Psychoeducational Evaluation

Name: Devin
Date of Birth: 9/19/1990
Dates of Evaluation: 3/4/2015; 3/16/2015; 3/18/2015

Basis for Evaluation:

Clinical Interview
Behavioral Observations
Conners' Adult ADHD Rating Scale-Self-Report: Long Version (CAARS-S: L)
Conners' Adult ADHD Rating Scale-Observer: Short Version (CAARS-O: S)
Conners Continuous Performance Test 3 (CPT 3)
Conners Continuous Auditory Test of Attention (CATA)
Nelson-Denny Reading Test (NDRT)
Wechsler Adult Intelligence Scale IV (WAIS-IV)
Woodcock-Johnson – Tests of Achievement IV (WJ-IV: ACH)

Reason for Referral

Devin had been previously diagnosed with ADHD; she referred herself for testing to update her diagnostic information and so that a more in-depth assessment could be administered.

Background Information

Devin is a twenty-four year old second year law student at St. Mary's University. Prior to enrolling in law school she completed an undergraduate degree in International Studies at St. Edwards University in Austin, Texas.

Devin was born in Porterville, California and raised in Visalia, California and Austin, Texas. She was raised in an intact family with a younger sister. Both of her parents hold bachelor's degrees. Devin reported that she attended four different schools in kindergarten through sixth grade and two different schools in seventh through twelfth grade. Devin did not repeat any grades, but her teachers advised her parents that she needed to repeat kindergarten because she was "too hyper." In addition, she reports that she frequently got into trouble during her elementary and secondary schooling because she wouldn't stay in her seat, had trouble following directions, talked all the time and walked around the classroom disrupting other students. Beginning early in her elementary school years, Devin's teachers recommended testing for attention and focus issues, but her parents refused to allow the testing. When asked why her parents didn't want her to be tested, she remarked, "They (her parents) were too Asian" and didn't believe in the testing. Finally, when she was a sophomore at St. Edwards University, she was referred for assessment of ADHD because of the significant difficulties she was experiencing trying to sustain attention and focus in and out of the classroom. At that time she was diagnosed with Attention Deficit Hyperactivity Disorder, Combined Type (Severe) and pharmacological intervention was recommended. Medications were begun at that time. However, she has had repeated problems with the side effects of ADHD medications. Doctors have tried both Adderall XR and Vyvanse with little to no success; she is currently on Concerta and reports fewer side effects than previous medications.

Devin reports being a hands-on learner, but further indicated that she learns best by working through examples and exercises. When learning, she prefers to receive information via demonstrations, and through directed practice. When asked why she prefers to receive information through these modalities,

she remarked that these particular teaching/learning modalities help her keep engaged and attentive. Devin employs a variety of study techniques; she shared that first and foremost, she has to study in a quiet setting because noise and other distractions impede her ability to keep track of her thoughts. She also indicated that she outlines and highlights while reading and studying because it helps her sustain attention for more than 5-7 minutes at a time, that she engages in a timely review of her notes during the school week and that she is part of a study group.

Devin stated that she has a short attention span, is fidgety and distractible, and that she has trouble trying to concentrate in class and when she is studying. Taking tests is also very difficult for her, as her inability to sustain focus and attention during the test makes her very anxious. Devin shared that when taking tests, she surveys the test before beginning, eliminates incorrect answers as she is taking a test, and that she skips difficult questions and comes back to them after she has answered the questions she readily knows. Finally, Devin shared that she prefers short-answer, multiple-choice, fill-in the blank and essay exams.

Devin reports that, on a daily basis, she has problems with concentrating during class lectures, beginning assignments, keeping up with assignments, procrastination, keeping appointments, concentrating when studying, being prepared for class and/or tests, understanding what was read, and organizing written papers.

Behavioral Observation

Devin arrived a few minutes late for all of her testing sessions. The assessment was divided into three separate testing sessions of approximately 2½ hours each. The Triage assessment was comprised of the Conners' Continuous Performance Test 3 (CPT 3), the Conners Continuous Auditory Test of Attention (CATA), the Conners' Adult ADHD Rating Scale-Self-Report: Long Version (CAARS-S: L), the Conners' Adult ADHD Rating Scale-Observer: Short Version (CAARS-O: S), and the Nelson-Denny Reading Test (NDRT). The CAARS assessments were conducted via the use of paper and pencil and the remaining three assessments were administered on the computer. It was difficult for Devin to sustain focus throughout the administration of the CPT 3, the CATA and the NDRT. In fact, she spent a great deal of time during the administration of these computerized tests looking around the testing room, staring at the clock on the wall beside her and rocking in time with the ticking of clock. In addition during the administration of each of these assessments she seemed to stop processing information for several seconds to minutes at a time. Specifically, during the CPT 3, Devin sat for one minute staring at the computer screen with her hands in her lap while various letters were flashed on the screen. When she did rejoin the test, she did so slowly, which seems to be a pattern when she experiences one of these "checked-out" non-processing phases.

She also "checked out" for a long enough period of time during the NDRT Comprehension subtest that the test timed-out while she was still working on one of the reading selections approximately three quarters of the way through the subtest. While working on the Comprehension subtest of the NDRT she tried to use shortcuts to speed up the process so she wouldn't have to read each of the reading selections completely. Unfortunately, this process did not offset her "checked out" time sufficiently, hence the Comprehension subtest timing-out before she had finished all the reading selections.

On the WAIS-IV, only Devin's subtest scores of the Verbal Comprehension Factor Index all fell in the average range. Within both the Perceptual Reasoning and the Working Memory Factor Indexes, she had only one subtest score in each area that fell within the average range and on the Processing Speed Factor Index she had no scores fall in the average range. In addition, Devin had a great deal of difficulty with the Block Design subtest. Not only did she put the designs together very slowly, she also was not able to

"see" and replicate all but one of the 9-block designs. On the design she did replicate (#10), the design was not turned on its point – so it too was scored as incorrect. As the Digit Span subtest was ending, Devin began rocking side-to-side in time with the ticking of the clock on the wall behind her and continued this rocking motion (off and on) throughout the rest of the WAIS-IV assessment. During the Symbol Search subtest, she seemed to stop for several seconds at a time and just sat and stared at the response booklet frequently. This really slowed down her responses and earned her a scaled score of 4 (at the bottom of the borderline range). Approximately half way through the Visual Puzzle subtest, Devin requested to take a break so she could go to the bathroom. She immediately followed up this question with the statement, 'Oh, I guess I should wait till the end of this test;" she did take a five minute break as soon as this subtest was completed. Finally, on the Picture Completion subtest, she seemed to not be able to attend long enough to figure out what was missing from each stimulus item. If she didn't know the answer within the first five seconds of viewing a stimulus picture, she would indicate that "nothing" was missing or that she didn't know what was missing.

On the Woodcock-Johnson IV: Tests of Achievement (WJ-IV: ACH), Devin seemed to experience significant difficulty sustaining concentration and focus. During the administration of the second subtest (Applied Problems),

she stopped paying attention when the problems were being read to her and had to reread the problems several times for herself. In addition, she began playing with the pages of the testing book that were on her side of the book, she also played with her pencil, and spent a large amount of time looking around the room and staring at the top of the testing table. It took her a couple of minutes each time to return her attention to the task at hand.

By the fourth subtest (Passage Comprehension), she was rocking side-to-side in time with the ticking of the clock on the wall behind her and she frequently blurted out answers to the reading passages; in fact, on one of the reading passages she provided four different answers in rapid succession until she finally came to her final answer.

During the Writing Samples subtest (subtest six), Devin requested to have several of the writing prompts repeated a second time because she wasn't paying attention the first time each prompt was read. In addition, she frequently seemed to stop processing and instead sat looking around the room, staring into space, yawning and stretching, jiggling her leg, playing with the pencil she was using, or doing nothing at all; she would "check back in" several minutes later and would slowly begin to work on the task at hand. These kinds of behaviors continued throughout the rest of the WJ-IV: ACH. Devin's overall low scores in reading and obtained scores on many of the other subtests on the WJ-IV:ACH, are directly related to her inability to sustain attention and focus for longer than 5-7 minutes at a time, Therefore, her scores on the Woodcock-Johnson should be viewed only as "functional abilities."

On the Conners Continuous Performance Test 3 (CPT 3) and the Conners Continuous Auditory Test of Attention (CATA) Devin's scores indicate severe issues with inattentiveness and sustaining attention over time; her scores on the CPT 3 also indicate significant issues with vigilance. In addition, it was readily apparent that she repeatedly lost her focus and concentration throughout the CPT 3 and the CATA as she experienced ever lengthening episodes of "lack of processing" followed by "recovery time." Upon completion of both assessments, Devin remarked that the CPT 3 and the CATA were "just awful!" It should be noted Devin had not taken her ADHD medication (as instructed) prior to any of the assessments. However, she shared that her ADHD medications never completely ameliorated the effects of her ADHD condition; she can only take small dosages of the medication because of the severe side effects she experiences.

Devin was fully cooperative with the evaluation process. However, she experienced difficulty concentrating and sustaining focus throughout the assessment. She appeared to consistently put forth her full effort on the testing and to respond to items in a conscientious and serious manner. Therefore, the results are believed to be an accurate representation of Devin's current "functional" cognitive, academic and emotional functioning. Malingering did not occur. This was evidenced by the fact that Devin did not miss easy questions/problems and pass harder ones; her response time increased with item difficulty; she was cooperative during the entire assessment; and the discrepancy between her claimed initial symptoms and the assessment findings can be explained by the areas in which she is experiencing significant problems.

Results of Evaluation: Cognitive

Wechsler Adult Intelligence Scale – IV

WAIS-IV Factor Index Scores	Scaled Scores	Percentile Rank	Description
Verbal Comprehension (VCI)	100	50	Average
Perceptual Reasoning (PRI)	81	10	Low Average
Working Memory (WMI)	86	18	Low Average
Processing Speed (PSI)	76	5	Borderline
Full Scale (FSIQ)	83	13	Low Average
General Ability Index	90	25	Average

Verbal Comprehension Scale	Score	Description
Vocabulary	11	Average
Similarities	10	Average
Information	9	Average
Comprehension*	12*	High Average

Perceptual Reasoning Scale	Score	Description
Block Design	5	Borderline
Matrix Reasoning	6	Low Average
Visual Puzzles	9	Average
Figure Weights*	8*	Low Average
Picture Completion*	7*	Low Average

***Scores are not used to calculate Index scores or Full Scale IQ**

Working Memory Scale	Score	Description
Digit Span	6	Low Average
Arithmetic	9	Average
Letter-Number Seq.*	8*	Low Average

Processing Speed Scale	Score	Description
Symbol Search	4	Borderline
Coding	7	Low Average
Cancellation*	7*	Low Average

Devin's intellectual abilities were assessed using the Wechsler Adult Intelligence Scale – IV. The WAIS-IV is a widely used measure of both crystallized (learned) intelligence and fluid (problem solving) intelligence. The WAIS-IV Factor Index standard scores are based on a mean of 100, with a standard deviation of 15. Individual subtest scores are based on a mean of 10 with a standard deviation of 3. The average range of subtest scores is between 9 and 11. An individual's scores are compared to age based norms in order to identify individual patterns of functioning relative to other people, and are also compared to each other to identify individual patterns of strengths and weaknesses.

Devin's overall intellectual functioning is in the low average range as indicated by an obtained Full Scale IQ (FSIQ) of 83; her General Ability Index (GAI) of 90 is in the average range. Her Verbal Comprehension Index (VCI) score of 100, at the 50th percentile, is in the average range. However, her Perceptual Reasoning Index (PRI) score of 81, at the 10th percentile, is at the bottom of the low average range. Her Working Memory Index (WMI) score of 86, at the 18th percentile, is in the low average range and her Processing Speed Index (PSI) score of 76, at the 5th percentile is in the borderline range. Devin's Index scores are widely varied and even though her Perceptual Reasoning Index score is significantly lower than expected, her General Ability Index Score (GAI) was calculated; her GAI of 90 is a better indicator of her overall cognitive abilities and as such will be used for comparison to the rest of her test battery standard scores. (The GAI provides an estimate of general cognitive ability, with reduced emphasis on working memory and processing speed relative to the Full Scale IQ.) Devin's lack of ability to attend and focus throughout most of the subtests significantly impacted her scores on the WAIS-IV. Many times during the assessment, she was observed to be staring at various testing kits and books in the room, becoming fixated visually on the testing table top, playing with the pencil she was using and rocking side-to-side or forwards and backwards in time with the ticking of the clock on the wall behind her. She also stopped processing information for several minutes at a time and would only resume work very slowly after she had stopped processing.

Verbal Comprehension Index

The Verbal Comprehension Index is designed primarily to assess the use of specific cognitive constructs applied with orally presented information. These constructs include retrieval of verbal information from long-term memory and reasoning with verbal information. These tests are not timed and include answering oral questions about word meanings, general knowledge, and explaining relationships between two things. Devin's scaled scores on the subtests of this Index ranged from a low of 9 (average range) on the Information subtest to a high of 12 (high average range) on the Comprehension subtest. Devin also earned a scaled score of 10 (average range) on the Similarities subtest and a scaled score of 11 (average range) on the Vocabulary subtest.

Perceptual Reasoning Index

Devin's Perceptual Reasoning Index score of 81 is her second lowest Factor Index on the WAIS-IV and indicates that overall, her broad visual-spatial skills, and analysis and synthesis of information abilities fall at the bottom of the low average range of intelligence. Overall her subtest scores in this area were highly variable as they ranged from a low of 5 (borderline range) on the Block Design subtest to a high of

9 (average range) on the Visual Puzzles subtest. Devin also earned a scaled score of 6 (low average range) on the Matrix Reasoning subtest, a scaled score of 7 (low average range) on the Picture Completion subtest, and a scaled score of 8 on the Figure Weights subtest. Because of the wide spread of scores (SS=5 to 9) in this area, a single composite score is not representative of her abilities on this Index. Therefore each subtest score must be considered as a stand-alone score.

Working Memory Index

The Working Memory Index (WMI) measures one's ability to hold information in conscious awareness, manipulate it in some fashion and produce a result. Working Memory is an integral part of higher order cognitive processes and a critical part of developing fluid reasoning abilities. Devin demonstrated a low average (SS =86) ability to keep several pieces of information in conscious thought at the same time, to manipulate them successfully and to sustain attention and concentration throughout the process. Devin's scores in this area are somewhat varied as they range from a high of 9 on the Arithmetic subtest to a low of 6 on the Digit Span subtest. This indicates that she does better retaining auditory information when information is not presented in a void, but is presented with supporting details and/or when auditory information can be repeated.

Processing Speed Index

The Processing Speed Index (PSI) is a measure of thinking speed, planning ability, and motor response speed. Processing speed is critically linked to reading performance, and to higher order intellectual tasks that require a high degree of fluidity. It is comprised of two subtests: Symbol-Coding and Symbol Search. The Symbol-Coding subtest measures visual-motor speed and short-term visual memory; the Symbol Search subtest requires planning, sustained attention, and visual memory. Devin's Processing Speed Index standard score of 76 is at the 5th percentile (borderline range) and is her lowest Index score. Devin's overall subtest scores in this area are somewhat varied as they range from a low of 4 (borderline range) on the Symbol Search subtest to a high of 7 (average range) on both the Coding subtest and the Cancellation subtest.

Devin's overall performance on the WAIS-IV was lower than expected considering she is a second year law student who has been progressing at a regular pace since she entered the law school. Her scores on the WAIS-IV were also highly varied as indicated by Factor Index Scores that ranged from a high of 100 to a low of 76 a significant spread of 1½ standard deviations. It's obvious that Devin's deficits in perceptual reasoning, working memory and processing speed (being caused by her severe problems with attention and focus) are negatively impacting her overall cognitive scores making it impossible to get a "true" measure of her cognitive abilities.

Results of Evaluation: Achievement

Woodcock-Johnson IV: Tests of Achievement (WJ IV: ACH)

Academic achievement was measured using the Woodcock-Johnson IV – Tests of Achievement (WJ-IV), Form A. This battery is comprised of both timed and untimed tests. An age norm of twenty-four years was used in the scoring and assessment of the WJ-IV. The WJ-IV subtests are generally untimed, except for Math Fluency, Reading Fluency, and Writing Fluency, all tasks that require rapid processing and product production.

WJ-IV: Reading	Standard Score	Percentile Rank	Description
Broad Reading	86	18	Low Average
Letter-Word Identification	94	35	Average
Passage Comprehension	84	15	Low Average
Sentence Reading Fluency	85	15	Low Average
Reading Comprehension	82	11	Low Average
Passage Comprehension	84	15	Low Average
Reading Recall	80	9	Low Average
Reading Fluency	88	21	Low Average
Oral Reading	96	39	Average
Sentence Reading Fluency	85	15	Low Average
Reading Rate	85	16	Low Average
Sentence Reading Fluency	85	15	Low Average
Word Reading Fluency	86	17	Low Average

The Broad Reading cluster is a comprehensive measure of all components of reading ability, including decoding, reading speed, and the ability to comprehend connected text while reading. Devin's scores in this cluster are Letter-Word Identification (SS=94; average range), Passage Comprehension (SS=84; low average range), and Sentence Reading Fluency (SS=85; low average range). Her overall score on this cluster is 86 (18th percentile). This means that 82% of Devin's peers had higher Broad Reading scores than she did. It should be noted that the only reading-related subtest (Letter-Word Identification) in which Devin obtained an average score, evaluated reading words in isolation only; it did not involve reading for meaning or understanding.

Devin's lowest reading scores on the WJ-IV occurred on Passage Comprehension and Reading Recall subtests. Passage Comprehension measures the ability to use semantic cues to identify a missing word in text, a reading-writing ability. Devin earned a standard score of 84 on this subtest, which falls in the low

average range of ability. During this subtest, she frequently blurted out answers to the reading passages; in fact, on one of the reading passages she provided four different answers in rapid succession until she finally came to her final answer. She also began rocking side-to-side in time with the ticking of the clock on the wall behind her during this subtest. Reading Recall is a measure of reading comprehension (a reading-writing ability) and meaningful memory (a long-term retrieval ability). Devin earned a standard score of only 80 on this subtest, which falls at the bottom of the low average range of ability. Devin's overall reading scores on the WJ-IV: ACH are lower than her Nelson-Denny Reading Test scores (see results below) with the exception of her Reading Rate score which is commiserate with her Reading Rate score on the Nelson Denny Reading Test.

Devin's scores on the Nelson Denny Reading Test (NDRT), provide additional information about her reading abilities in general and specifically about her college level reading skills. The Nelson-Denny Reading Test, Form G, provides a comparison of reading abilities under timed conditions to other students at a four-year college. This particular instrument most closely resembles college level reading in that the passages are longer in the comprehension section. Multiple-Choice questions follow the reading passages.

Nelson-Denny Reading Test – Standard Time

	Standard Score	**Converted Score (from Pearson)**	**Percentile**
Vocabulary	231	119	90
Comprehension	196	94	34
Total	**214**	**108**	**71**
Reading Rate	177	85	16

The Vocabulary and Reading Comprehension subtests are timed and use a multiple-choice format for answering. Devin's converted Vocabulary score (standard administration) of 119 is at the 90th percentile and indicates that her reading vocabulary is in the high average range and her converted Comprehension score (standard administration) of 94, at the 34th percentile, is indicative of average reading comprehension abilities. Finally, her converted Reading Rate of 85, which is at the 16th percentile, is in the low average range for her age. Devin's Reading Rate score is a significant 1½ standard deviations lower than her total reading score.

WJ-IV: Written Language	Standard Score	Percentile Rank	Description
Broad Written Language	101	53	Average
Spelling	107	68	Average
Writing Samples	94	35	Average
Sentence Writing Fluency	100	51	Average
Written Expression	96	41	Average
Writing Samples	94	35	Average
Sentence Writing Fluency	100	51	Average

The Broad Written Language composite score provides a broad, comprehensive measure of the written language achievement, including spelling of single-word responses, fluency of production, and quality of expression (a reading-writing ability) and cognitive processing speed abilities. Devin's Broad Written Language cluster score (SS=101; average range) is at the 53rd percentile for her age. Her scores on the individual subtests for this cluster are, Spelling (SS=107; average range), Writing Samples (SS=94; average range) and Sentence Writing Fluency (SS=100; average range). It should be noted, that spelling and grammar are not scored on most items of the Writing Samples subtest, however, Devin scored her lowest score on this subtest of the Written Language cluster. In addition, this was the subtest that took her the most time to complete because of significant attention and lack of focus issues. During the Writing Samples subtest, Devin requested to have several of the writing prompts repeated a second time because she wasn't paying attention the first time each prompt was read. In addition, she frequently seemed to stop processing and was looking around the room, staring into space, yawning and stretching, jiggling her leg, playing with the pencil she was using, or doing nothing at all; she would "check back in" several minutes later and would slowly begin to work on the task at hand. Following the reading of the writing prompt for the last item of this subtest (which contained a long, detailed paragraph that had to be summarized), Devin sat and stared at the open response booklet for several minutes; she then asked if she could "skip" writing a response for this item. When told "no" she had to attempt a response for the item, she put her pencil down and stared at the response booklet for several more minutes before beginning her response. Her response was incorrect and demonstrated that she had not paid attention to the details of the stimulus paragraph. In addition, during the "directions" phase of the Sentence Writing Fluency subtest, Devin kept trying to start writing before the directions were completed. She also changed pencils at the two minute, fifty-six second mark and then played with the new pencil for 30 seconds before resuming her writing during this timed subtest.

Devin also frequently rocked from side-to-side in time with the ticking of the clock on the wall behind her and when asked about the rocking (after testing was completed for the day) indicated she wasn't aware she was doing it. During this subtest she also had to take a break to go to the bathroom and requested to do so in the middle of a subtest.

WJ-IV: Mathematics	Standard Score	Percentile Rank	Description
Broad Mathematics	107	67	Average
Applied Problems	107	68	Average
Calculation	106	65	Average
Math Facts Fluency	105	64	Average
Math Calculation Skills	106	66	Average
Calculation	106	65	Average
Math Facts Fluency	105	64	Average

The Broad Mathematics cluster provides a comprehensive measure of math achievement, including problem solving, number facility, automaticity, and reasoning (quantitative knowledge) and cognitive processing speed abilities. Devin's Broad Mathematics cluster score of 107 (average range), is comprised of her Applied Problems score (SS=107; average range), Calculation score (SS=106; average range) and her Math Facts Fluency score (SS=105; average range). Her obtained scores across the Mathematics cluster are fairly flat (SS=105 to107); her scores indicate seemingly even development across all tested aspects of mathematics.

However, during the Applied Problems subtest, she was highly distracted and lacked focus during the administration of many of the items. After the administration of the first fifteen problems (thirty total problems were presented to her), her attention and focus began to diminish significantly. She stopped paying attention when the problems were being read to her and had to reread the problems several times for herself. In addition, she began playing with the pages of the testing book that were on her side of the book, she also played with her pencil, and spent a large amount of time looking around the room and staring at the top of the testing table. It took her a couple of minutes each time to return her attention to the task at hand. On the Math Facts Fluency subtest, she worked rapidly, but carelessly, and got several of these very basic math problems wrong; typically she performed the wrong function; she would add when she should have been subtracting, she would subtract when she should have been adding, she added when she should have multiplied and she multiplied when she should have added. Overall, these "lack of attention" and "lack of focus" issues interfered significantly with her ability to show what she knows and culminated in her scoring lower than her actual ability.

WJ-IV: Academic Clusters	Standard Score	Percentile Rank	Description
Academic Skills	103	57	Average
Academic Applications	94	35	Average
Academic Fluency	94	35	Average

Academic Skills

The Academic Skills cluster is an aggregate measure of reading decoding, math calculation, and spelling single-word responses, which provide an overall score of basic achievement skills. The subtests that comprise this cluster (and Devin's scores) are Letter-Word Identification (SS=94; average range), Calculation (SS=106; average range), and Spelling SS=107; average range). Devin's composite score in this area of 103 (at the 57th percentile) falls in the average range; her obtained scores across this cluster are slightly varied (SS=94 to103; a nine point split).

Academic Applications

This is a cluster of subtests that measures the examinee's ability to apply academic knowledge. The subtests (and Devin's scores) that comprise this cluster are Passage Comprehension (SS=84; low average range), Applied Problems (SS=107; average range), and Writing Samples (SS=94; average range). Devin's composite Academic Applications score of 94 is in the average range and at the 35th percentile. However, her scores in this area vary widely (SS=84 to107; a significant twenty-three point spread). Therefore a single composite score is not representative of her overall abilities to apply academic skills; each subtest score must be considered as a stand-alone score. However, it should be noted that Devin had significant difficulties sustaining attention and focus during all three of these subtests, thus her obtained scores tend to be lower than her actual abilities.

Academic Fluency

The Academic Fluency cluster measures the automaticity of reading, writing, and math. Devin's overall score on this cluster falls in the average range (SS= 94). Academic Fluency includes her scores on three subtests: Sentence Reading Fluency (SS=100; average range), Math Facts Fluency (SS=105; average range), and Sentence Writing Fluency (SS=100; average range). While her overall fluency scores are relatively flat, Devin's responses on the Math Facts Fluency subtest must be noted. On the Math Facts Fluency subtest she made five mistakes. On two of the problems she added when she should have multiplied; on other problems, she subtracted instead of adding, added when she should have subtracted, and multiplied when she should have added.

Overall, on the Woodcock Johnson IV Tests of Achievement, Devin obtained subtest scores that ranged from a standard score of 80 (bottom of the low average range) to a standard score of 107 (average range), a significant twenty-seven point (over 1½ standard deviation) split. Her overall low scores in reading and obtained scores on many of the other subtests, are directly related to her inability to sustain attention and focus for longer than 5-7 minutes at a time, Therefore, Devin's scores on the Woodcock-Johnson should be viewed as "functional abilities" and not true abilities.

Results of Evaluation: Attention

Conners Continuous Performance Test 3 (CPT 3)

Devin was administered the Conners Continuous Performance Test (CPT 3). The CPT 3 is a computerized assessment that assesses attention-related problems. During this assessment, individuals are required to respond when any letter except the letter "X" appears on the monitor. The inter-stimulus intervals (the amount of time between presentations of the letters; ISIs) are 1, 2, and 4 seconds with a display time of 250 milliseconds. There are 6 blocks (sets of trials) with 3 sub-blocks each consisting of 20 trials. Within each block, the sub-blocks have different ISIs (1, 2, 4 seconds) and the order in which the ISIs are presented varies between blocks. Responses from the 14-minute, 360-trial protocol are used to compute scores that assess various aspects of the respondent's attention. Devin's scores on the various components of the CPT 3 follow:

Measures of Inattentiveness	Detectability	Omissions	Commissions	HRT	HRT SD	Variability
T-Score	74	90	55	88	90	82
Description	Very Elevated	Very Elevated	High Average	Atypically Slow	Very Elevated	Very Elevated

The section summarizes Devin's scores on the inattentiveness measures and provides information about how she compares to the normative group. Indicators of inattentiveness on the Conners CPT 3 are poor Detectability, a high percentage of Omissions and Commissions, a slow Hit Reaction Time (HRT), as well as high levels of inconsistency in response speed (Hit Reaction Time Standard Deviation [HRT SD] and variability). Devin's scores on these measures strongly support problems with inattentiveness.

Measures of Impulsivity	HRT	Commissions	Perseverations
T-Score	88	55	76
Description	Atypically Slow	High Average	Very Elevated

This section summarizes Devin's scores on the impulsivity measures and provides information about how she compares to the normative group. Indicators of Impulsivity on the Conners CPT 3 include a faster than normal Hit Reaction Time (HRT) in addition to a higher than average rate of Commissions and/or Perseverations. Devin's scores on these measures do not indicate a problem with impulsivity.

Measures of Sustained Attention	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
HRT (ms)	517	580	503	817	687	677
HRT SD (ms)	174	288	275	494	432	579

This section summarizes Devin's scores on the sustained attention measures. Sustained attention is defined as the respondent's ability to maintain attention as the administration progresses. A decrease in sustained attention across time is captured by atypical slowing in the respondent's Hit Reaction Time (HRT; as indicated by the variable HRT Block Change), as well as by increases in Omissions and Commissions in later blocks of the administration. Devin's profile of scores on these measures indicate problems with sustained attention.

Measures of Vigilance	1-second ISI	2-second ISI	4-second ISI
HRT (ms)	482	605	744
HRT SD (ms)	218	342	510

This section summarizes Devin's scores on the vigilance measures. Vigilance relates to the respondent's performance at varying levels of stimulus frequency (Inter-Stimulus Intervals; ISIs), and as defined by the respondent's ability to maintain performance levels even when the task rate is slow. The construct is captured by changes in the respondent's Hit Reaction Time (HRT), as indicated by the variable HRT ISI Change, as well as the observed pattern of Omissions and Commissions at various ISIs. Devin's profile of scores on these measures indicate problems with maintaining vigilance; specifically, she was challenged by trials with longer intervals between stimuli.

Overall, results from the CPT 3, indicate severe issues with inattentiveness, sustaining attention over time, and with vigilance.

Conners Continuous Auditory Test of Attention (CATA)

Devin was administered the Conners Continuous Auditory Test of Attention (CATA). The CATA is a computerized test that assesses auditory processing and attention-related problems. Responses from the 14 minute, 200-trial protocol (divided into 4 blocks) are used to assess the respondent's performance in areas of inattentiveness, impulsivity, and sustained attention, as well as to provide valuable information about the respondent's auditory laterality (relative effectiveness/efficiency- on left- or right-ear targets) and mobility (the ability to shift attention from one ear to another). Devin's scores on the various components of the CATA follow:

Measures of Inattentiveness	Detectability	Omissions	Commissions	HRT	HRT SD
T-Score	63	55	59	50	68
Description	Elevated	High Average	High Average	Average	Elevated

This section summarizes Devin's scores on the inattentiveness measures and provides information about how she compares to the normative group. Indicators of inattentiveness on the Conners CATA are poor Detectability, a high percentage of Omissions and Commissions, a slow Hit Reaction Time (HRT), as well as high levels of inconsistency in response speed (Hit Reaction Time Standard Deviation [HRT SD]). Devin's scores on these measures indicate that she has problems with inattentiveness.

Measures of Impulsivity	HRT	Commissions	Perseverations
T-Score	50	59	53
Description	Average	High Average	Average

This section summarizes Devin's scores on the impulsivity measures and provides information about how she compares to the normative group. Indicators of impulsivity on the Conners CATA include a faster than normal Hit Reaction Time (HRT) in addition to a higher than average rate of Commissions and/or Perseverative Commissions. Devin's scores on these measures do not indicate problems with impulsivity.

Measures of Sustained Attention	**Block 1**	**Block 2**	**Block 3**	**Block 4**
HRT (ms)	512	697	746	682
HRT SD (ms)	247	274	374	422

This section summarizes Devin's scores on the sustained attention measures. Sustained attention is defined as the respondent's ability to maintain attention as the administration progresses. A decrease in sustained attention across time is captured by atypical slowing in the respondent's Hit Reaction Times (HRT; as indicated by the variable HRT Block Change, as well as by increases in Omissions and Commissions in later blocks of the administration. Devin's profile of scores on these measures indicate problems with sustained attention.

Auditory Laterality – Percent of Hits	**Left Ear Targets**	**Right Ear Targets**
Hits	85	83
Standard Deviation	36	37

Auditory Laterality – Hit Reaction Time	**Left Ear Targets**	**Right Ear Targets**
Hits	653	666
Standard Deviation	293	400

This section provides descriptive information about Devin's auditory laterality (the respondent's preference of left or right ear targets). Auditory laterality is presented in terms of Percent of Hits (the rate of correct response to targets) and Hit Reaction Time (HRT). Devin's results do not indicate an advantage to either ear.

Auditory Mobility – Percent of Hits	**Switch**	**Non-Switch**
Hits (%)	75	84
Standard Deviation	43	37

Auditory Mobility – Hit Reaction Time	**Switch**	**Non-Switch**
Mean	657	359
Standard Deviations	345	350

There are two types of warned trials on the Conners CATA. On "switch" trials, the low-tone warning sound and high-tone target sound are played in different ears, requiring the respondent to shift auditory attention from one ear to the other. Sometimes, the switch is from left ear to right ear; other times, the switch is from right ear to left ear. On "non-switch" trials, the two sounds are played in the same ear. This section provides descriptive information about Devin's auditory mobility. Auditory mobility is presented in terms of percent of hits (the rate of correct responses to targets) and Hit Reaction Time (HRT). The results suggest that Devin does not appear to have an issue with auditory mobility (shifting attention from one ear to the other).

Overall, results from the CATA, indicate issues with inattentiveness and sustaining attention over time.

Conners' Adult ADHD Rating Scale-Self-Report: Long Version (CAARS-S: L)

The CAARS has been designed to help assess, diagnose, and monitor treatment of ADHD in adult patients. The self-report provides a multi-modal assessment of the same behaviors and problems and contains identical sets of scales, subscales and indexes. CAARS forms are available in long, short and screening versions. The Self-Report: Long Version (CAARS-S: L) is a Likert-type measure with 66 questions with 8 mutually exclusive scales that provide a multi-modal assessment of symptoms and behaviors associated with ADHD in adults. Specifically, the subscales are: Inattention/Memory Problems, Hyperactivity/Restlessness, Impulsivity/Emotional Lability, Problems with Self-Concept, DSM-IV: Inattentive Symptoms, DSM-IV: Hyperactive-Impulsive Symptoms, DSM-IV: ADHD Symptoms Total, and the ADHD index. The normative sample for the CAARS includes 1026 adults and validity studies have shown an 85% correct classification rate.

The profile that emerged for Devin indicates "very much above average" scores on all 8 scales. The highest score on the measure was on the DSM-IV: Inattentive Symptoms Total (87) which adds behavioral definition to the problems Devin reported in the clinical interview. The scale for DSM-IV-Inattentive symptoms (83) was the second-highest score. The DSM-IV-Hyperactive-Impulsive symptoms (82) was the third highest score, followed by Inattention/Memory problems (79), ADHD Index (78) and Problems with Self-Concept, Impulsivity/Emotional Lability, Hyperactivity/Restlessness, all with a T-Score of 73. The results on this measure support the scores earned on the CPT 3 and the CATA assessment and also offer support to the report of Devin's severe difficulty sustaining attention and focus during studying, during exams and during everyday tasks (i.e., taking turns in social conversations, cleaning the house, "will start something, not finish it before starting something else, not finish that before starting something else" and not being able to put together a schedule for the day, etc.). The following table provides a summary of the scores earned on the CAARS-S: L. The clinical profile is consistent with the diagnosis of ADHD. The symptoms endorsed throughout her academic career also match the following profile.

Subscale	Raw Score	T-Score	Guideline
Inattention/memory problems	29	79	Very much above average
Hyperactivity/restlessness	30	73	Very much above average
Impulsivity/emotional lability	25	73	Very much above average
Problems with self-concept	17	73	Very much above average
DSM-IV- Inattentive symptoms	22	83	Very much above average
DSM-IV-Hyperactive-impulsive symptoms	23	82	Very much above average
DSM-IV-ADHD symptoms total	45	87	Very much above average
ADHD Index	28	78	Very much above average

Conners' Adult ADHD Rating Scale-Observer: Short Version (CAARS-O: S)

The Observer: Screening Version **(**CAARS-O: S) is a Likert-type measure with 26 questions with 5 mutually exclusive scales that provides a multi-modal assessment of symptoms and behaviors associated with ADHD in adults. Specifically, the subscales are: DSM-IV: Inattentive Symptoms, DSM-IV: Hyperactive-Impulsive Symptoms, DSM-IV: ADHD Symptoms total, and the ADHD index.

The profile that emerged from Devin's observer indicates "very much above average" scores on 4 out of 4 scales. The highest score on the measures was on ADHD Index (90^{+}). The Inattention/Memory Problems scale (81) was the second highest score, followed by both the Impulsivity/Emotional Lability scale and the Problems with Self-Concept scale (79) and the Hyperactivity/Restlessness scale (78). The results on this measure support the scores earned on the CPT 3 and CATA as well as the Self-Report: Long Version (CAARS-S: L) results. The following table provides a summary of the scores earned on the CAARS-O: S. The clinical profile is consistent with the diagnosis of ADHD. The symptoms endorsed throughout her academic career also match the following profile.

Subscale	Raw Score	T-Score	Guideline
Inattention/Memory Problems	15	81	Very much above average
Hyperactive/Restlessness	14	78	Very much above average
Impulsivity/Emotional Lability	15	79	Very much above average
Problems with Self-Concept	15	79	Very much above average
ADHD Index	34	90^{+}	Very much above average

Diagnosis:

314.00 Attention Deficit Disorder: Predominately inattentive presentation (History of severe ADHD Combined Type)

Diagnostic Impressions

Devin's overall performance on the WAIS-IV was lower than expected considering she is a second year law student who has been progressing at a regular pace since she entered the law school. Her scores on the WAIS-IV were also highly varied as indicated by Factor Index Scores that ranged from a high of 100 to a low of 76 a significant spread of 1½ standard deviations. It's obvious that Devin's deficits in perceptual reasoning, working memory and processing speed (being caused by her severe problems with attention and focus) are negatively impacting her overall cognitive scores making it impossible to get a "true" measure of her cognitive abilities

Overall, on the Woodcock Johnson IV Tests of Achievement, Devin obtained subtest scores that ranged from a standard score of 80 (bottom of the low average range) to a standard score of 107 (average range), a significant twenty-seven point (over 1½ standard deviations) split. Her overall low scores in reading and obtained scores on many of the other subtests, are directly related to her inability to sustain attention and focus for longer than 5-7 minutes at a time, Therefore, her scores on the Woodcock-Johnson should be viewed as "functional abilities" and not true optimal abilities.

Devin's scores on the Nelson Denny Reading Test (NDRT), provide additional information about her reading abilities in general and specifically about her college level reading skills. Devin's converted Vocabulary score (standard administration) of 119 is at the 90^{th} percentile and indicates that her reading vocabulary is in the high average range and her converted Comprehension score (standard administration) of 94, at the 34^{th} percentile, is indicative of average reading comprehension abilities. Finally, her converted Reading Rate of 85, which is at the 16^{th} percentile (and is commiserate with her reading rate on the WJ-IV: ACH), is in the low average range for her age. Devin's Reading Rate score is a significant 1½ standard deviations lower than her total reading score.

Overall, results from the CPT 3, indicate severe issues with inattentiveness, sustaining attention over time, and with vigilance; results from the CATA, indicate issues with inattentiveness and sustaining attention over time. Finally, the clinical profile of both the CAARS-S: L and the CAARS-O: S are consistent with the diagnosis of ADHD. The symptoms endorsed throughout her academic career also match the profile.

Accommodations
The following accommodations are needed to offset the negative impact of Devin's Attention Deficit Disorder, Predominately inattentive presentation:

- Extended test time (1½ times)
- Testing in a quiet, non-distracting environment
- Being allowed to record lectures
- Being allowed to use a laptop to take notes

St. Mary's University

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