

NEUROPSYCHOLOGICAL, LTD EDUCATIONAL, & PSYCHOLOGICAL EVALUATIONS

Client: AB
Age: 8 years 4 months
Birth Date: 02/14/2009
Test Date: 06/12/2017, 06/13/2017
Examiner: Dr. Laurie Cestnick

Reason for referral: AB's parents and grandparents wished to have him tested given school reports of inattention, hyperactivity, social and behavioral concerns that had been escalating. Full neuropsychological, psychological, and educational evaluations were completed to help with diagnostics and decision-making with respect to academic programming and counseling.

TESTS ADMINISTERED

Review of records; Interviews with parents and AB; WISC-V: Block Design, Similarities, Matrix Reasoning, Vocabulary, Picture Concepts, Symbol Search, Visual Puzzles, Coding, Digit Span Forward, Digit Span Backward, Digit Span Sequencing, Comprehension, Figure Weights, - Visual Puzzles, Picture Span; NEPSY II: Arrows, Auditory Attention and Response Set, Comprehension, Design Copying, Finger Tapping, Imitating Hand Positions, Inhibition (three conditions: naming, inhibition only, and inhibition switching); Memory for Faces Immediate and Delayed Recall, Narrative Memory, Phonological Processing, Word Generation (semantics and initial letter); IVA Plus; CPT II; BASC-3 (self-report, parent reports, grandparent report); Rorschach Ink Blot Personality Test; Sentence Completion; M-PACI.

BACKGROUND HISTORY

Prenatal, Birth and Early Development

Xanax, Ibuprofen, and alcohol were consumed during pregnancy as his mother was not aware of the pregnancy for quite some time. AB was carried almost to term and was born vaginally a few weeks early. His APGAR score at both 1 and 5 minute intervals after birth was a 9 (very good). He had difficulty sucking to feed as an infant. No sleeping problems were reported, he was quiet, liked to be held, and was alert. AB walked early at 10 months and did not speak his first word until he was almost 3 years old and was not speaking in sentences until 4 years old. AB had early intervention for speech from the approximate age of 2-3 years until he entered Kindergarten (Laurie August was his speech therapist). As he developed, his mother recalls wondering if he might be on the spectrum given sensitivity to sounds (covering his ears) and hand movements/actions that did not appear age appropriate (e.g. mimicking dinosaurs in ways that same age children would find odd). His father voiced concern over sensory sensitivities as well. All other developmental milestones were reported as on time.

Medical

Asthma, allergies (strawberries and pollen) and frequent headaches were reported. AB uses an inhaler periodically for asthma. No head injuries, seizures, hospitalizations, surgeries, ear infections or any other medical concerns were reported.

Family

AB lives with his great grandfather, mother and sister (Breena, 13 years) in his great grandfather's home in Billerica, MA. More recently, his mother's boyfriend and his two sons (Brandon 11 and Travis 5 years) have also moved into the home. AB stays with his father, stepmother and their dog Diesel approximately every other weekend. Many weekends AB (and his sister Breena) stays with his paternal grandparents in Burlington, MA (quite often). There is a high level of conflict between AB's biological parents and co-parenting generally does not run smoothly. AB's mother completed some college and works as a nail technician, and his father completed his GED (high school), is not working, and is currently in school at Middlesex Community College. His parents were never married (both AB and Breena have the same biological father). AB's stepmother completed her GED (high school) and works as an assistant for a nurse with Home Health (assisting people who need services in their homes). English is spoken in both homes.

The following were reported on extended family lines: alcoholism (common on both sides of his family), drug abuse (father [mild], maternal great aunt had severe drug addiction), depression (mother, father, great aunts and uncles), anxiety disorders (mother, father, paternal uncle, great aunts and uncles both sides), ADD/ADHD (paternal uncle), cancer (paternal great grandmother), and diabetes (paternal great grandfather and grandfather). Anxiety and depression are common on both sides of AB's extended families, and drug use in some family members on both sides.

Social and Emotional

AB enjoys aspects of school including science, art and math. He enjoys riding his bike, being outside, swimming, basketball, playing hand-held computer games and being with his family. He particularly enjoys time with his paternal grandparents and spends a great deal of time with them. AB can be a very polite, mild-mannered, sensitive and sweet boy. He is curious about many things and comes up with creative ideas. AB has some fears of bugs and 'unknown' things, e.g. some dogs. He struggles socially at times and does not always engage with kids in a manner conducive to fostering deeper bonds/friendships with others. He has a tendency to not make good eye contact and lacks skills to keep conversations with peers going and to show an interest in others and bonding with others.

The following areas of concern were reported: attention, hyperactivity, tantrums, gives up easily, stubborn, easily frustrated, sleeping problems, aggression toward others (new at school), social skills, and repetitive behaviors e.g. rocking back and forth. AB recently started seeing a counselor prompted by bad behavior at school: behavioral outbursts, aggressiveness, and noncompliance. AB kicked his teacher's foot and he was suspended for a day. He has been sent

home repeatedly due to noncompliance. When AB feels someone is on his side and cares for him, he is the sweetest child. If he senses that someone is upset with him or does not like him he can become noncompliant and oppositional. He is largely extremely compliant and sweet when with his grandparents in particular. Reports from his school have largely indicated a high and escalating level of noncompliance. Despite moderate concern over behaviors at school, he still wants to go to school.

Possible life stressors include: maternal grandmother died 2015, poor co-parenting between his biological parents, not much quality time with his father (this is improving), recently sharing his home and bedroom with his mother's boyfriend's two sons (and mother's boyfriend), inattention, poor social skills, and the 'unknown' regarding where his family will be living/moving to as these newly combined families cannot remain at his great grandfather's home.

Academic

AB received support services for reading and math in the past and was said to have made appropriate gains and to no longer require these support services. No strong academic concerns were reported. The following were reported by his teachers: inattention, impulsivity, disrespectful behavior toward others, ignores adult requests at school (noncompliant), refuses to do work, has been aggressive toward himself as well as his mother and peers/teachers at school, weak social participation, weak balance and motion, and weak planning/ideas, and depression (sad to be at school). Despite these things, AB always wants to go to school.

Prior School Testing

School testing indicated well below average processing speed (standard score of 77) and working memory (standard score of 74), and slightly weak oral reading fluency (standard score of 89) and sentence building (standard score of 92) – low to below average. It is common for those with weak processing speed to have writing concerns. Testing also indicated precocious vocabulary knowledge (98th percentile). As will be seen in this report, intelligence testing by the school versus the examiner rendered different results at times (sometimes weaker, sometimes higher).

OBSERVATIONS

Initially the examiner could see behaviors reported by the school regarding some slight oppositionality and not wanting to engage fully with the testing process. This very quickly turned around however when he felt the examiner was on his side and he was more comfortable with the process. AB's eye contact was often weak and inattention was noted throughout testing with tendencies to drift from the task, speak about things unrelated to tasks at hand, and difficulty holding his attention. AB loved to talk and liked taking many breaks between tasks which made him happier and more engaged with testing thereafter. His working memory presented as weak throughout testing with a need to repeat instructions and to keep them concise for him. Writing fluency was astronomically slow. AB was cooperative, engaged, and happy

during testing rendering results reliable and valid from which to draw diagnostic and prognostic conclusions.

TEST RESULTS

How to Interpret Scores

The scores show how well AB performed compared to a group of peers the same age from across America. The highest possible score is 160 and the lowest possible score is 40 for most skills tests. Half of all persons tested will score less than 100, and half of all persons will score more than 100. Scores from 90 to 109 are average.

A percentile rank is also given, which shows how he ranks in the national comparison group. If the percentile rank were 45, for example, it would mean that AB scored higher than approximately 45% of persons his age that were tested and 55% achieved a higher score than he did. At times scaled scores are also used. Scaled scores are out of 20. The following can be used to interpret scaled scores: 1-4 well below average, 5-7 below average, 8 low average, 9-11 average, 12 high average, 13-14 above average, 15-16 superior, and 17-20 very superior.

NEUROPSYCHOLOGICAL

Intelligence

Ten subtests from the WISC-V were administered to examine the following facets of intellectual functioning: verbal reasoning (verbal comprehension), nonverbal reasoning (visual-spatial), fluid reasoning, working memory, and processing speed. Results from these tests are summarized by category in the below table.

Composite		Sum of Scaled Scores	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description	SEM
Verbal Comprehension	VCI	29	124	95	114-130	Superior	4.74
Visual Spatial	VSI	27	119	90	110-125	Above Average	4.24
Fluid Reasoning	FRI	29	126	96	117-131	Superior	3.67
Working Memory	WMI	15	85	16	79-94	Below Average	4.24
Processing Speed	PSI	19	98	45	89-107	Average	5.61
Full Scale IQ	FSIQ	85	116	86	110-121	High to Above Average	3.00

Results indicated **high to above average overall intellect, above average to superior reasoning skills (across verbal, visual-spatial, and fluid reasoning tasks), below average working memory, and mixed processing speed performance with below average performance on the Coding task and average performance on the Symbol Search task** that

collectively generated the Processing Speed score. Each of these areas of performance will be discussed in greater detail in upcoming sections of this report.

It is noteworthy, that when AB’s school tested him, his overall Processing Speed score was well into the below average range.

In order to determine areas of significant strength or weakness across areas of intelligence, intelligence Index scores were contrasted with one another. Those areas of intelligence that are significantly higher/lower from each other have been noted in the table below with the letter ‘Y’ for “YES – significant difference”, and those that are not significantly different are noted with the letter ‘N’ for “NO – significant difference.” As can be seen in the table below, working memory is significantly weaker than all intelligence areas, and processing speed is also lower than all areas with the exception of working memory.

Index Level Pairwise Difference Comparisons

Index Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
VCI - VSI	124	119	5	12.46	N	36.0%
VCI - FRI	124	126	-2	11.75	N	45.0%
VCI - WMI	124	85	39	12.46	Y	0.3%
VCI - PSI	124	98	26	14.39	Y	9.9%
VSI - FRI	119	126	-7	10.99	N	33.9%
VSI - WMI	119	85	34	11.75	Y	2.3%
VSI - PSI	119	98	21	13.78	Y	14.3%
FRI - WMI	126	85	41	10.99	Y	0.6%
FRI - PSI	126	98	28	13.14	Y	7.9%
WMI - PSI	85	98	-13	13.78	N	13.2%

These findings indicate that **all reasoning abilities are areas of notable strength, working memory is an area of significant weakness, and processing speed is weak relative to his reasoning (albeit not weak overall relative to same age peers).**

Language

AB achieved average on the Similarities task that examined his ability to determine semantic relatedness of words (e.g. butterfly and bee are both “insects”), and superior on the Vocabulary task that examined his ability to offer verbalized definitions of words presented to him aurally/verbally.

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	SEM
Verbal	Similarities	SI	31	16	98	14:2	1.16
Comprehension	Vocabulary	VC	26	13	84	10:2	1.24

To examine language skills further, additional subtests from the NEPSY II were also administered.

Language				
Score Name	Raw Scores	Scaled Scores	Percentile Ranks (%)	Classification
Comprehension of Instructions Total Score	19	6	9	Below Average
Phonological Processing Total Score	32	10	50	Average
Repetition of Nonsense Words Total Score	16	5	5	Below Average
Word Generation-Semantic Total Score	27	12	75	Average
Word Generation-Initial Letter Total Score	13	10	50	Average
WG Semantic vs. Initial Letter Contrast Scaled Score	--	9	37	Average

NEPSY II results indicated average to superior performance on all language tasks with the exception of those taxing on working memory and attention. He achieved below average Comprehension of Instructions (multi-step information presented taxing on attention and working memory), average Phonological Processing (a pre-reading skills that usually dictates 'decoding'/'sounding-out' of unfamiliar words), below average Repetition of Nonsense Words (taxing on working memory and must hear subtle speech sounds that are not easily predictable) high average Word Generation for Semantics (generating/stating words from categories as efficiently/accurately as possible in a limited time) and average Word Generation for Initial Letters (generating/stating words that start with given letters as efficiently/accurately as possible in a limited time).

Performance on all language tasks was average to superior, with the exception of language tasks that were very taxing on working memory, thereby emphasizing weak working memory as opposed to language processing per se. Language processing will fail when there is too much of it, particularly when the information is rote and not meaningful. This is largely due to weak working memory as opposed to language. Having said that, speech onset was delayed as a youngster indicating possible language processing concerns.

Visual-spatial

AB achieved average on the Block Design task that involved manipulating blocks to re-create designs shown to him in pictures, and he achieved superior on the Visual Puzzles task that involved choosing 3 blocks out of six or more that when mentally rotated and placed together would create a target design at the top of the page. The visual-motor coordination may have weakened his performance on the Block Design task (Visual Puzzles did not require any motor response but was visual only).

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	SEM
Visual Spatial	Block Design	BD	26	11	63	9:10	1.04
	Visual Puzzles	VP	22	16	98	>16:10	1.08

It is important to note that the school noted below average performance on the Visual Puzzles task with a scaled score of only 7, whereas the examiner of this current report and evaluation indicates performance in the superior range with a scaled score of 16. It is important and noteworthy that AB does not always look at all options before making decisions due to impulsivity. He needs to be encouraged to take his time during tasks particularly visual-spatial ones so we are measuring his visual-spatial reasoning abilities and not his attention or impulsivity per se.

To look at visual-spatial skills further, subtests of the NEPSY II were also administered.

Visuospatial				
Score Name	Raw Scores	Scaled Scores	Percentile Ranks (%)	Classification
Arrows Total Score	29	12	75	Average
Design Copying General Total Score	13	--	>75	Above Average

He achieved high average on the Arrows task that examined his ability to determine line angles and orientations, and above average on the Design Copying task that examined his ability to copy abstract shapes while in view. **No concerns with visual-spatial skills per se were indicated with average to superior performance on tasks.**

Fluid Reasoning

Fluid reasoning can be thought of as reasoning like ‘water’ that is fluid/moving. As one approaches a problem, rules of thinking are applied (e.g. deductive, inferential, reasoning and others) to try to solve the problem. If one rule/idea does not work to solve the problem, one moves on to another idea and continues to solve the problem. Some problems require several steps of problem-solving. It requires a functional working memory, ability to apply rules of thinking, and to move on to new rules when appropriate in an attempt to solve. This is fluid reasoning.

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	SEM
Fluid Reasoning	Matrix Reasoning	MR	21	14	91	14:10	0.99
	Figure Weights	FW	25	15	95	15:2	0.73

Results indicated **above average to superior fluid reasoning**, with above average performance on the Matrix Reasoning task and superior performance on the Figure Weights task.

Working Memory

Working memory can be likened to RAM on a computer; where computers can open and run a limited number of programs at one time, so can humans think about a given number of pieces of information at one time. Just as RAM is limited by the technology housed in the computer, so is working memory limited in varied brains/minds (averaging 3-9 items dependent upon the strength of working memory). Working memory impacts upon all learning and is thus very

important to functioning within many aspects of life (academic, social, work, etc.). Where many aspects of cognitive functioning are very consistent throughout one's life (given no acquired trauma), working memory is most susceptible to change from a variety of factors including anxiety, fatigue, and varied insults that can occur.

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	SEM
Working Memory	Digit Span	DS	19	8	25	7:2	0.95
	Picture Span	PS	17	7	16	6:2	1.08

AB struggled with both verbal and nonverbal working memory tasks, with low to below average performance on the language-based and below average on the picture-based working memory tasks.

Processing Speed and Sensorimotor

Processing speed is a measure of visual-motor efficiency and elevated levels of visual attention shifting/tracking. Symbol Search involved looking at two designs followed by a string of additional designs, and determining if either of the two target designs are in the string or not. If one is present, that item is circled or crossed out and if not, the word “no” is circled/crossed out. To perform this task one must be able to accurately attend to visual details and be able to visually scan/search for those details, as well as be able to cross out items on the page.

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	SEM
Processing Speed	Coding	CD	24	8	25	<8:2	1.37
	Symbol Search	SS	21	11	63	9:2	1.34

As can be seen in the table above, AB achieved low to below average on the Coding task (visual-motor task) and average on the symbol search task (also a visual-motor task but with largely visual and a much smaller motor component than the Coding task).

To examine sensorimotor skills further, subtests from the NEPSY II were also administered. These tasks examined ‘motor only’ and varied degrees of visual-motor coordination. Finger Tapping Repetitions looked at ‘motor only’ via bringing his index finger and thumb together repeatedly as efficiently and accurately as possible (task can be performed equally well with eyes closed). He also completed the Finger Tapping Sequences task that involves coordinating hands from both sides of the body and crossing the midline of his body (also thereby crossing brain hemispheres as well); a visual-motor cross-midline task. In addition, he completed the Imitating Hand Positions task that examines the ability to ‘mirror’ the hand positions of the examiner (recreate finger/hand positions observed on the examiner with her own hands). Results can be seen in the table on the next page.

Sensorimotor					
Score Name	Raw Scores	Scaled Scores	Percentile Ranks (%)	Cumulative Percentages (%)	Classification
Fingertip Tapping–Dominant Hand Repetitions Completion Time	6	--	>75	--	Above Average
Fingertip Tapping–Dominant Hand Sequences Completion Time	11	--	51–75	--	Average
Fingertip Tapping–Nondominant Hand Repetitions Completion Time	7	--	51–75	--	Average
Fingertip Tapping–Nondominant Hand Sequences Completion Time	15	--	26–50	--	Average
Fingertip Tapping–Dominant Hand Combined Scaled Score	--	12	75	--	High Average
Fingertip Tapping–Nondominant Hand Combined Scaled Score	--	10	50	--	Average
Fingertip Tapping–Repetitions Combined Scaled Score	--	12	75	--	High Average
Fingertip Tapping–Sequences Combined Scaled Score	--	10	50	--	Average
FT Dominant Hand vs. Nondominant Hand Contrast Scaled Score	--	6	9	--	Below Average
FT Repetitions vs. Sequences Contrast Scaled Score	--	8	25	--	Low to Below Average
Imitating Hand Position Total Score	17	6	9	--	Below Average
Imitating Hand Positions – Dominant Hand Score	8	--	--	3–10	Well Below Average
Imitating Hand Positions – Nondominant Hand Score	9	--	--	11–25	Low to Below Average

Generally speaking, AB achieved -- on the Finger Tapping Repetitions task ('motor only'), -- on the Finger Tapping Sequences task (visual-motor crossing of the midline), and -- on the Imitating Hand Positions task (more visual-spatial processing required and higher visual-motor coordination as well for this 'mirroring' task). Results indicated slightly greater Finger Tapping Repetitions versus Finger Tapping Sequences – in other words the 'motor only' task of just tapping fingers together rendered slightly greater performance than tapping each finger with the opposing hand (a crossing of the midline visual-motor task), but both tasks led to age appropriate performance. **AB struggled with the Imitating Hand Positions task that had the highest visual-spatial and visual-motor component, with below average performance.** It is also noteworthy that **the difference between performance with his dominant and nondominant hands proved to be more pronounced than same age peers.**

Memory

The following aspects of memory were examined: Memory for Faces Immediate Recall, Memory for Faces Delayed Recall, Narrative Memory, free recall, cued recall (answering questions) and recognition (multiple choice). Results can be seen in the table below.

Memory					
Score Name	Raw Scores	Scaled Scores	Percentile Ranks (%)	Cumulative Percentages (%)	Classification
Memory for Faces Total Score	13	14	91	--	Above Average
Memory for Faces Delayed Total Score	12	12	75	--	High Average
MF vs. MFD Contrast Scaled Score	--	10	50	--	Average
Narrative Memory Free and Cued Recall Total Score	11	4	2	--	Well Below Average
Narrative Memory Free Recall Total Score	4	5	5	--	Well Below Average
Narrative Memory Recognition Total Score	12	--	2-5	--	Well Below Average
NM Free and Cued Recall vs. Recognition Contrast Scaled Score	--	8	25	--	Low to Below Average

Memory testing indicated **high to above average memory for faces and well below average memory for story information** (provided the information verbally and reported the information back to the examiner verbally).

Attention

The **CPT II** was administered to examine attention. This is a computerized test that examines **visual attention** specifically. Letters were flashed on the screen and he was to click the computer mouse every time he saw a letter, with the exception of the letter 'X' (he was to inhibit responding when he saw the letter 'X', but click the mouse to all other letters). This task ran for approximately 15 minutes. The time in between the presentation of stimuli is altered as are order of letter presentations and frequency of 'X' presentation to examine various facets of attention. This test of attention is often difficult for many persons with attention deficits to perform.

CPT II (visual attention)
<ul style="list-style-type: none"> • Match with a clinical ADHD profile 68 % • Match with a nonclinical (nonADHD) profile 32% • 7/12 attention scores were atypical

Results support a diagnosis of ADHD. AB's performance pattern matched an ADHD profile by 68% and a nonclinical (nonADHD) profile by only 32%. A minimum of 2/12 attention scores are required to be in the atypical range for a consideration of ADHD, and in AB's case, 7/12 of the attention scores fell in the atypical range.

It is important to note that this task is a visual attention task specifically. He may perform one way on visual tests of attention (or this ‘particular’ visual attention task) and another auditory or ‘switching’ tasks of attention. In order to examine attention further, additional subtests were also given: **Auditory Attention tasks from the NEPSY II.**

Auditory Attention					
Score Name	Raw Scores	Scaled Scores	Percentile Ranks (%)	Cumulative Percentages (%)	Classification
Auditory Attention Total Correct	24	5	5	--	Well Below Average
Auditory Attention Combined Scaled Score	--	5	5	--	Well Below Average
Auditory Attention Total Omission Errors	6	--	6–10	--	Below Average
Auditory Attention Total Commission Errors	1	--	26–50	--	Average
Auditory Attention Total Inhibitory Errors	1	--	11–25	--	Low to Below Average
Response Set Total Correct	17	3	1	--	Well Below Average
Response Set Combined Scaled Score	--	6	9	--	Below Average
Response Set Total Omission Errors	19	--	2–5	--	Well Below Average
Response Set Total Commission Errors	4	--	26–50	--	Average
Response Set Total Inhibitory Errors	4	--	26–50	--	Average
AA vs. RS Contrast Scaled Score	--	8	25	--	Low to Below Average

Two tests of auditory attention were administered: a more simple and a more complex auditory attention task. The simple auditory attention task (Auditory Attention) required simply touching a red circle each time he heard the word “red” from an audio file. If he heard the words “blue”, “yellow”, “black” or any other miscellaneous word he was to ignore those. This task lasted a few minutes. He achieved in the well below to below average range on both tasks. The more difficult auditory attention task (Response Set) required touching yellow if he heard “red”, touching red if he heard “yellow”, touching blue if he heard “blue”, and not touching anything if he heard “black”. He performed equally poorly on this more difficult task than he did on the more simple auditory attention task. **Results supported a diagnosis of ADHD.**

In addition to visual attention (examined via the CPT II) and auditory attention (examined via the NEPSY II), difficulty with other facets of attention such as switching of attention from one concept to another, or from one modality (auditory/visual) to another may be present.

The IVA Plus was administered to examine these additional facets of attention (below). The IVA CPT Plus is a more sensitive measure of ADHD given high demand conditions and ‘modality switching’ requirements. Most persons with ADHD do not perform well on the IVA task in particular (less well than the CPT II).

The IVA Plus is an auditory and visual task over the course of approximately 20 minutes that examines the ability **to attend to both auditory and visual stimuli, to inhibit non-target/irrelevant stimuli, and switch back and forth between auditory and visual information.** This task was administered and results can be seen in the table below.

IVA Plus (visual and auditory switching)
<ul style="list-style-type: none"> • Global Auditory Attention Scaled Score of 70 (well below average) • Global Visual Attention Scaled Score of 74 (well below average) • Results showed weak attention shifting; support for ADHD diagnosis

Findings from the IVA Plus indicated well below average overall auditory and overall visual attention, indicating **very weak shifting of attention between auditory and visual stimuli. Results supported a diagnosis of ADHD.**

Note: IVA Plus AQ scores (in table above) are particularly useful when comparing with intelligence IQ scores (in first table of report) given that both the AQ and IQ scores are on the same standard scoring system; direct comparisons between the scores allow direct comparisons between attention and intelligence to determine if they are in line with one another or not. Sometimes attention can present as age appropriate, but when intelligence scores are superior, the difference between attention and intelligence becomes notable and worthy of diagnostic exploration/consideration. In AB's case, his overall IQ score is 116 (high to above average) indicating a **substantially significant difference between his AQ (well below average scores 70 – 74) and and IQ (116) offering very strong support for a diagnosis of ADHD.**

To test attention further still, the **BASC-3** was administered for information with respect to everyday behaviors. This questionnaire has scales for inattention, hyperactivity, and many other behaviors. When a score is in the clinical range, it denotes a very high level of endorsement from the person's responses (e.g. 8-9/10 questions endorsed as AB in that category), and when a score is in the 'at risk' range, it denotes a higher than average level of endorsement (e.g. 7/10). Results can be seen in the table below.

Responder	Clinically Significant	At Risk
AB (self-report)	<ul style="list-style-type: none"> • Attitude to School • Attention Problems • Self-reliance 	<ul style="list-style-type: none"> • Relations with Parents • School Problems
Mother (re. AB)	<ul style="list-style-type: none"> • Withdrawal (anxiety) • Hyperactivity • Conduct Problems 	<ul style="list-style-type: none"> • Attention Problems • Depression • Atypicality • Aggression • Anxiety

Grandmother (re. AB)	<ul style="list-style-type: none"> • Withdrawal (anxiety) • Depression 	<ul style="list-style-type: none"> • Conduct Problems • Leadership • Aggression
Father (re. AB)	<ul style="list-style-type: none"> • Hyperactivity • Atypicality • Withdrawal (anxiety) • Behavioral Symptoms 	<ul style="list-style-type: none"> • Attention Problems • Externalizing Problems • Aggression

Executive Function

Many persons with an ADHD profile have difficulty with executive function tasks (planning and organizing). Subtests from the NEPSY II were administered to examine problem-solving and planning abilities, as well as subskills that underlie this processing such as efficiency of word retrieval and attention shifting.

Subtest	Scaled Score	Description
Verbal Fluency Letters	11	Average
Verbal Fluency Categories	12	High Average
Verbal Fluency Category Switching	11	Average
Color-word Interference Color Naming (speed)	7	Below Average
Color-word Interference Word Reading (speed)	8	Low to Below Average
Color-word Interference Inhibition (speed)	<1	Well Below Average
Color-word Interference Inhibition Switching (speed)	<1	Well Below Average
Twenty Questions	8	Low to Below Average
TOWER	7	Below Average

Letter Fluency involved recalling words starting with target letters, Category Fluency involved recalling words from target categories, and Category Switching involved switching attention from one category to another. In each of these fluency tasks, words are pulled from memory and verbalized. These are all word retrieval efficiency tasks. Results indicated age appropriate performance with average to high average Verbal Fluency. AB achieved average efficiency of word retrieval using words starting with given letters, e.g. 's', high average retrieval for using categorical information, i.e. animal names and boys names, and average switching of attention between categories on a word retrieval tasks (i.e. fruit, furniture, fruit furniture, etc.). Overall findings on these tasks indicate age appropriate and higher verbal fluency.

Visual tracking concerns were not ruled out from performance across the Word Fluency and Color-word Interference tasks. When word fluency is age appropriate, and basic naming is far weaker (e.g. Color Naming, Word Reading), a visual tracking component could have made rapid

naming weaker (as opposed to a word retrieval concern). In AB’s case, his naming of colors and words was below average indicating possible ‘localization’ or color blindness concerns, and his naming in the other conditions was very below average and considerably weaker than verbal fluency. He achieved well below average on the Inhibition and Inhibition-switching tasks which is **common in those diagnosed with ADHD**, and in fact expected in those diagnosed with ADHD. His weak performance on the Color Naming and Word Reading tasks indicates **probable weak visual localization of items**.

The Color-word Interference tasks are nonverbal item naming speed tasks. Where the Verbal Fluency tasks required recalling words from memory, the Color-word Interference tasks required recalling/verbalizing words of visual stimuli presented in multiple rows (naming speed). He achieved below average to well below average on these tasks; below average performance on Color Naming (name the colors of these squares as quickly as you can), low to below average on the Word Reading (read these words of colors as fast as you can) task, and well below average on both Inhibition and Inhibition Switching tasks that require splitting/altering attention between concepts/visual stimuli. All four tasks measured the speed in which he could do the following: name colored squares (Color Naming), read words (Word Reading), ignore what the words presented said/meant (i.e. ‘red’, ‘green’, ‘blue’) and attend only to the ink colors of these words and verbalize these ink colors as quickly as possible (e.g. ‘red’ written in green ink, ‘blue’ written in red ink, etc.) (Inhibition), and finally switch back and forth between verbalizing the ink color of words versus attending to what the word said (a color name inconsistent with the ink color) (Inhibition Switching).

Collective findings suggest that “switching’ was the largest area concern which is common in those with ADHD, and possibly weak visual tracking/localization.

EDUCATIONAL

Given prior school test results that placed AB in the well below average range for processing speed, his writing skills are at great risk; weak processing speed correlates very strongly with weak/inefficient writing as well as potential dysgraphia. As such, writing and math tasks (both involving pencil manipulation and paper) were administered to see if AB is struggling with inefficient fine motor and writing/math in particular.

As can be seen in the table below, not only is the efficiency for which he can print letters and numbers weak relative to his above average intelligence, but also weak relative to same age peers as well with low average to well below average on writing and math tasks.

Subtest	Raw Score	Standard Score	95% Confidence Interval	Percentile Rank	Normal Curve Equiv.	Stanine	Grade Equiv.	Age Equiv.	Growth Score
Alphabet Writing Fluency	10	91	75–107	27	37	4	1.6	7:0	485
Sentence Composition	—	74	63–85	4	13	2	1.4	6:6	458
Math Fluency—Addition	16	88	75–101	21	33	3	2.0	7:0	427

Subtest	Raw Score	Standard Score	95% Confidence Interval	Percentile Rank	Normal Curve Equiv.	Stanine	Grade Equiv.	Age Equiv.	Growth Score
Math Fluency—Subtraction	9	87	77–97	19	32	3	1.9	7:0	421

He achieved in the low average range for the speed for which he could print the letters of the alphabet (a timed task that he worked hard at to complete as many letters of the alphabet as possible in 30 seconds), well below average on sentence creation tasks (with even more difficulty forming his own sentences from scratch than combining those provided for him, albeit both problematic), and below average for the speed in which he could solve basic addition and subtraction questions with pencil/paper. It is very important to note that he correctly combined and created sentences verbally for the examiner and quite rapidly, but performed well below average in his overall ability to form written sentences. This lends to a formal diagnosis of Dysgraphia.

Subtest Component	Raw Score	Standard Score	Percentile Rank	Normal Curve Equivalent	Stanine	Qualitative Description
Sentence Composition						
Sentence Combining	4	88	21	33	3	Below Average
Sentence Building	0	63	1	<1	1	Well Below Average

Intensive support for writing and math with respect to the written aspects of it is required to help bring AB to grade level. Accommodations to test his knowledge of academic material in verbal as opposed to written form are also imperative. Learning to keyboard efficiently without looking at the keys will lend to better writing outcomes than free printing/writing ever will, and learning to utilize voice to print will be an important part of his learning and academic success.

Composite	Sum of Subtest Standard Scores	Standard Score	95% Confidence Interval	Percentile Rank	Normal Curve Equiv.	Stanine	Qualitative Description
Math Fluency	175	87	79–95	19	32	3	Below Average

These performance patterns are not a surprise given prior testing by the school that indicated very weak processing speed and low average sentence building (April, 2017). His sentence combining results were deemed much higher (high average) by the school in April 2017 than by the examiner in June 2017. The examiner is happy to share his raw data to show how problematic his performance was. In addition, the time that it took AB to complete these sentence construction tasks was astronomical relative to same age peers. Time is not taken into account in the sentence construction scores, but his performance would be on the floor relative to same age peers had the tasks been timed. **AB fiercely struggles with written output to such a concerning level that he shuts down at the thought of having to put his ideas and answers to paper.** This struggle alone would explain tendencies to shut down or act out at school. It is also important to note that his written efficiency for math facts (timed him writing out answers to

basic addition and subtraction questions) was deemed much higher (average) by the school in April 2017 than by this examiner in June 2017 (below average).

PSYCHOLOGICAL

AB's performance patterns across the M-PACI, Rorschach Ink Blot Personality, and BASC-3, suggest that he is **shy and introverted with underlying dependency needs**. He has internalized a motivation to please significant others, which presses him to do the "right thing" and avoid making mistakes. As a result, he tries to be firm and steadfast, and he feels comfortable in structured situations and with routines.

Clinically, AB's profile can best be understood as reflecting **an intense conflict between his desire to withdraw from personal relationships, obsessive thoughts and compulsions, and a growing sense of unworthiness and despondency**. He would very much like to depend on peers and family, but he **has learned to anticipate disillusionment and discouragement in these relationships**. His deflated sense of self-worth and his expectation of personal failure and social humiliation limit any efforts he might make to become autonomous or to overcome his dispirited feelings. Moreover, he believes that others have either deprecated or disapproved of his occasional attempts at confidence building or self-assertion. Thus, he sees no alternative but to give up hopelessly or give in to his sorrowful state. This restriction of choice stirs deep resentment within him. As a consequence, he experiences a **generalized anxiety with distinct obsessive-compulsive features, interspersed at times with petulant and passive-aggressive acts**.

The dependent security that he seeks, however, is seriously jeopardized when he voices his discontent too strongly. To bind his resentment and thereby protect against further loss, he will characteristically withdraw, resolve his conflict in occasional obsessions and compulsions, and become moderately anxious and depressed.

AB's periodic moodiness may only add to the humiliating reactions he evokes in others, which serves then to further reinforce his self-protective and conflicted withdrawal. Every avenue of potential gratification seems full of conflict. **He fears standing on his own because of his shaky sense of self-esteem, and he cannot depend on others because of his fearful mistrust of them**. Anticipating disillusionment, he may on rare occasions behave petulantly and irritably, thereby incurring the very rejection and disappointment he expects but tries to avoid.

Unable to overcome the feeling that life is problematic and unable to overcome the deficits he sees in himself, he is likely to turn against himself, expressing a sense of personal unworthiness and uselessness. He sees few of the attributes he admires in others in himself, and this awareness intrudes on his thoughts and interferes with his behavior, ultimately upsetting his capacity to cope effectively with ordinary life tasks. Simple tasks may demand more energy than he can muster. What few effective efforts he can make to deal with life's tasks may give way under the most modest of family or social pressures.

CURRENT CLINICAL SIGNS

Psychological testing (consistent with neuropsychological test results) also indicated the presence of **ADHD symptoms. Anxiety worsens his ADHD.** At times he also reacts to stress-producing experiences that amplify ADHD features. Lacking insight and seeking to downplay emotional complaints, he is inclined to resist the suggestion that his difficulties have a psychological origin or concomitants. For example, attention is weakened further from his tendency to turn his anger inward and ruminate about these things. Additionally, the role that academic issues play within the family should be explored.

There is evidence of moderate depression. He exhibits a level of downheartedness that is **consistent with dysthymia.** Preoccupied with matters of personal adequacy and plagued with self-doubts and awkwardness, he may be bothered by the thought that he is somewhat physically unattractive or inferior. Periodically sad and lonely, he is likely to have **yearnings for greater social acceptance if not affection.** Because of his defensive efforts to dampen his emotions and hide his despair, his sadness may be contained sufficiently to fade into his typically bland appearance. Nevertheless, self-deprecatory thoughts and attitudes of futility can be readily elicited by skillful probing.

AB's family history regarding mood disorders should be explored if emotionality persists as he gets older; it may suggest that genetic or neurologically based factors are involved in his condition.

TREATMENT CONSIDERATIONS

AB has a strong underlying need to be liked and accepted. Although his anxieties contribute to some initial hesitation and reluctance to fully participate in the therapeutic process, he will typically grant the therapist his respect because the therapist is an adult whose role is to listen to and help him with his problems. The therapist will be able to gradually build trust with the child by offering empathy and understanding without judging him. Identifying and focusing on strengths and competencies will also facilitate developing the therapeutic relationship. Nonetheless, AB may avoid exposing weaknesses or reporting relevant complaints because he lacks self-confidence and is disinclined to take chances.

Treatment efforts for AB should proceed at a slow pace and would be best directed toward countering his withdrawal tendencies. Introversive and anxiety will be walls for the therapist to work on. Minimally introspective and exhibiting diminished affect and energy, he must be prevented through therapy from becoming totally isolated from the support of a benign environment.

He probably engages only in those activities that are required by school or family obligations. By shrinking his interpersonal milieu, he precludes exposure to new and possibly benign experiences. Of course, this is his preference, but such behavior only fosters his isolated and withdrawn existence. Therefore, the therapist should seek to **ensure his continuation of even a modest amount of social activity to prevent him from becoming lost in asocial and fantasy**

preoccupations. Encouragement of excessive social activity should be avoided, however, because his tolerance in this realm is limited.

Nevertheless, it is most important to **avoid being put off by his distancing behavior.** AB's willingness to engage in therapy, although hesitant, may create the impression that progress will be rapid. In fact, therapy is likely to recapitulate his inner **conflict between wanting acceptance and fearing rejection.** Sensitive to further humiliation, he may view therapy as dangerously self-revealing. Persuading him to forgo this expectation may prove slow and arduous. Support should be provided to ease his tensions, particularly **his feeling that the pressures and demands of adults inevitably result in disapproval.**

It would be especially helpful for AB's parents and grandparents to **encourage him to become more independent and less passive.** Overprotection may only aggravate his immaturities and helpless feelings. The key is acceptance, not protection, conveying warmth and understanding, simply being there as a soothing and comfortable presence. In this way, he will not feel alone as he tries to cope with his pain. He can **learn to tolerate facing his difficulties without being devastated by them.**

It is equally important for AB's guardians to **pull AB out of self-absorption and a fantasy world.** He doesn't really want to isolate himself; it is just easier for him to withdraw than to tune into reality.

Efforts should be made to draw him out and get him **more involved in a normal social life, with constant, tangible parental support and guidance.** The task is to maintain his forward momentum, no matter how small it is, so he can continue to build a sense of mastery.

Owing to AB's periodic anxious and depressed feelings, his parents should **provide a routine of warm and affirming expressions of love. A prescription for antidepressant or anti-anxiety medication may be considered, but it should be very closely monitored, especially in the earlier phases of treatment.**

Attempts to cognitively **reorient his attitudes** may be useful in gaining insight into his unwarranted fears and in motivating interpersonal sensitivity and activity. **Behavior-modification techniques may be valuable in developing new social skills.** Group and family methods may be useful in encouraging and testing out constructive social attitudes. In these benign settings, he may begin to alter his social image and acquire the motivation and the skills needed for developing a more effective interpersonal style. Preceding or combining group programs with individual treatment sessions may aid in forestalling untoward social discomforts.

Efforts to enhance AB's social interests must proceed in a slow, step-by-step manner so he is not pushed beyond tolerable limits. Careful and well-reasoned therapeutic communication may foster his willingness to adopt more rational and realistic beliefs about himself and others. The therapist should be alert to the spheres of life in which the child possesses positive emotional inclinations and should encourage him to undertake activities consonant with these tendencies.

SUMMARY

Testing was desired by AB's parents and grandparents given school reports of behavioral concerns that have been escalating in addition to reported inattention and social concerns at school. Full neuropsychological and psychological evaluations were completed in addition to select writing and math tasks. Testing indicated **diagnoses of moderate to severe ADHD, Dysgraphia, LD NOS (weak working memory, inattention, weak processing speed and executive functioning) and Adjustment Disorder with mixed emotions and behavior including OCD symptoms and Dysthymia.** Results are discussed in more detail below.

Neuropsychological

Results indicated **high to above average overall intellect, above average to superior reasoning skills** (across verbal, visual-spatial, and fluid reasoning tasks), **below average working memory, and mixed processing speed performance with below average performance on the Coding task and average performance on the Symbol Search task** that collectively generated the Processing Speed score.

Performance on all language tasks was average to superior, with the exception of language tasks that were very taxing on working memory, thereby emphasizing weak working memory as opposed to language processing per se. Language processing will fail when there is too much of it, particularly when the information is rote and not meaningful. This is largely due to weak working memory as opposed to language. Having said that, speech onset was delayed as a youngster indicating possible language processing concerns. **No concerns with visual-spatial skills per se were indicated with average to superior performance on tasks, and above average to superior fluid reasoning. AB struggled with both verbal and nonverbal working memory tasks**, with low to below average performance on the language-based and below average on the picture-based working memory tasks.

He achieved **below average performance on tasks with both visual-spatial and visual-motor components** (e.g. Imitating Hand Positions). It is also noteworthy that **the difference between performance with his dominant and non-dominant hands proved to be more pronounced than that of same age peers.** Memory testing indicated **high to above average memory for faces and well below average memory for story information** (provided the information verbally and reported the information back to the examiner verbally). Attention testing was also very comprehensive and results indicated **moderate to severe ADHD.** Executive functioning was also weak in low to below average ranges. Collective findings suggest that 'switching focus' was the largest area concern from attention testing, and **weak visual tracking/localization** is likely also present (may grow out of this).

Educational

Moderate dysgraphia was evident impacting the efficiency/accuracy for which he can print both letters and numbers, and performance is particularly weak when creating his own sentences.

Psychological

AB is a good boy who can be misunderstood. He lacks confidence and longs for nurturance and trust but is afraid of being let down. He becomes oppositional if he feels he is not loved or understood but quickly calms down and is very sweet if he views adults as kind and reasonable with him. He needs kindness and compassion to be obvious and can sometimes take stark demands as being picked on or misunderstood. AB shies away from getting close to others out of fear of getting hurt and instead withdraws and often plays alone. His chronic inattention and writing (dysgraphia) concerns lead to additional frustration and withdrawal. Despite these concerns, he is of above average intellect with tremendous strengths including very superior reasoning skills and vocabulary knowledge. It is important for people to understand that AB is an extremely intelligent young boy who is struggling tremendously due to weak attention, working memory, written output and social problems. He needs assistance on how to develop friendships and bonds with others as lack of social success leads to him shutting down further still. There are environmental influences that have contributed to some of his emotionality and behaviors including family dynamics (academic/cognitive concerns, conflict between biological parents, inconsistent co-parenting and time share between parents, new siblings and second father unit, uncertainties regarding future living quarters, insecurity regarding friendships, etc.). AB endorsed family concerns via his BASC-3 responses that fell in the 'at risk' range.

AB will behave better at school once his teachers understand his cognitive profile and learning concerns better and respond to him with nurturance and care. Learning and social issues need to be addressed with an I.E.P. Having a counselor/adult to talk to and listen to him alone regularly will be helpful. Recommendations for a counselor have been outlined in the Treatment section earlier in this report under Psychological as well as in the Recommendations section at the end of this report. Given numerous learning and environmental influences impacting AB at this time, Adjustment Disorder with mixed behavior and emotions seems an appropriate diagnosis. He has some mild OCD symptoms and dysthymia that should slowly correct with more adult support and therapy. DSM V Diagnoses below:

Axis I

- ADHD Combined with both inattention and impulsivity
- Dysgraphia
- LD NOS (weak working memory, attention, processing speed & executive functioning impact general learning)
- Adjustment Disorder with mixed emotions and behavior (anxiety symptoms such as OCD tendencies, sadness, and issues with authority)
- Dysthymia

Axis II Not Applicable

Axis III Asthma

	Headaches
Axis IV	Social Problems
	Behavioral Problems
	Family conflicts
Axis V	65 (GAF)

RECOMMENDATIONS

SCHOOL

General

Intensive support for:

- (1) Dysgraphia (as it impacts all writing including sentences and numbers)
- (2) moderate inattention (and impulsivity) and weak executive functioning
- (3) weak working memory
- (4) social skills
- (5) and some support for affect and behavior

Dysgraphia and weak Processing Speed

- (6) learn to keyboard efficiently without looking at keys (daily pull out)
- (7) learn to utilize voice to print technology (daily pull out)
- (8) spelling assistance
- (9) oral testing and answering as opposed to written
- (10) extended time for all writing work
- (11) reduce amount of written work in lieu of dysgraphia, e.g. every other math question or sentence construction once has demonstrated mastery of concepts

Inattention, Working Memory and Executive functioning

- (12) short, concise, repeated and multi-modal instructions
- (13) frequent review of prior material
- (14) ask AB to repeat instructions back to ensure understood
- (15) help keep him on task
- (16) break tasks down into smaller steps for him
- (17) wait until steps are completed before offering additional steps
- (18) COGMED program to improve working memory
- (19) Eye contact, touch shoulder, etc. to engage before giving info
- (20) private room for test taking
- (21) preferential seating for least distracting locations
- (22) Homework is to go into his bag along with checklists and a place for his parents to sign showing they reviewed what needed to be done, ensured it was completed, etc. Teacher-parent meeting should take place if either not following through with the program.

Social Skills

- (23) lunch/social skills group at school to learn social skills and foster friendships
- (24) regular (weekly or biweekly) communication between school counselor and outside counselor to assist program development and implementation at school

Affect and Behavior

- (25) Rapport development between school counselor and AB as someone he looks forward to seeing and that he can trust
- (26) Minimally weekly meetings with school counselor
- (27) Regular reward, praise and attention from teachers. When AB feels that people care and are on their side he is the sweetest boy. Gentle gloves for teachers when it comes to interacting with AB will get the best out of him. He can become oppositional if he senses he is not understood or is being attacked.
- (28) Teachers should share both praises and concerns with the school counselor on a regular basis

Outside of School

Dysgraphia

- (29) Get AB a small laptop for all writing tasks that he brings to school and uses after school
- (30) Cover the keys initially to help facilitate a motor memory for finding keys, and make sure his index fingers are always on the 'f' and 'j' keys with other fingers laying on keys to the immediate sides of those (mark the 'f' and 'j' keys only)
- (31) Keyboarding practice without looking at the keys. This is the single greatest thing that can be done to help facilitate written output for AB at this time.
- (32) Teach voice-to-print to help him get his thoughts out into written form by bypassing sluggish and problematic written output.

Attention and Working Memory

- (33) Speak with prescribing physician re. medication options for ADHD. Inform the physician of his anxiety symptoms and sadness.
- (34) Repeat the attention tasks specifically on medication for attention to determine the utility of the medication and amount at improving his attention. These tasks can be repeated with different types of medication, different amounts, and/or also at different times of day to determine their effectiveness. It is important to relay that these specific tests used have minimal to no practice effects meaning scores do not readily improve with practice. As such, large improvements on the tasks would be indicators of impacts from medication as opposed to from practice. This helps us gauge what the medication is doing to make medication management decisions.

- (35) COGMED program. 5 week program 45 minutes per day followed by one year of additional 20 minute sessions to significantly improve working memory. Ask Dr. Cestnick about this program.
- (36) See Appendix.

Counselor

Minimally once per week to work on:

- (37) Social Skills
- (38) Self-esteem
- (39) Anger and affect management
- (40) Fighting fears
- (41) Combating sadness
- (42) Family dynamics and parent coaching/counseling

Counselor should read this report in full, particularly the psychological section, for additional suggestions on what and how to do when approaching therapy with AB. Counselor should have regular conversations with his school counselor.

Family Coaching

- (43) Increase levels of praise and pride, while reducing criticism to counteract oppositional tendencies.
- (44) Reprimand use of force in play and show him better behaviors that he can implement in place of impulsive ones that can be physically aggressive or inappropriate.
- (45) Praise and reward kindness, cooperation, reaching out to peers, etc. (all appropriate social skills)
- (46) Increase the amount and quality of one-on-one time with AB. Make the time more interactive. The following are examples of what could be done:
 - a. He starts to draw a line, then parent does, then AB, then parent, etc. until a picture made by both is complete
 - b. Write topics on cards and place them in a box and pull them out to get each other's thoughts on subjects, e.g. "what makes a good friend" "what is love" "what does the world need most" "what would really help the world"
 - c. Ask AB to show you in detail the things he enjoys doing, e.g. how to play one of his videogames – play 2 player.
 - d. Set goals together and accomplish them, e.g. to build something over one month or a few months, getting each other's input and creating it together, or both AB and his parent(s) say they are going to make new friends and share their stories about what is working or not working.
- (47) A more consistent, shared and predictable parenting schedule between his biological parents.

- (48) Decision-making with respect to where the kids will be living to help improve predictability and reduce unknowns.

Other

- (49) Big Brother's for an additional male adult influence in his life.
- (50) Hold a school meeting to discuss these findings.

It was a pleasure working with AB and your family. Please reach out for assistance with the implementation and/or referral of services for any of the above listed recommendations.



Laurie Cestnick, Ph.D., M.Ed.

APPENDIX

Attention Recommendations

To avoid being easily distracted by noises/stimuli, consider the following:

1. Work in a quiet room.
2. Arrange for use of libraries and quiet rooms for studying at school and for homework.
3. Use a machine that creates white noise (background noise) to drown out distracting sounds.
4. Use headphones that play white noise or soothing music that drowns out distracting sounds. Tell your family/teachers/friends how to get your attention.
5. Find a quiet area where frequent and quick breaks can be taken.

To handle interruptions and multiple tasks, consider the following:

6. Put up a “Do not disturb” sign until homework is done.
7. Do one task at a time. Do not start a new task until the current one is complete.
8. Initiate texting/calls/communication as opposed to being available to others as these come through.
9. Teachers to help set priorities and manage workload.
10. When someone interrupts you, take a deep breath, pause, put your work down, and slowly turn to the person. Sometimes, if you make the person wait while you transition, the person will hesitate to interrupt you again.
11. When interrupted, write down what you were doing so that you remember it when you complete the interaction.
12. Ask them to come back later or tell them you will get back to them when you are ready. You would only do this if you had a plan to remember your commitment.
13. Learn to ignore specific (nonimportant) interruptions from students.
14. Determine when most people are not working and work during those hours. Common times to try include early mornings, late nights, weekends, holidays and lunch hours.

To assist with feeling ok being in one place for a long period of time, consider the following:

15. Arrange your work space so you can move around a lot, e.g. getting materials, sharpening pencils, going to lockers, etc.
16. Arrange your workspace so you get up frequently to get items, e.g. books/phone.
17. When the phone rings, stand up to answer it.
18. Choose a desk location making it less obvious that you take frequent breaks.
19. Exercise as vigorously as possible during breaks or lunch hour.

To assist with not learning too much information too quickly, consider the following:

20. Obtain written notes/materials from teacher before classes begin.
21. Sit in the front to more easily follow what is being said.
22. Audio or videotape classes. Use voice-to-print to transcribe them
23. Hold a review meeting with other students a few days after the class to review notes.