual processing (if indicated)
- Achievement measures
 - Standardized
 - Diagnostic
- Comorbidity measures
- Behavior checklists

Assessment Procedures:

Wechsler Intelligence Scale for Children – Fourth Edition

(Differential Abilities Scale)

(Stanford Binet Intelligence Scale)

(Clinical Evaluation of Language Fundamentals)

Woodcock-Johnson Tests of Cognitive Abilities – selected subtests

Wide Range Assessment of Memory and Learning – Second Edition

NEPSY Developmental Neuropsychological Assessment – selected subtests

Lindamood Auditory Conceptualization Test

(Test of Phonological Awareness)

(Boston Naming Test)

Woodcock-Johnson Tests of Achievement – Third Edition

(KTEA)

(Wechsler Individual Achievement Test)

(Gray Oral Reading Test)

Informal Academic Inventories (VERY IMPORTANT)

Test of Everyday Attention for Children

(Delis Kaplan Executive Function System)

(Test of Variables of Attention)

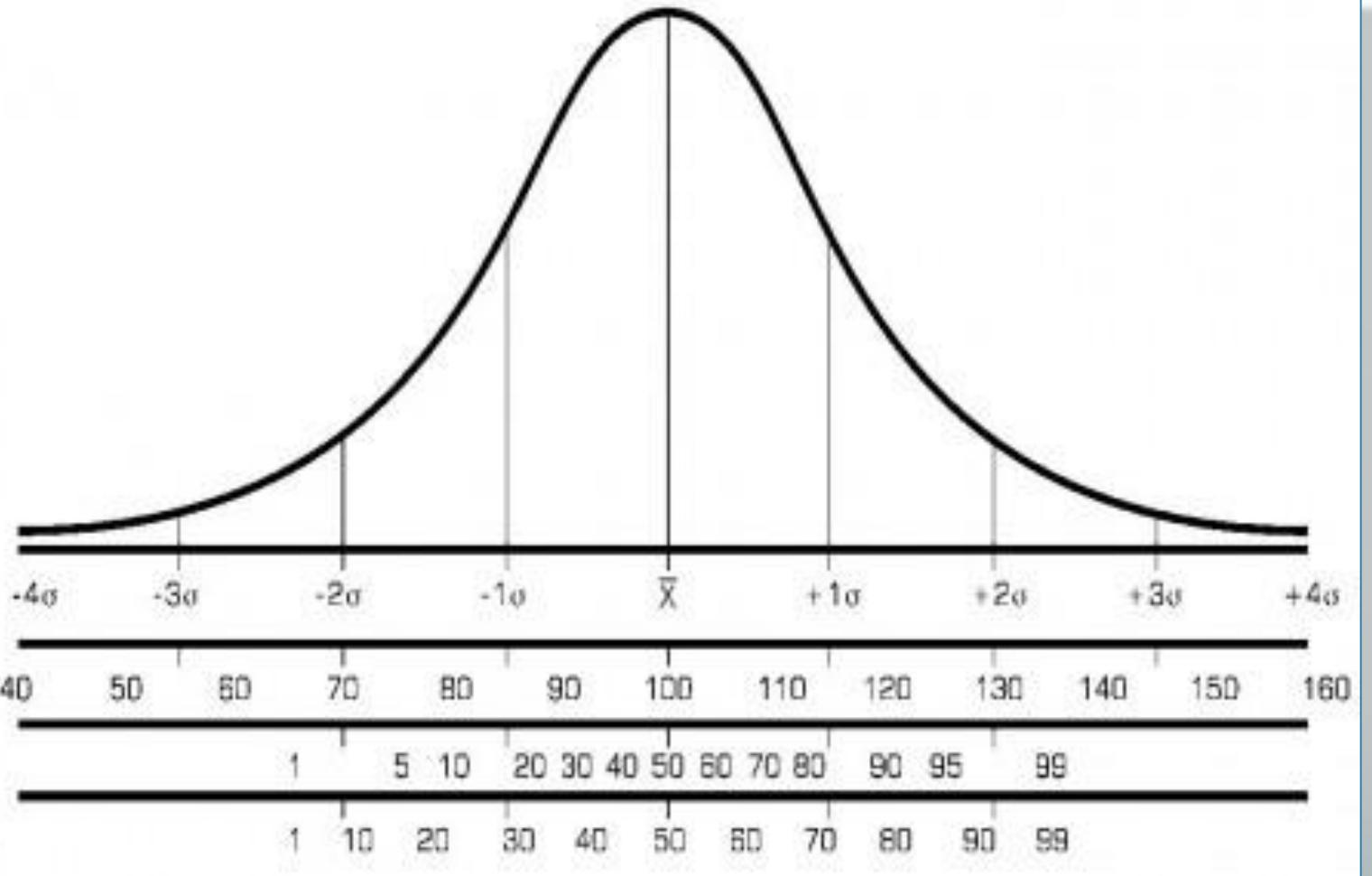
Child Behavior Checklist – Parent and Teacher Report Forms

Observations:

- Attitude
- Demeanor
- Attention
- Extenuating factors

Observations: DUKE entered the testing situation readily. He was cheerful, polite and cooperative throughout both of his appointments. He put forth good effort on the testing activities and seemed motivated to do well, and to please. During his appointments, DUKE was very active and restless. He had difficulty remaining seated and needed to get up and walk around to take breaks. He was very easily distracted by ambient noise, objects in the room, and by stories that he wanted to relate.

Testing conditions were excellent. DUKE seemed relaxed and comfortable with the process. He was given multiple breaks to accommodate his attention span. This evaluation is judged to be a valid assessment of DUKE's current skills and abilities.



Results:

- WISC IV or V is the most common test
- Meaning of scales
- Subtests
- Patterns and discrepancies
- Strengths and weaknesses
- May indicate which further tests are appropriate

Assessment Results: The Wechsler Intelligence Scale for Children – Fourth Edition was administered to assess DUKE’s verbal and nonverbal learning characteristics and processing strengths and weaknesses. The following scores were obtained on the WISC-IV:

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

(IQ, Index, and Standard scores have a mean of 100 and a standard

Scale	Index/ IQ Score	Percentile
Verbal Comprehension	112	79
Perceptual Reasoning	115	84
Working Memory	86	18
Processing Speed	94	34
General Ability Index	116	86

Subtest Scaled Scores

(Subtest scaled scores range from 1 to 19, with an average of 10 and a

Verbal Comprehension		Perceptual Reasoning		Working Memory		Processing Speed	
Similarities	12	Block Design	11	Digit Span	7	Coding	6
Vocabulary	12	Picture Concepts	12	Let.-No. Seq.	8	Symbol Search	12
Comprehension	13	Matrix Reasoning	14				

Narrative:

• Interpretation and explanation of scores

- Don't over analyze
- Look for general patterns

DUKE is functioning within the high average range of cognitive ability according to the Wechsler Intelligence Scale for Children – Fourth Edition. There is no significant difference between his ability to think and reason with and without the use of words. DUKE demonstrates relative strengths in the areas of social judgment, common sense, expressive language, and nonverbal abstract reasoning. He shows very strong academic potential. Areas of relative weakness for DUKE on the Wechsler Intelligence Scale include Working Memory and Processing Speed. Working memory refers to DUKE's ability to attend to and hold information in short term memory while performing some operation or manipulation with it. Working memory is highly dependent on the ability to sustain attention and concentration on a task. Processing speed refers to DUKE's speed and accuracy in visual scanning and tracking activities and his fine motor output speed. Processing speed scores are also vulnerable to problems with concentration. A weakness in the areas of both working memory and processing speed is common among children and adults diagnosed with ADHD.

Tools:

- Dyslexia specific tests
 - Many tools are available
 - Rapid automatic naming
 - Sound blending
 - Sound symbol memory

Selected subtests of the Woodcock-Johnson Tests of Cognitive Ability were administered in order to assess cognitive factors that tend to correlate with reading disabilities. The following scores were obtained:

Woodcock-Johnson Tests of Cognitive Abilities, Third Edition

	Standard Score	Percentile	Grade Equivalent
Rapid Picture Naming	93	32	1.8
Visual-Auditory Learning	72	3	K.3
Sound Blending	100	51	2.9

DUKE was given tests of Rapid Picture Naming, Visual-Auditory Learning, and Sound Blending. He performed within the average range on a test of Sound Blending, which presented him with word fragments, and asked him to blend them together to form words. He had more difficulty with tests of rapid picture naming and sound blending. On the Rapid Picture Naming subtest, DUKE was asked to name pictures of everyday common objects as rapidly as possible. A weakness in rapid automatic naming, which is also known as rapid word retrieval, is common among individuals diagnosed with dyslexia. On the Visual-Auditory Learning test, DUKE was asked to learn the names for visual symbols. These symbols represented words. These symbols were arranged into rows, and DUKE was asked to read the pictures as though they were words. He was scored on the number of reminders he needed for the name of each symbol before he had mastered the name. It is this type of memory that pairs a visual symbol with an auditory cue that is involved in the early stages of reading when a child is learning letter names and sounds, and also sight words for reading. A weakness in this type of memory is very common among individuals with reading disorders. This was extremely difficult for DUKE, and is a marked weakness for him.

Tools:

- Types of memory that are important for reading
- Look for patterns
- Relative strengths

DUKE was given the Wide Range Assessment of Memory and Learning in order to further assess his verbal and visual immediate memory. The following scores were obtained:

Wide Range Assessment of Memory and Learning – Second Edition

Subtests	Verbal	Visual
Story Memory	9	
Design Memory		10
Verbal Learning	9	
Picture Memory		11

Domain	Index Score	Percentile
Verbal Memory	94	34
Visual Memory	102	55

DUKE's scores in the areas of both verbal and visual immediate memory on the WRAML are within normal limits; however, he scored slightly below average in the verbal memory arena. The Verbal Memory test area consisted of memory for stories that were read aloud and memory for word lists. While these activities were slightly more challenging for DUKE than the visual memory tests, his scores are still within the average range. The Visual Memory tests area consisted of memory for geometric designs and patterns, as well as memory for pictures. DUKE did well on both of these activities. There are no indications of a marked weakness in either DUKE's verbal or visual immediate memory that would contribute to his academic struggles.

Tools:

- Phonological processing
 - What is it?
 - Why is it important?
- Many tools are available
 - More than one should be used

DUKE was given the NEPSY Developmental Neuropsychological Assessment, as well as the Lindamood Auditory Conceptualization Tests to assess his phonemic awareness and phonological processing abilities. Phonological processing is the ability to isolate individual speech sounds within words and to determine the order and location of those sounds. This ability has been found to be very important in the development of reading decoding and spelling skills. On the Phonological Processing subtest of the NEPSY, DUKE was asked to pronounce words while omitting or substituting individual speech sounds within those words. This was very difficult for DUKE, and he scored at a level that would be typical for a child ages 6 years, 6 months to 6 years, 11 months on this test. DUKE was then given the Lindamood Auditory Conceptualization Test, which is a slightly more advanced test of phonemic analysis. On this test, DUKE was asked to use colored blocks to illustrate the number and order of individual sounds within nonsense words. He was then asked to make changes in the patterns as the pronunciation of the words was changed. This was very confusing for DUKE, and he scored at a beginning first grade level on this test. Taken together, these results reflect a weakness in DUKE's phonemic awareness and phonological processing abilities, which has most likely contributed to his struggles with reading decoding and spelling. A phonological processing deficit is one of the most common underlying factors for reading disorders of the dyslexic type.

Tools:

- Achievement Tests
 - Many tools are available
 - Look for reliable and valid measures
 - Standardized vs criterion referenced
 - Why we need standardized tests
- What do these numbers mean?
 - Local vs National norms
 - Weakness of grade equivalent scores
- Fluency measures
 - Grade 3 and up

The Woodcock-Johnson Tests of Achievement, as well as informal academic inventories were administered to assess DUKE's progress in reading, math and written language. The following scores were obtained:

Woodcock-Johnson Tests of Achievement, Third Edition

	Standard Score	Percentile	Grade Equivalent
Brief Reading	81	10	1.7
Letter-Word Identification	86	17	1.9
Passage Comprehension	77	6	1.4
Word Attack	93	33	2.1
Sound Awareness	91	27	2.1
Brief Math	100	50	2.8
Calculation	96	40	2.6
Applied Problems	103	57	3.0
Brief Writing	84	15	1.8
Spelling	80	9	1.5
Writing Samples	92	30	2.1

Narrative:

- Explanation of scores
 - Strengths and weaknesses
 - Points to further assessments

Woodcock-Johnson Tests of Achievement, Third Edition **(Cont'd)**

DUKE's scores in the area of reading are uniformly below average. He had difficulty with tests of sound awareness, which is another measure of phonemic awareness. He also has trouble with word identification and passage comprehension. His errors on the Comprehension section were due to problems with word recognition. He does not seem to have difficulty with oral comprehension, and does not need intervention with reading comprehension alone. His primary area of need is in decoding. He had difficulty with the Word Attack subtest as well, where he was asked to read phonetically regular nonsense words. This is consistent with his weakness in phonemic awareness. Overall, DUKE is functioning within approximately a year below grade level in his basic reading skills. In the area of math, DUKE is functioning close to grade level expectations. He made some minor errors in his math calculation; however, he was quite successful at solving story problems that were read aloud to him. He has a strong conceptual understanding of mathematics and was able to apply the correct operation to the story problems and was successful in finding solutions. Written language appears to be DUKE's weakest area academically, primarily due to his spelling difficulties. DUKE has a great deal of trouble using phonetic cues to guide his spelling. His spelling repertoire is extremely small. DUKE does not like to attempt words when he is not sure of the spelling. Thus, his sentences were extremely brief and often incomplete. DUKE made some letter reversals in his writing; however, when asked to write the alphabet, he did not make these same reversals.

Tools:

- Informal reading inventories
 - Why do we need them
 - What do they add to the picture?
 - How does Duke read?
- Diagnostic inventories
 - Why do we need them
 - What do they add to the picture?
 - What does Duke know about the building blocks of reading?
 - Where should instruction begin?

DUKE was given some informal assessments of his reading skills along with these standardized measures. On the Silvaroli Informal Reading Inventory, DUKE was asked to read graded passages aloud and he was asked comprehension questions about what he had read. At the first grade level, DUKE made approximately nine errors per passage and was able to answer fewer than half of the comprehension questions correctly. This would be termed his frustration level for reading. He is not able to read independently at the first grade level and gain meaningful information from the text. At the pre-primer level, which represents the first three months of first grade, DUKE made approximately four decoding errors per passage and was able to answer four out of six comprehension questions correctly. This would be his instructional level for reading. At this level, DUKE can read text with reasonable comprehension with adult guidance. It will be important in the classroom to make adjustments in reading material that DUKE is given in the content areas in order to assure that he is able to read independently and gain information from the text.

DUKE was also given an informal phonics inventory. On the Portland Brief Phonics Inventory, DUKE provided the correct sounds for nineteen out of twenty one consonants and all of the short vowels. He did not provide correct sounds for the 'R' controlled vowels. DUKE also has a tendency to "voice" his consonants. This means that he adds a vowel sound to the end of each consonant, which makes it difficult for him to blend the sounds into words. When asked to read nonsense words, DUKE had a great deal of difficulty reading simple consonant-vowel-consonant configurations, as well as words with long vowels. He does not seem to know rules for when a vowel should make a short or long sound. He also struggled with consonant blends. Starting points for instruction for DUKE would be to review and re-teach all basic individual sounds, and then to begin a review of blending skills starting with simple consonant-vowel-consonant configurations.

Tools:

- Tests of attention
 - Different measures for different ages
- Why used?
 - Needed if previous tests indicate and background suggest their use
- Types of attention
- Meaning of scores

DUKE was given the Test of Everyday Attention for Children to assess his attentional capacities on a norm referenced format. The following scores were obtained on the TEACH:

Test of Everyday Attention for Children (TEA-CH)

Measure	Scaled Score	Percentile Band
Sky Search		
Attention Score	9	30-43
Score!	8	20-30
Creature Counting		
Total Correct	6	6-12
Sky Search DT	7	12-20
Opposite Worlds		
Same World Total	10	43-56
Opposite World Total	8	20-30

The Test of Everyday Attention for Children is a comprehensive test battery designed to assess numerous aspects of attention, including both visual and auditory attention, the ability to divide and switch attention, and the ability to stop and inhibit impulsive responses. DUKE's pattern of scores on the Test of Everyday Attention for Children falls between mildly and moderately below average. He had particular difficulty with auditory attention, divided attention and inhibition. This score pattern is consistent with his pattern of weak working memory and processing speed on the Wechsler Intelligence Scale and would support a diagnosis of ADHD.

Tools:

- Behavior checklists
 - Parent and teachers
- Why do we need them?
- What do they tell us?

Diagnosis:

- DSM V codes
 - Why are these needed?
 - Insurance
 - Eligibility
 - Future accommodations

Summary and Recommendations

- The BIG picture
- What comes next

DUKE's classroom teacher and reading teacher both completed the Child Behavior Checklist – Teacher Report Form. DUKE's regular second grade teacher describes DUKE as a friendly child who works well with others; however, he is behind in reading and written language. At times he cannot seem to concentrate or pay attention for long. He often fails to finish things he starts and has difficulty learning. In the classroom he is inattentive and easily distracted and fails to carry out assigned tasks. His work is often messy and of poor quality. He is underachieving and not working to potential. DUKE's reading intervention teacher notes that DUKE is a very nice boy who wants to do a good job. He is kind to others; however, he gets easily frustrated with his work and will shut down. In the reading group, DUKE cannot seem to concentrate or pay attention for long. He has difficulty following directions and often fidgets and squirms. He tends to act rather young for his age. The Teacher Ratings Scales are all consistent with the descriptions of DUKE's behavior offered by his parents during the intake session, and would also support a diagnosis of an Attention Deficit Disorder.

Diagnosis:

314.01 Attention Deficit Hyperactivity Disorder, Combined Type
315.00 Specific Learning Disorder with Impairment in Reading (dyslexia)
315.2 Specific Learning Disorder with Impairment in Written Expression (spelling accuracy)

Summary and Recommendations: DUKE is a very bright and motivated second grade student who has been struggling with reading and writing skills since beginning kindergarten. He also has a previous diagnosis of ADHD that did not involve direct evaluation. The results of current testing indicate that DUKE has exceptionally strong verbal and perceptual reasoning abilities. He did well on measures of both verbal and visual immediate memory and shows a strength in mathematics. Areas of relative weakness for DUKE include working memory and processing speed, attention and concentration, sound symbol memory, rapid automatic naming, and phonological processing. There is a significant discrepancy between DUKE's cognitive ability and his level of achievement in reading and written language. DUKE meets the diagnostic criteria for a reading disorder with his weakness in rapid automatic naming, phonological processing, and sound symbol memory. His reading disorder meets the diagnostic criteria for dyslexia.

Recommendations:

- What are we going to do about it?
 - At home
 - At school
 - Outside resources

The diagnosis of dyslexia was discussed with DUKE's parents during the feedback conference. The book *Overcoming Dyslexia* by Dr. Sally Shaywitz was suggested as a learning resource for his parents and teacher. There has been considerable research regarding effective methods of instruction for children and adults with dyslexia. In general, multisensory teaching methods where reading and spelling are taught simultaneously tend to be more successful. Those approaches that include emphasis in building phonemic awareness have also been found to be superior for this population. Resources for tutoring were shared with DUKE's parents during the feedback conference. The results of direct testing of DUKE's cognitive abilities and attentional capacities, as well as the results of behavior checklists and direct observations of DUKE's behavior are all consistent with a diagnosis of ADHD. This diagnosis was also discussed with DUKE's parents during the feedback conference. The Children's Program website offers a list of readings for parents regarding working with young children with ADHD. In general, we find the best forms of intervention involve skills training, accommodations within the classroom, as well as possible treatment with a medication. It was suggested that DUKE's parents meet with a developmental pediatrician or child and adolescent psychiatrist, and explore the possibility of treating DUKE's symptoms with a medicine. They will be able to find answers to their questions regarding safety, side effects, and both short and long term use of these medicines during a consultation, and this will allow them to make an informed decision regarding this form of treatment. Resources for attention training groups and classes were also shared during the feedback conference.

Recommendations:

•What are we going to do about it?

- At home
 - Do's and don'ts
- At school
 - Programs
 - Accommodations
- Outside resources
 - Tutoring
 - Other services

Finally, DUKE's parents may wish to request a 504 plan of accommodations at school for DUKE. Specific accommodations for children with a diagnosis of ADHD have been attached to this report. With regard to reading accommodations, it will be important to adjust the difficulty level of reading material that DUKE is given in the classroom. Using audio books will also be beneficial for DUKE. He is a good candidate for time extensions for any test, quiz or assessment, or project that involves reading or writing. Oral testing is also a good option for DUKE. Oral presentations may also be a good alternative to written reports, as DUKE works to improve his writing skills. DUKE should not be penalized in terms of grading on his written work due to spelling errors, as these are a core element of his learning disability.

(Many more accommodations can be added here...this is another presentation!)

At home it is important to continue to read with DUKE for at least twenty minutes each evening. DUKE can alternate reading with his parents. This nightly practice will help to consolidate the gains that DUKE is making with his tutoring and accelerate his progress.

It was a pleasure meeting and working with DUKE. This evaluator may be contacted if any further information regarding this assessment is needed.

Stephanie Verlinden, Psy.D., N.C.S.P.
Licensed Clinical Psychologist

Thank You

