

Confidential Report of Neuropsychological Assessment

Name: “Joe”

DOB:

DOE:

Start Time:

Referral Source:

Reason for Referral:

Joe is an 8-year 7-month old, right-handed Caucasian boy with a history premature birth, Tourette syndrome and Attention-deficit/Hyperactivity Disorder (ADHD). He was referred for neuropsychological consultation to clarify his current neurobehavioral functioning and to make recommendations for intervention. This is a planned follow-up evaluation, based on initial recommendations from his initial neuropsychological assessment at age 6 years. At this time, Joe’s parents and teachers have noticed increased concern about his attentional control, and its effects on his progress in elementary school.

Assessment Methods Used:

Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV); Rapid Automatized Naming (RAN); Rapid Alternating Stimuli (RAS); Boston Naming Test (BNT); Token Test for Children; Word Generation—NEPSY-II; Verbal Learning—Wide Range Assessment of Memory and Learning-2 (WRAML-2); Rey-Osterrieth Complex Figure; Beery Developmental Tests of Visual Motor Integration (VMI) and Visual Perception (VP); Gray Oral Reading Tests-Fourth Edition (GORT-IV); Elision—Comprehensive Test of Phonological Processing (CTOPP); Hand Movements (Kaufman Assessment Battery for Children-II—KABC-II); Handwriting Samples; Repeated Patterns Test; Spatial Span Test (WISC-IV-Integrated); Incomplete Sentences Test Behavior Rating Inventory of Executive Function (BRIEF), Parent and Teacher Forms; ADHD Rating Scale-IV (Home Version); Behavior Assessment System for Children, Second Edition, Parent and Teacher Forms (BASC-2); Adaptive Behavior Assessment System-II (ABAS-II), Teacher Form; Review of available school records

Relevant History:

Joe is the older of two children (brother age 5 years) and lives with his parents and sibling. Both parents have attended college. There is a positive family history of learning disabilities and anxiety. Pregnancy with Joe was complicated by early contractions, which were reportedly treated with Terbutaline. Joe was delivered at 32 weeks gestation, weighing 3 pounds 7 ounces. There were reportedly difficulties with the labor and birth including reduced amniotic fluid. Mother also reported being in an auto accident approximately 10 days before she delivered. Joe spent 34 days in the NICU, and was on a heart monitor for bradycardia.

Early developmental milestones were reported to have been delayed in expressive language, motor skills, and ultimately in pre-academic development. Joe also had early feeding difficulties involving reflux. Joe had multiple ear infections as a toddler, but PE tubes were not required. Joe reportedly began having eye blink and throat clearing tics at age 2 years. He continues to have motor and vocal tics, although these have subsided somewhat over the last few months. Joe currently sees Dr. Joe for medication related to anxiety, impulsiveness, and tics. Joe’s medications at the time of assessment included Abilify and Clonidine. He has had some improvement in behavior and tics while on these medications. Parents report, however, that Joe has sleep problems in which he wakes around 1pm nearly every night. Joe has been otherwise healthy, and his hearing and vision screens have been unremarkable.

Joe is in the third grade at ____ School. He has not repeated a grade. School problems were first identified in preschool and involved pre-academic skill development, distractibility, reading and arithmetic skills. In Kindergarten, he became more unruly and had episodes of running out of class. These episodes have subsided. At present, Joe receives small group reading assistance four days a week, and small group assistance for mathematics five days a week. School accommodations include slightly modified curriculum, with shorter tests, and modified assignments, including modified homework. Joe also has private tutoring for math once per week. Outside school, Joe participates in a number of sports, including gymnastics and basketball. Parents note that Joe does well with sports, yet they are concerned that he is falling farther behind in school, and are seeking recommendations regarding the impact of his attention, learning and tic disorders on his needs for the future.

Observations/Test Results:

General presentation: Joe was observed in an extended office visit. He appears his chronological age, and was eager to participate. He is an engaging youngster, who talks openly and freely about a variety of topics. Joe’s play is cooperative and clearly symbolic. His spontaneous speech was readily available, and his thought processes were goal-directed and linear. There was no evidence of suicidal, homicidal or psychotic thinking. No overt loss of contact or disruption of ongoing behavior was observed. There was no indication of impairment to hearing or vision observed during the assessment. Joe’s activity level was within normal expectations throughout the assessment. Joe frequently talked his way through tasks, which in some cases helped his focus; however, in other cases, it served to distract him. Otherwise, with consistent structure and external support, Joe’s cooperation was easily elicited and his effort was good. As such, the results are considered to be a valid representation of Joe’s present neurobehavioral strengths and weaknesses. The results from Joe’s performance during this neuropsychological assessment are summarized below. Where appropriate, qualitative observations and comparisons to previous test results are included.

Mood/social-affective processing: Throughout the assessment, Joe's mood was upbeat, and cheerful. On the Incomplete Sentences Test, Joe produced age-appropriate themes, with no significant signs of anxiety or dysphoria noted. Parents and teachers completed the BASC-II form, which covers a broad range of mood and behavioral concerns. Parent reports on the BASC-II did not indicate concerns with anxiety or depression; however, they did note concerns with inattention and hyperactivity. Teacher reports on the BASC-II are highly consistent in terms of hyperactivity and inattention (noted most clearly in larger class settings); however, the teachers also consistently endorsed observations of Joe's somatic complaints, perhaps related to his feelings of discomfort around academic work.

Attention/executive functions: Joe's ability to modulate and direct attention was disrupted throughout the assessment session. His talking frequently interfered with his concentration. When given directions, he often "forgot" the rules, and appeared to lose cognitive set—thus requiring redirection from the examiner. During some tasks, he inadvertently maintained content and rule information from previous tests, which also served to derail his focus. He had particular difficulty when making transitions to items that had an increased level of complexity (e.g., moving from a picture task with two rows to one with three rows). On performance-based tasks, Joe demonstrated variability on tasks attention. Both his basic auditory attention span (i.e., Digit Span forward ScS = 7) and his visual span (Spatial Span forward ScS = 5) were below age level expectations, suggesting a vulnerability to acquisition of information when it is initially presented (especially when presented only once). Similarly, Joe had some difficulty on tasks of working memory (i.e., manipulating information mentally while simultaneously performing some other task). He demonstrated somewhat more intact verbal working memory performance (Digit Span backward ScS = 8); although his spatial working memory was slightly below average as well (Spatial Span backward ScS = 7).

"Executive function" refers to the domain of cognitive abilities that includes self-regulation, set maintenance, selective inhibition of responding, response preparation, cognitive flexibility and organizing time and space. These skills are related to the development of frontal brain systems, and become more salient in later elementary school years and beyond, especially in the remediation of areas of learning weaknesses, and in regulating behavior independently. Joe had difficulty with the executive aspects of most tasks, regardless of format. In particular, he had trouble with strategic initiation, sustaining effort, and maintaining set. When required to estimate or guess, he was reluctant to respond and had difficulty judging whether his response was on target or not. On a parent rating of executive function i.e., Behavior Rating Inventory of Executive Function (BRIEF), Joe's parents note slight concerns around behavioral inhibition and self-monitoring, although at a much less severe level than in previous assessment. Teacher reports on the BRIEF reveal concerns primarily in the area of planning and organizing his schoolwork, with scores on most scales much improved, compared to assessment at age 6.

General cognitive abilities: Administration of the WISC-IV yields a Full Scale IQ score of 75. In comparison to age-related peers, Joe's overall intellectual functioning is in the borderline range for age. This score represents lower relative performance than in his prior testing (age 6 FSIQ = 83). In other words, while Joe has gained skills in the past two years, his standing, relative to his age-peers, has dropped in all domains. In general, Joe's verbal knowledge base remains slightly stronger than his nonverbal skills. Joe struggled on both timed and untimed tasks. Examination of the quality of performance reveals that Joe continues to have a well-developed verbal knowledge base, good descriptive vocabulary; however, his use of visual cues in problem solving appears a relative weakness—especially tasks involving three-dimensional shapes.

Adaptive skills: Parent and teacher ratings of adaptive skill are largely below age-level expectations, with teacher ratings of study skills a particular area of concern.

Language and language-related processes/verbal memory: Throughout the assessment, Joe's spontaneous language was easy to elicit and he spoke abundantly. Reciprocal communication was adequate. Auditory comprehension and verbal formulation were appropriate in conversation. Joe's speech was fluent and prosodic, with appropriate articulation, voice quality and volume. In conversation, Joe's grammatical usage was intact; however, his understanding of language was very concrete, and he had long response latencies when answering questions. Joe also had a number of vocal tics during written tasks. Formal testing revealed relatively variable language skills across tasks. Among receptive tasks, Joe's rote verbal span (i.e., how much information he can take in aurally) is generally below age level expectation, and clearly affected by inattention (Digit Span Forward ScS = 7). When given a visual cue as reference, he was somewhat more proficient. He performed adequately in response to one- and two-step directions (Token Test Part 1 z-score = 0.0; Part 3 z-score = -0.59); however, he had more difficulty following 2-step commands when syntax was added to the directions (Part 5 z-score = -0.97). He did much better retaining information if he was able to hear multiple repetitions when learning new information (WRAML-2 Verbal Learning ScS = 9; Delay Trial ScS = 10), although his recall was marked by multiple and repeated intrusions that may have impeded his learning.

Expressively, Joe's language skills are also variable and affected by attentional control. Confrontation naming (i.e., Boston Naming Test) was impaired, with multiple paraphasic errors noted ($z = -1.67$). In contrast, Joe's ability to produce words in response to a semantic cue (NEPSY-2 Word Generation) is within normal limits (ScS = 9), as was his performance on initial letter (phonemic) fluency (ScS = 9).

Language skills considered crucial for the development of reading include phonological processing, rapid naming, and decoding of real and nonsense words. Joe's phonological awareness skills were generally intact for age (Elision ScS = 8), although his

progress relative to peers since last assessment has dropped (age 6 ScS = 10). For timed items, Joe's scores from the Rapid Automatized Naming Tests were intact for highly automatized items, such as letters, numbers and objects; however, he did make some errors in color naming, which may be less automatized or overlearned at this age. Joe's oral reading skills were accurate; although his speed and comprehension were slightly below average for age.

Nonverbal/visual processing/visuospatial memory: There are no observed disturbances in visual acuity, face or object recognition, appreciation of personal space or navigation in topographic area. His immediate visual span for increasing sequences was intact (Hand Movements ScS = 8), although with perseverations, and slightly less proficient than in prior assessment (age 6 Hand Movements ScS = 10). Joe's performance on constructional tasks was consistently in the low average to borderline range. Visual Motor Integration was scored formally in the borderline range SS = 77 (age 6 score = 84). In contrast, the non-motor Visual Perception task was scored in the average range SS = 105, which represents a striking improvement since his last assessment (age 6 SS = 82).

On the Rey Osterrieth Complex Figure, an integrative copying task, Joe's copy condition was scored well below age level (<10th percentile), and was completed in a highly fragmented, part-oriented style. On recall conditions, he was not able to further integrate the information, and his productions remained fragmented (Immediate recall organization < 10th percentile; Delayed recall organization < 10th percentile), both in part-oriented style. On recognition trial, however, he was able to identify many of the parts (11th – 16th %ile), using identification (rather than recall) format.

Sensorimotor/praxis: Joe's routine gait was within normal limits. He had a number of motor tics during the assessment, and at times, these appeared to interfere with the fluency of his motor movements. Joe is right-handed for writing and drawing. Pencil grip in the preferred hand is in a tripod condition in the preferred hand, but with the tips of his fingers in the non-preferred hand. His name-writing speed was within normal limits for preferred right hand as well as non-preferred left hand. Joe's performance on the Repeated Patterns Test, a measure of continuous graphomotor output and accuracy, was within normal limits on 4 of 5 trials for speed; although at the expense of accuracy ($z = -0.70$). Results of the PANESS motor examination revealed a variety of errors of inhibition, including body-part-as-tool errors on praxis exam, feet-to-hand overflow on stressed gaits, and bilateral proximal overflow on timed motor tasks. Joe also had some mild dysmetria (past-pointing) on reaching tasks. All of these errors are unexpected for age. On gait and standing tasks, Joe also had difficulty with balance, impersistence, and maintaining posture.

Impression:

Joe is an engaging and cooperative youngster. With consistent support for attention and allowances for movement, he participated well in an extended assessment session. Both vocal and motor tics were observed during the testing, although at a reduced level than in his prior assessment two years ago. Joe's overall intellectual skills, as measured by a standardized intellectual battery, are in the borderline range, in comparison to age-related peers. This is a lower score than at age 6, suggesting that his rate of progress in key cognitive skills continues to lag behind that of his peers. While some of the difficulty with test performance can be attributed to inattention, Joe still has trouble with both verbal and nonverbal reasoning, even when his attention is supported. At the same time, Joe's overall behavior has improved in the past two years. While he continues to have inattention and hyperactivity, these issues are not as pronounced as what was reported at age 6, which may be due to his pharmacological treatment. That being said, the pharmacotherapy may also contribute to some of the slowing observed in processing speed.

The neuropsychological protocol as whole highlights a significant neurobehavioral disorder in the context of 1) premature birth, 2) Tourette syndrome, and 3) ADHD. Joe's own history and the research literature suggest that he is vulnerable to developmental learning difficulties as a function of the combination of risks associated with these three conditions. At present, the most significant areas of need, from a neuropsychological perspective, include the following:

- Attention and executive dysfunction, primarily affecting basic auditory and visual attention span, task persistence, working memory, and organization of behavior and materials. Since these difficulties affect basic regulation of behavior, they can contribute to needs in all academic skill areas.
- Motor control, affecting drawing, copying, basic handwriting, transcription, accuracy and speed of copying from the chalkboard, and written expression in all subject areas (including arithmetic).
- Integration of complex information, regardless of modality.
- Functional independence, in part related to his attention difficulties that limit his ability to use the skills he has learned when they are needed.

The pattern of skill deficits is highly consistent with prior assessment, and is considered to be longstanding in nature and associated with his developmental neurological picture, with notable implications to bilateral frontostriatal brain systems. As a

result of having early neurological vulnerability, Joe's nervous system is considered to have developed differently than most youngsters. His development is "off track" in comparison to his peers, and while he will continue to progress, he is likely to require a level of support not ordinarily provided to students his age.

Relevant observations and issues from the history include the following:

- Joe continues to "forget" or "miss" parts of instructions. He also loses track of his own progress during tasks.
- Joe's performance continues to deteriorate at the end of tasks.
- Joe talks his way through tasks—interfering with his own concentration.
- Motor demand leads to much poorer performance on nearly all tasks.
- Joe is vulnerable to task complexity, such that his concentration and performance often derails when complex information is presented to him all at once.

The increased complexity of the third grade curriculum is likely to challenge Joe. Integration deficits limit Joe's ability to handle multi-load tasks of many sorts. On tasks where an immediate response can be elicited, where cuing is part of the task format, where what is tapped is essentially one process, where structure relevant to the solution of the problem is inherent in the materials themselves, and where the need to integrate graphomotor control are at a minimum, Joe can achieve in the low average to average range for age. In contrast, where double operations are required, where uncued accessing of information is the goal of the activity, where graphomotor demands are present, Joe is quickly overwhelmed, and his performance, not surprisingly, deteriorates.

Although Joe's performance on a standardized intelligence test is in the borderline range, his overall profile is not what is typically seen in children with that level of IQ scores. Knowledge is available at a higher level, depending on examiner support and/or inherent task structure. In spite of this, however, Joe is a youngster whose capacity for independent functioning remains well below average—arguing for continued specific and focused instructional support of his self-regulation skills.

With this neuropsychological profile, Joe remains at high risk for difficulties in age-appropriate independent functioning, and for significant difficulty and slow progress in the academic setting, particularly as there is increasing demand that complex skills be brought together in higher-order and multiple-operation tasks, and on an increasingly independent basis. Responding to such demands will require coordination from medical and educational providers, as well as family support.

Recommendations:

The following recommendations should be shared with Joe's medical, psychiatric and educational treatment teams. Despite his difficulties, Joe continues to learn and has made progress. As such, the goal of those involved in his care will be to promote continued progress. In particular, the current findings suggest strongly that Joe continues to need small group instruction on a daily basis for the continued development of his basic reading and math skills. He has clearly benefited from this level of support since his last assessment; however, given the increased demand for reading and writing that he will face over the remainder of elementary school, Joe will require instruction in small class setting. The overall approach to working with Joe will involve intervention that begins with external support, including active and directive modeling, coaching, and guidance by all who work with him regularly. Ultimately, the goal is to transition to an internal process of fading the cueing. Nevertheless, at present, Joe continues to need: 1) external modeling for multi-step routines; 2) external guidance with the development and implementation of everyday routines—especially involving homework; 3) practice in the use of these routines on a daily basis, and 4) attempts to gradually fade the external supports and begin to directly cue (remind) him to generate his routines on his own.

Joe has difficulty with planning and organizing his approach to tasks independently. In particular, he may underestimate the time involved, or the level of difficulty of the tasks he is expected to complete. He may also have difficulty delineating and carrying out the multiple steps required to complete complex tasks. This difficulty is likely to be exacerbated on written assignments. Given his profile, Joe is also vulnerable to difficulties organizing his belongings, both at school and at home.

In class, Joe is likely to require more breaks than the next child, particularly with motor activity. These breaks can be used a reward for work completed, and only need to be a minute or two in duration. For these breaks, Joe might be asked to complete some independent desk work or to run an errand for the teacher, take a bathroom or drink break, or simply bring his work to the teacher. Teacher "check-ins" can be also an effective method of providing Joe a break for motor activity and to provide an opportunity for reinforcement. For example, Joe might be asked to complete only a few problems or lines from a paragraph before bringing his work to the teacher. This process provides a built-in break, and can facilitate a step-wise approach to the task. Joe will also need increased supervision for his attention, activity level, and movement. Preferential seating, near the teacher, will be important, as placing Joe where he can feel more "in the middle" of activities may increase his arousal and help with focus.

Joe's reduced processing speed will affect his ability to complete all assignments and tests in the same amount of time as his classmates. It is strongly recommended that he be given reduced workloads for class work and homework, and abbreviated tests. One way to reduce workload is to do every other item. Teachers may need to prioritize assignments for Joe and communicate that they do not expect him to complete everything. In situations where this is not possible (e.g., standardized tests), Joe will require extended time with frequent breaks due to fatigability.

Joe is also at risk for spending excessive time on homework. It will be important to monitor Joe's workload, and facilitate his communication with teachers about appropriate demands. Joe should spend approximately 60 to 75 minutes per night completing his homework, reviewing class notes, and preparing for upcoming tests. If Joe is spending more time than this, either he is working inefficiently or teachers are not adjusting assignments sufficiently.

If Joe is trying to take notes at the same time as listening, he will likely miss a good portion of what is being said. To maximize his classroom learning, Joe should be provided with a legible copy of the teacher's notes. Ideally, these notes would be given to Joe prior to the lecture so that he can follow along with the lecture, and annotate as needed. As sxxxx will be held responsible for this material on tests, it is important that the notes come from the teacher rather than a fellow student who may not be accurate. Regardless, when writing or drawing, Joe may need extra time if neatness is counted as part of the grade. He will also require extra time on in class written assignments, and on timed tests of all types.

Because he may tend to rush through work, Joe should be specifically reinforced for accuracy, and for reflecting on instructions before beginning. Additionally, Joe may have difficulty with the fine motor and visual motor demands involved in filling in the circles on answer sheets for standardized tests. For these tests, it is recommended that Joe be allowed to answer directly on the page with the questions. The rate with which information is presented may need to be altered for Joe. He may need additional "processing time" or wait time, to rehearse new information. He may also need the information broken down into smaller chunks.

Joe will benefit from prominent placement of a daily schedule that is reviewed at the outset of each day (in school), and again in the evening with his parents as part of his homework. The goal is to help Joe anticipate the sequence of events each day, and to work through changes in his routine as they occur.

It is important to consistently shape and prompt his attention and comprehension. It is crucial to remember that Joe begins to "lose" information after 3-4 words. To assist with auditory attention and working memory, Joe should be encouraged to listen for important points when new material is presented. Establishing eye contact with Joe prior to giving essential instructions or new material will help ensure that he is ready to listen carefully. He may also benefit from being alerted when important material is being presented.

Joe will also benefit from opportunities to meet with a teacher or aide at the outset of each day to preview the gist of what is to be introduced that day. Joe should also review some class notes every evening, even when he does not have an upcoming test. This is important for two reasons: 1) identify information that needs to be clarified before it is too late, and 2) obtain multiple repetitions of important information to increase learning and memory. This is also an opportunity to practice prioritizing important information, i.e., highlight the most relevant facts for future study and review. Getting Joe into the habit of studying every night will increase the automaticity of the routine, reducing Joe's dependence on external reminders for this portion of his education.

Joe continues to talk his way through his work (i.e., saying aloud what he is thinking). This behavior is likely a form of verbal overflow; thus, he likely does not know he is doing it. It will be important to work with Joe to help him internalize his speech, but he should not be penalized for talking aloud in these circumstances.

Continued psychiatric consultation regarding pharmacological management of his attentional difficulties, impulsivity and tics is warranted. Continued involvement with a behavioral specialist is also warranted, especially to work with the psychosocial effects of chronic tics. These findings and recommendations will be discussed in detail with parents. Joe should have a follow-up neuropsychological assessment in two years. In the interim, I would recommend that Joe have a "check up" appointment in 6 months to monitor progress. I enjoyed meeting with Joe and his family. I can be reached at

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Report of test scores: Not for use outside the context of the attached interpretative report

Standardized Score Type	Average Range of Scores +/- 1 SD
Scaled Score (ScS)	7 to 13
Standard Score (SS)	85 to 115
T-score (T)	40 to 60
z-score (z)	-1 to 1

BASC-II	T-Score (Parent) Current	T-score (Parent) Age 6	T-Score (Teacher) Current				T-score (Teacher) Age 6
			1	2	3	4	
Hyperactivity	87	77	71	58	53	57	77
Aggression	68	64	46	46	43	48	67
Conduct Problems	62	68	49	49	42	45	53
Anxiety	55	59	59	48	52	76	39
Depression	59	67	53	55	45	55	50
Somatization	36	45	73	69	77	81	42
Atypicality	62	52	63	53	46	50	69
Withdrawal	44	42	49	49	49	44	44
Learning Problems	--	--	68	62	72	72	74
Attention Problems	69	70	64	59	53	55	67
Externalizing Problems	75	72	56	51	46	50	67
Internalizing Problems	50	59	65	59	60	76	42
School Problems	--	--	67	61	64	65	73
Behavioral Symptoms Index	69	66	60	54	48	52	66

BRIEF Scale	T-score: Parent Form Current / Age 6		T-score: Teacher Form Current 1/2/3/4 Age 6 (right column)				
	Inhibit	62	73	57	50	49	53
Shift	57	47	61	55	44	55	67
Emotional Control	65	57	57	59	51	53	68
Initiate	59	61	69	57	51	67	82
Working Memory	65	70	65	63	59	65	81
Plan/Organize	65	74	63	67	52	70	72
Organization of Materials	64	56	47	69	47	64	69
Monitor	62	79	67	56	49	54	72

WISC-IV Subtest	Subtest Score (ScS) Current / Age 6	Index Scores (SS) Current / Age 6	IQ Score (SS) Current / Age 6
Similarities	5 / 6	Verbal Comprehension 87 / 93	Full Scale IQ 75 / 83
Vocabulary	9 / 10		
Information	9 / 10		
Digit Span	7 / 6	Working Memory 80 / 83	
Letter Number Seq.	6 / 8		
Block Design	7 / 7	Perceptual Reasoning 75 / 86	
Matrix Reasoning	4 / 9		
Picture Concepts	7 / 7		
Coding	5 / 8	Processing Speed 80 / 83	
Symbol Search	8 / 6		

BASC-II Adaptive Skill Area	T-Score (Parent) Current	T-Score (Parent) Age 6	T-Score (Teacher) Current				T-Score (Teacher) Age 6
			1	2	3	4	
Adaptability	37	42	43	47	50	43	40
Social Skills	44	39	52	38	65	60	64
Leadership	44	47	39	42	39	39	43
Study Skills	--	--	36	38	43	38	48
Activities of Daily Living	42	47	--	--	--	--	--
Functional Communication	40	51	37	46	47	44	46
Adaptive Skills Composite	40	51	40	41	49	44	48

ABAS-II Adaptive Skill Area	ScS Teacher				Index Scores (SS) Teacher	General Adaptive Composite Teacher
School Living	5	4	6	7	Practical 84 / 49 / 80 / 84	SS = 77 / 49 / 82 / 87
Health and Safety	3	1	6	8		
Community Use	6	1	3	3		
Self-Care	12	2	8	9	Conceptual 69 / 61 / 81 / 90	
Communication	3	2	3	7		
Self-Direction	3	2	8	10		
Functional Academics	5	3	5	5	Social 88 / 58 / 92 / 98	
Leisure	4	2	8	10		
Social	11	1	10	11		

Rapid Automatized Naming Condition	SS Current (Age 6)
Colors	93 (86)
Letters	98 (97)
2-Set	99
3-Set	96

GORT-IV Score	ScS	SS
Rate	7	
Accuracy	11	
Fluency	9	
Comprehension	7	
Oral Reading Quotient		88

PANESS Timed Motor Exam	z-scores Right (preferred)	z-scores Left
Foot Tapping	-0.47	-3.42
Heel-Toe Sequencing	-0.82	-1.47
Hand Patting	-2.96	-2.95
Hand Pronation/Supination	+0.31	2.00
Finger Repetition	-0.45	-0.06
Finger Sequencing	-2.18	-0.03

Note: scores below -1 indicate impaired performance