Note: This is a fictional case

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Confidential Psychological Report

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| Name:  Liam Garrison | Evaluation Dates:  1/15/2019–2/6/2019 |
| Date of Birth:  1/11/2010 | Date of Report:  2/12/2019 |
| Age:  9 years, 3 months | Client Number:  4561-2019 |

# Reason for Referral

Liam’s parents are worried that their son is beginning to fall behind in school and hope to understand his strengths and weaknesses better so that they can be more effective when they assist him with his schoolwork. They strongly suspect that their son has attention problems that were missed in a previous evaluation.

# Procedures for Evaluation

* Interviews with Liam, his parents, and his teacher
* Wechsler Intelligence Scale for Children, Fifth Edition (WISC‑V)
* Woodcock-Johnson Tests of Cognitive Ability, Fourth Edition (WJ IV)
* Kaufman Tests of Educational Ability, Third Edition (KTEA‑3)
* Behavioral Assessment Scales for Children (BASC‑2, Parent Forms)

# Relevant Background Information

Liam is a 9-year-old boy of mostly English and Scottish heritage living in a Bloomington, IL. He is the youngest of five boys in the family. His parents are both college-educated with careers involving high levels of responsibility.

## Birth and Early Development

Liam was delivered three weeks early because there was a true knot in the umbilical cord, raising the risk of asphyxia. During Liam’s delivery both mother and child lost consciousness for a short but terrifying period of a few minutes. The doctors were relieved that there were no obvious consequences after consciousness was regained. In his first week Liam was severely jaundiced, requiring several days of phototherapy to reduce toxic levels of bilirubin. It is impossible to know with any certainty whether any of these problems before, during, and after Liam was born have anything to do with his current difficulties but all of them are associated with increased risk of attention and learning problems. On the other hand, it is quite possible, and even likely, that his attention problems would have occurred even if his delivery had been without incident.

Because one of Liam’s siblings has a pervasive developmental disorder, any signs of similar symptoms in Liam as a baby and then as a young child were especially noticeable to his parents. In truth, there were and are some similarities between Liam and this brother. Liam is extremely sensitive to particular textures and is often uncomfortable in his clothes. He has very particular food preferences. When he plays alone, he primarily experiments with objects rather than engaging in imaginative play. When stressed or excited, he used to flap his hands in a manner that is common among children with autism (His mother suspects that this was simply learned by observing his brother.). In addition, Liam was starting to show problems with attention and impulsivity.

## Psychoeducational Evaluation in 2013

Because of the concerns listed above, Liam was evaluated by a clinical psychologist in 2013 when Liam was six years old. Liam and his mother were interviewed for about an hour and Liam was given an IQ test and an academic achievement test. Other than the fact that Liam rushed through his work and made careless errors, the evaluator did not see attention problems severe enough to warrant a diagnosis of ADHD. The evaluator concluded that his problems were primarily behavioral in nature. No mention of any symptoms of autism was made in the report. Liam’s cognitive ability scores on the IQ test were mostly average, as were his academic ability scores. His reading decoding skills were low average and his spelling ability was high average.

## Current Academic Difficulties

Liam is currently in the fourth grade. His moderate attention deficits are partially reduced with stimulant mediation prescribed by his physician. These deficits are beginning to interfere with his performance in school, causing his grades to drop. His teacher noted that when motivated, Liam is capable of doing everything she asks him to do and that he excels in math and science-related areas, but lately his efforts have been flagging in most domains. Although never defiant at school, Liam finds diverse and creative ways to avoid doing his schoolwork in its intended spirit. That is, he often takes shortcuts so that it appears that he has completed the work but upon inspection, he has not shown that he has mastered the skills the assignment was intended to foster.

# Relevant Behavioral Observations

Liam was initially excited about the evaluation process and we quickly developed a natural rapport. He was eager to talk about a wide variety of topics, both light and serious. He answered all my questions directly and thoughtfully, often with self-awareness and humor. I found him to be a gentle soul: sensitive, warm, and kind.

Liam’s attentional deficits were not at all apparent at first, but they were unmistakably obvious as time went on. Over the course of five testing sessions, as the novelty of the situation wore off, the time that he was able to stay engaged without distraction became progressively shorter. Although Liam clearly wanted to perform to the best of his ability on all tests, he needed frequent prompts to do so.

To a degree that is unusual even among other children with ADHD, Liam’s mental energy is quickly drained by any task requiring sustained mental focus. He often whined and expressed his dismay at how difficult the tests were. At first this was confusing to me because his complaints were most intense, not when the tasks were well beyond his ability, but when they were well within it. That is, he would repeatedly protest (e.g., “I don’t like this.” “Do I have to do this?” “This is physically impossible!”) as he successfully completed item after item. Even when he was not complaining, it was obvious that many of the tests were wearing him out. To illustrate, he let out quiet grunts, as if heaving medium-sized stones, each time he (correctly) solved simple math problems (e.g., 6 + 7 = ?, 9 −2 = ?, 2 × 3 = ?)

Interestingly, his discomfort was less intense on tests normally considered to demand attention (e.g., short-term memory tests). That is, he was more tolerant of tests in which he needed to focus in short bursts and he could see the end in sight. Tests that were untimed, open-ended, and of indeterminate length (e.g., defining vocabulary words, solving logic problems, and answering questions about reading passages) were especially unpleasant to him because he knew that he needed to concentrate but did not know when the task would end.

In the course of testing, sometimes many test items would be revealed at once and he could see that he had, what was to him, a long way to go before finishing. This was often greeted with a whimper. If I gave sympathy and encouragement, he would take a deep breath, steal himself to the approaching unpleasantness, and then attempt to complete the task to the best of his ability. Thus his tendency to be overwhelmed by task length did not appear to lower his scores but did influence how long it took to complete each test, including many short breaks between items.

Between tasks, there was no sense of resentment toward me for asking him to work hard. As soon as the pressure was off, he went back to being his cheerful, delightful self.

Liam often used his self-awareness to advocate for himself. He knew when he was nearing his limits and would suggest solutions so that he could work longer. For example, he suggested that “running laps” would make him feel better after sitting for a long time (We had been sitting for 30 minutes.). He ran up and down the hall several times and then was able to work for about 20 minutes without interruption or visible discomfort. Because he was genuinely trying to figure out how to get through the evaluation instead of merely avoiding doing work, I came to trust Liam’s judgment about what he needed.

In the sessions in which he had recently taken his prescribed stimulant medication, Liam was better able to focus on the task at hand. However, even when medicated, he still found sustained mental effort extremely taxing.

# Standard Score Range Labels

## Key for Interpretation of Ranges

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Range | Index Scores | Scaled Scores | T-Scores | Percentile |
| Extremely High | 140–160 | 18–19 | 78–90 | >99.5 |
| Very High | 130–139 | 16–17 | 70–77 | 0.98–99.5 |
| High | 120–129 | 14–15 | 64–69 | 91–97 |
| High Average | 110–119 | 12–13 | 57–63 | 75–90 |
| Average | 091–109 | 19–11 | 44–56 | 26–74 |
| Low Average | 81–90 | 7–8 | 37–43 | 10–25 |
| Low | 71–80 | 5–6 | 31–36 | 3–9 |
| Very Low | 61–70 | 3–4 | 23–30 | 0.5–2.0 |
| Extremely Low | 40–60 | 1–2 | 10–22 | <0.5 |

# Cognitive Abilities

## General Ability

**General ability** is estimated from an average of many test scores and refers to a person’s overall capacity to reason, solve problems, and learn useful information.

When Liam is alert, motivated, relaxed, and under close supervision, Liam’s performance on most cognitive tests is in the average range, if not slightly better. However, when these optimal conditions are not present, his performance tends to worsen considerably.

## Language Ability & General Knowledge

**Language ability & general knowledge** refer to the ability to use language to reason and understand how the world works. People with good verbal comprehension ability are likely to have strong academic skills.

Liam understands speech and communicates effectively. He enjoys engaging in verbal wordplay and witty banter, which is one of the ways in which his family expresses affection. His informal verbal communication style feels more sophisticated than his average test scores would suggest. Sometimes he uses his sensitivity to the subtle meanings of words to his advantage (e.g., selectively interpreting adult commands in a literal sense so as to give the appearance of compliance without having to exert unwanted effort). Had Liam been able to maintain consistent enthusiasm for testing, it is likely that his language ability scores would likely have been somewhat higher, perhaps in the high average range.

Overall, Liam’s scores on general knowledge tests are on the lower half of the average range. However, as is true with most people, Liam’s knowledge is more developed in some areas than in others. Liam is unusually motivated to perform scientific experiments. This is an interest shared by his mother, who often helps Liam replicate demonstration projects they have seen on the television show Mythbusters. He was quite proud of his mastery of scientific subjects and spontaneously offered to explain to me various scientific ideas (e.g., why earthquakes happen). His knowledge of the humanities and the social sciences is less well developed, mostly because his interests lie elsewhere.

## Reasoning & Problem Solving

**Reasoning & problem solving** is the ability to using logic to solve unfamiliar problems.

Although the ability to learn from instruction is extremely important, much of life involves figuring things out without being explicitly told what is going on. On formal tests of reasoning, which measure the ability to solve unfamiliar logic problems, Liam’s performance is average. However, Liam’s average score is average in an interesting way: His performance varies quite a bit from test to test and from situation to situation.

One of the logical reasoning test scores at the end of this report is misleadingly high. On the WISC-V Figure Weights test, he earned a score that is higher than 99.6% of his same-age peers, but his true ability level is probably in the high average range. Figure Weights is a multiple choice test and when he encountered difficult items, he announced that he would guess because he knew that he had a 20% chance of getting it right (Upon further querying, I found that he had an advanced understanding of probability and could calculate odds correctly in a variety of situations.). For the last seven (and most difficult) items on this test, he looked at the problem for about 10 seconds and then pointed to an answer, saying, “I’m guessing.” Luck was with him and he guessed right four out of seven times. With purely random guesses, getting 4 or more questions right out of seven would occur only 3% of the time. It is possible that some unconscious and intuitive aspect of intelligence was at work, slightly increasing the odds of guessing correctly. However, such intuition cannot be relied upon consistently. If he were to retake a similar test, it is unlikely that he would obtain such a high score again. Indeed, on similar measures, his performance was average.

Liam is the kind of child who delights in giving adults a gentle ribbing when they contradict themselves or demonstrate a minor lapse in logic. More generally, he is attentive and sensitive to logical consistency in all things. He firmly wishes for ideas to be logically tidy—so much so that when something does not fit within his logical framework, he has a tendency to dismiss it out of hand, refusing to consider the matter any further. Several times during testing he announced that some of my questions made no sense—and that was that—on to the next question! For example, on a vocabulary test in which he needed to find pairs of synonyms, some of the correct answers were only approximately the same (e.g., thick and wide). The near but inexact similarities between the correct word pairs upset him and he announced that the test was unfair: “I really don’t like this. None of them are right.” No amount of prompting to try to think of an answer (or even guess) helped. This did not appear to be merely avoidance of effort. After the testing was complete, I revisited these items and suggested that he find the words that were the most similar to each other, even though they were not exactly the same. Still, he refused to make an attempt, not out of defiance, but on principle.

I believe that he knew the correct answers in these situations but that the small differences between the words loomed large in his mind and to say that they were in any way similar was somehow offensive to him. In further discussions, he explained (and his teacher confirmed) that this happened often in the classroom and that it upset him greatly when test questions violated his expectations or were, in his opinion, illogical. To some degree, thinking concretely is typical for children Liam’s age. However, it is expressed with more than typical emotional fervor in Liam’s case and occasionally interferes with optimal performance.

## Visual-Spatial Processing

**Visual-spatial processing** refers to abilities such as being able to visualize how objects should look from different angles and to visualize how to put objects together so that they fit snugly. These types of abilities are important for tasks in which visual pattern recognition is essential such as the visual arts and mechanical tasks.

Much of human intelligence is devoted to solving problems non-verbally, in the mind’s eye. Artists, engineers, architects, and designers often visualize solutions to problems in their heads before committing resources to a particular approach. In everyday life, visualizing can dramatically increase the probability of successfully solving particular problems. For example, imagining how to fit a large couch through a doorway reduces the time and effort it would otherwise take with a purely trial-and-error approach.

The first test I gave to Liam was a measure of visual-spatial ability. Liam was dismayed that it required concentrated effort to solve the puzzles and was quickly discouraged despite my best efforts to buoy his spirits. It was especially disappointing to him that the evaluation was not going to as fun as he initially believed it would be. Giving up quickly on difficult test items brought him temporary sense of relief but resulted in a test score that was an underestimate of his ability.

Liam was under the impression that he was being graded on the test and believed that it was unfair that he was given no opportunity to study for it. After a short discussion, Liam accepted that these tests served a different kind of purpose. He felt better about the matter when he learned that no one else was given the opportunity to study for the tests and that, in part, the tests measured the ability to figure things out for the first time. Follow-up testing (and test scores from the 2011 evaluation) revealed that, under optimal conditions, Liam’s visual-spatial ability is at least average and probably high average.

## Auditory Processing

**Auditory processing** refers to the perceive sound patterns, especially small differences in speech sounds.

In the same way that we can manipulate visual images in our heads, we can also play with sounds in our thoughts. For example, even after he lost his hearing, Beethoven was able to compose music by “hearing” in his mind how certain sounds would blend.

One ability that is particularly important for beginning readers is the ability to pull apart and blend units of sounds that make up words. For example, the word “cat” has three sounds: /k/, /a/, and /t/. Beginning readers need to be able to distinguish these sounds from each other so that they can see the correspondence between individual sounds and specific letters: /k/ = C, /a/ = A, and /t/ = T. In this way, unfamiliar words can be “decoded” one letter-sound at a time.

Children who have poor auditory processing abilities often have difficulty learning to read and spell. As will be seen later, Liam has weak spelling skills. Are his spelling difficulties caused by auditory processing problems? No. Across several auditory processing tests in various formats, Liam’s auditory processing ability is average. Therefore, auditory processing deficits do not explain his spelling problems.

Furthermore, Liam’s difficulty articulating the /r/ sound is a production problem, not a result of an inability to perceive the sound correctly. Liam can hear the /r/ sound accurately but cannot produce it consistently.

## Working Memory

**Working memory** refers to the ability to hold onto information in one’s head just long enough to use it, usually just for a few seconds. For example, working memory is used to remember two-digit numbers just long enough to add them together in one’s head. Deficits in working memory can limit performance in the areas of mathematical reasoning, reading comprehension, and writing composition.

Working memory tests require the ability to focus attention on information in short-term memory and manipulate it in some way (e.g., alphabetizing a short list in one’s head). Working memory is used in almost every task that involves more than a few steps. Liam’s performance on working memory tests is average to high average.

Because the use of working memory requires the effortful direction of attention, working memory tests are sometimes thought of as markers of ADHD. Although it is true that people with ADHD tend to score a little lower on working memory tests on average, about half of people with ADHD score in the average range or better. Therefore, good performance on working memory tests does not rule out an ADHD diagnosis.

## Long-term Memory & Learning Efficiency

**Long-term memory and learning efficiency** refers to the rate and ease with which new information can be learned and retained.

Some people are able to learn new information quickly and effortlessly whereas others need to be exposed to new knowledge many times before it is finally learned. Liam’s learning rate is average, but only when he is able to devote his attention to the material.

## Memory Retrieval Fluency

**Memory retrieval fluency** refers to the ability to access information in memory in a rapid and fluent manner.

When we need to recall information, there is usually a short delay before we can find the desired information in memory. Some memories are easier to retrieve than others. Everyone has experienced the “tip-of-the-tongue” phenomenon when a particular fact is temporarily inaccessible to memory. For example, I often have to strain to remember what the capital of Canada is, even though I know that I know it (...Ottawa!).

For some people, memory retrieval is particularly effortful, causing many short delays in speech and thought (accompanied by frequent “ahs” and “ums”). Problems with memory retrieval can manifest in disfluent reading, writing, and calculation. People with especially fluent memory retrieval ability are known to have an advantage in creative problem solving because they can generate and evaluate many ideas quickly. Fortunately, Liam’s memory retrieval fluency is at least average and likely in the high average range when fully alert and motivated.

## Information Processing Speed

**Processing speed** refers to the rate at which one can make simple decisions (e.g. sorting) and transform information (e.g., use a key to translate a series of numbers into letters). Processing speed tests are good predictors of performance on tasks that are so well learned that they are nearly automatic.

On very simple and repetitive tasks (e.g., verifying whether pairs of numbers are the same), some people can process familiar information quickly, smoothly, and efficiently. Others process information slowly, often in fits and starts. One of the primary causes of slow information processing speed is impaired attentional control. That is, they are unable to direct the focus of attention smoothly as they process each bit of information. Under optimal conditions, Liam’s information processing speed appears to be average.

## Cognitive Ability Summary

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ability | Extremely Low | Very Low | Low | Low Average | Average | High Average | High | Very High | Extremely High |
| General Ability |  |  |  |  | • |  |  |  |  |
| Language |  |  |  |  | • |  |  |  |  |
| Reasoning |  |  |  |  | • |  |  |  |  |
| Auditory |  |  |  |  | • |  |  |  |  |
| Visual-Spatial |  |  |  |  | • |  |  |  |  |
| Working Memory |  |  |  |  | • |  |  |  |  |
| Learning Efficiency |  |  |  |  | • |  |  |  |  |
| Retrieval Fluency |  |  |  |  | • |  |  |  |  |
| Processing Speed |  |  |  |  | • |  |  |  |  |

# Academic Skills

# Reading Skills

The ability to read is not just a single skill but a collection of many related subskills. Not all reading subskills are necessarily equally well developed.

## Reading Decoding

**Reading Decoding** is the ability to read single words, often presented without context, is reading decoding. If a word is unfamiliar, it must be sounded out.

Skilled readers effortlessly recognize familiar words immediately, but they slow down to sound out unfamiliar words. When focused, Liam’s ability to recognize and sound out words according to standard pronunciation rules is average. However, if he is distracted or not interested in what he is reading, he often fails to slow down to sound out less familiar words, even words that he is capable of sounding out. Thus, his performance on reading tests depended on his overall level of attention and also whether he is prompted to read accurately.

## Reading Flu ency

**Reading Fluency** is the speed and ease at which a person can read text.

In order for a person to become a skilled reader, reading decoding must become fluent and automatic so that attention can be devoted to the meaning of the text rather than to pronunciation of the words. On tests of reading fluency, Liam was able to read single words and simple sentences at an average rate.

## Reading Comprehension

**Reading Comprehension** is the ability to understand what the text says and what is implied by the author.

Liam’s ability to understand text is average, as would be expected from his language abilities, reading decoding, and reading fluency skills. Liam’s interest was piqued several times by the content of the reading comprehension test items. He wanted to engage in extended conversations about what he read. For this reason, it was particularly interesting to note how easily and quickly answering these reading comprehension items fatigued him. It would be understandable if he were bored by the text, but this was clearly not the case. It was not so much that reading per se fatigued him. It was reading and then having to return to the text in order to answer detailed questions that was particularly taxing. Having to answer “main idea” questions was particularly aversive because, in his opinion, these were “opinions, not facts.” Nevertheless, he was usually able to answer these questions correctly when given encouragement.

# Writing Skills

## Handwriting

**Handwriting ability** refers to the skill of writing neatly and efficiently.

Writing neatly is not a priority for Liam. Although it is possible to read his writing, it often requires effort to do so. Even his best writing is fairly messy.

## Spelling

**Spelling ability** refers to being able to spell words with both regular and irregular spellings.

Liam knows that he is not a good speller; it is already a part of his emerging identity, even to the point that it is a point of pride. His performance on a spelling test was low, although with a little more effort I suspect that he could have gotten at least a low average score.

It is particularly puzzling as to why his spelling skills are low because his reading decoding skills are average. Many people are poor spellers because they cannot hear the individual sounds in words that correspond to each letter. As mentioned before, Liam has no such deficits.

I was not able to arrive at a definitive explanation for his spelling deficits. One clue as to why his spelling skills are poor is that most of his spelling errors had to do with spelling words in a phonologically regular manner (i.e., spelled just as they sound). He did this even when those letter combinations never occur in standard written English (e.g., draw = “jra”). I believe that incorrect spelling does not bother him and thus he is not motivated to learn from his mistakes. Learning to spell words with irregular spelling is probably unappealing to him because it requires learning endless particulars and exceptions. His preference for logical tidiness may also extend to English spelling. He would prefer (as many of us do) that English spelling were more regular, following the pronunciation of words more closely.

It is possible that Liam’s spelling (and written grammar) deficits result from a subtle language processing problem that was not detected in this evaluation. Liam’s mother also struggles with spelling, even though she has excellent reading skills and is highly motivated to spell correctly. She suspects that Liam’s struggles with spelling are similar to hers. When focused on writing correctly, she can usually recall the correct spelling of words because she has by brute force memorized them. However, when performing a cognitively demanding task while writing, she frequently makes inexplicable letter substitutions. Other family members have more pronounced spelling and reading deficits, with some members having dyslexia or dyslexic tendencies.

## Written Mechanics

**Written mechanics** and grammar skills include knowledge of punctuation, capitalization, and grammar.

Liam’s spoken grammar is excellent but his ability to find and correct written grammar errors and punctuation problems is low. It seems doubtful to me that there is a strictly cognitive reason that he does not capitalize the first words in sentences, put quotation marks in appropriate places, insert commas between clauses, and end sentences with periods or question marks. As with spelling, not bothering with proper punctuation is now part of his identity. In his own words, delivered with a wry smile, “Oh no. I don’t do commas.”

## Writing Fluency

**Writing fluency** refers to how quickly one can formulate and write a correct sentence.

Surprisingly, Liam is able to write very quickly. On a writing speed test, he was able to compose short simple sentences at a rate faster than 97% of children his age. However, on this test, he was so devoted to writing quickly that his hand cramped up severely. Although he pushed through the pain until the end of the test, he was unable to use a pencil for the rest of the testing session that day.

## Written Expression

**Written expression** refers to the ability to express ideas correctly in writing. It includes the ability to use expressions that are more likely to occur in writing than in speech.

Although his knowledge of the mechanics of writing is low, his ability to express his ideas in writing is at least average. On a task in which he had to recall and write down a story that had been told to him, he whined and complained throughout the task but retold the story quite thoroughly. At the end, he asked if he could extend the story. Curious, I allowed him to do so. Immediately, all fatigue was gone as he gleefully wrote down a silly alternate ending to the story. He then drew a detailed picture of one of the story’s characters. Thus, it is not writing per se that tires him, but writing on a narrowly defined topic not of his own choosing.

# Mathematics Skills

Liam is proud of his math skills. While taking the math tests he did not complain or show signs of fatigue.

## Computation Skills

**Computation skills** refer to the ability add, subtract, multiply, and divide with integer, fractions, and decimals.

Liam knows his basic math facts (e.g., 4 + 5 = 9). Although he made several impulsive calculation errors, he self-corrected almost all of them after he noticed that his answers did not make sense. His knowledge of basic math calculation procedures involving whole numbers, decimals, and fractions is average for his age.

## Math Fact Recall Fluency

**Math fact recall fluency** refers to the ability to quickly remember basic math facts without having to calculate them (e.g., 4 + 3 = 7).

Being able to recall math facts automatically and without effort is an essential task for anyone who hopes to master algebra and higher forms of mathematics. If attention is devoted to recalling math facts, it is difficult to remember where one is in solving a multi-step problem. For this reason, it bodes well that Liam’s ability to recall math facts fluently is high average.

## Math Problem Solving

**Math problem solving** refers to the ability to solve practical problems using math. Often tested with so-called “word problems.”

Liam has an intuitive sense about solving mathematics problems and appears to enjoy solving problems of moderate difficulty. His performance in this area was high average.

# Academic Ability Summary

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ability | Extremely Low | Very Low | Low | Low Average | Average | High Average | High | Very High | Extremely High |
| Reading Decoding |  |  |  |  | • |  |  |  |  |
| Reading Fluency |  |  |  |  | • |  |  |  |  |
| Reading Comprehension |  |  |  |  | • |  |  |  |  |
| Spelling Ability |  |  | • |  |  |  |  |  |  |
| Writing Fluency |  |  |  |  |  |  | • |  |  |
| Written Expression |  |  |  |  | • |  |  |  |  |
| Math Computation Skills |  |  |  |  | • |  |  |  |  |
| Math Fact Fluency |  |  |  |  |  | • |  |  |  |
| Math Problem Solving |  |  |  |  |  | • |  |  |  |

# Behavioral and Emotional Functioning

## Attentional Deficits

A common misunderstanding about ADHD is that people with the disorder simply cannot direct their attention at all, even when they want to. When children with ADHD are observed to control their attention, people with this misunderstanding assume that the children therefore do not really have ADHD. Furthermore, if they can control their attention, then it is assumed that any attentional lapses are willful, and therefore blameworthy. Actually, the total inability to control attention is very rare and is more consistent with a severe brain injury than with garden-variety ADHD.

To make a comparison, it is not that people with severe headaches are unable to smile pleasantly, and it is not that they refuse to smile pleasantly; it simply does not occur to them to do so most of the time. Given the right incentives, people with severe headaches can smile pleasantly but possibly only with great effort.

Likewise, it is not that people with ADHD can’t pay attention, nor is it that they won’t pay attention. Rather, much of the time they simply don’t pay attention. Often they are willing and able to so when prompted, but they do require the prompt.

Liam is usually quite willing and able to control his impulses and direct the focus of his attention when prompted by situational demands. However, doing so is not his natural inclination, in part because engaging in activities requiring sustained mental focus is more tiring and unpleasant for him than it is for most people. When fatigued, his ability to control his attention and his impulses is reduced considerably.

## Social Adjustment

Liam is fortunate to come from a loving home with parents who are tolerant of his special needs but still insist on good behavior and encourage academic success. Liam’s relationship with his older brothers is generally positive. In the rough-and-tumble economy of brotherly love, Liam both dishes out and receives a bit of teasing and light torment, but it is never terribly serious.

Liam makes friends easily. Although Liam believes that his friends find him to be “a little wild” and his mother believes that he might be “a little bossy,” Liam has been able to sustain these friendships over time.

One of the reasons that he is liked by his friends is that he has a natural generosity and enjoys sharing what he has (e.g., food and toys). On one occasion, he helped a friend become close with a girl even though he too liked the girl. He recognized that his friend liked the girl more than he did and so he thought it was the right thing to do.

## Emotional Regulation

Liam is mostly a very cheerful person. However, he frequently has fairly intense nighttime anxiety, which on occasion has resulted in insomnia and daytime fatigue. Often it is difficult for him to articulate exactly what he is afraid of. Although there is no history of trauma, he fears intruders coming into the house. His mother describes his nighttime anxiety as similar to a panic attack.

His anxiety is often made more intense by his extreme sensitivity to particular textures in his clothes. He prefers to go shirtless at home whenever possible and this seems to help him to focus when completing his homework.

When stressed, Liam calms himself by taking warm baths. Immersing himself so that all but his face is underwater seems to block out unpleasant sensory stimulation. If allowed, Liam would take frequent short baths but on average he is restricted to bathing only twice per day.

# Summary

Liam is a 9-year-old boy of European heritage who is beginning to fall behind academically despite average cognitive ability and academic skills. He often fails to complete classwork due primarily to moderate attention deficits and mild problems of impulsivity. These symptoms are only partially remediated by stimulant mediation. Although he is socially and emotionally well-adjusted in general, Liam has significant nighttime anxiety which at times interferes with his ability to sleep, which, in turn, worsens his attention problems.

# DSM-5 Diagnosis

314.01 Attention-deficit/hyperactivity disorder, combined presentation

V62.21 Academic or educational problem

# Recommendations for Liam’s Parents

* As parents, you are admirably attuned to Liam’s needs and limits. With loving understanding, you have been able to create an environment in which Liam is developing into a kind, generous, and thoughtful human being. There is little advice I can give to improve upon what you are already doing so well. There is every reason to believe that with continued support Liam will continue to develop in a positive direction. Even so, your worries about his future are legitimate, and I share them. It is hard for any child to learn how to see things through when they are difficult, unpleasant, or tedious. With Liam’s particular sensitivities and attention deficits, it is even harder. I see it as an especially hopeful sign that he was aware of his own limits and could advocate for himself in the testing environment. In my conversations with Liam’s teacher, it appears that this skill has not yet generalized to the school environment. He may need explicit guidance in how to communicate his needs appropriately to school personnel and other authority figures (For example, “If I could quietly pace the floor every once in a while, I would feel less restless and could probably get more schoolwork done today.”).
* Consider teaching Liam relaxation skills such as meditation so that when he is frustrated or overwhelmed, he can quietly talk a brief break and calm himself. I am happy to recommend books on this topic. If teaching these skills proves difficult, I am happy to recommend a behavioral specialist who could work with Liam to master these skills. A behavioral specialist is also likely to be helpful in working with Liam to master his nighttime anxiety.
* To a remarkable degree, you have balanced tolerating Liam’s special needs and maintaining high expectations for good conduct and academic achievement. This has required a deftly agile and flexible approach to parenting. Because Liam’s academic performance has recently dropped, it is probably time, at least in the near future, to err on the side of maintaining high expectations. Even so, in the long term, no academic achievement is worth losing the warm relationship that you and he currently enjoy. In my short experience with Liam, I found that Liam could tolerate quite a bit of frustration if he understood the overall reason for the hard work he was doing. Before attempting homework assignments likely to be unpleasant for him, it might be helpful to quickly review why completing the assignment thoroughly is important. For example, “This assignment is about how to use commas to help readers understand what you mean when you write. I know that commas are not your favorite topic, but I’ve seen some hilarious misunderstandings when people forget to use a comma properly. Look at this sentence: Let’s eat, Joe. Now look at what it means when the comma is missing. See? That’s pretty funny! So in this case, putting the comma in the right place is a life-and-death matter...at least for Joe. I know this assignment might not be terribly exciting but let’s get through it for Joe’s sake. Also, I think most people really appreciate it when your writing has commas in the right places. It communicates your thoughts clearly, and it shows that you take your work seriously. That is something that employers really like to see. If I didn’t use commas in my writing, there is no way I would have been hired for the job I have.”
* Consistent routines in the household have been very helpful to Liam. Without them it is likely that there would be considerable conflict about when, how, and why homework and household chores are to be done. As he gets older, he is likely to experiment with asserting his independence about homework completion. Because it is easier to maintain a standard than it is to reestablish it, I recommend maintaining these routines as long as possible but judiciously adapting them as Liam matures.
* Liam’s preferences for logical tidiness does not mean that he is an inflexible person or even that he is a “rigid thinker” in every domain. To the contrary, he is quite flexible on most matters and values compromise when there are disagreements. It is likely that he will come to value ambiguity as he matures but that also he will retain a greater than average preference for orderly thought. As this personality trait can be leveraged for success in many careers, it should be encouraged when appropriate and gently redirected when it gets in the way of his success.

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| Elizabeth Bennet, M.S. |  | W. Joel Schneider, Ph.D. |
| Examiner |  | Supervisor |

# Test Scores

**Warning:** Psychological test data are easily misinterpreted by people unfamiliar with psychological tests and psychological testing principles. Please consult a licensed psychologist before acting on any interpretation of these scores. Note that the labels used in the “Range” columns of the tables correspond to the graphic below, not necessarily to the range labels suggested in each test’s manual.



Wechsler Intelligence Scale for Children, Fifth Edition (WISC-V)

|  |  |  |  |
| --- | --- | --- | --- |
| Scale | Range | Score | Percentile |
| Full Scale IQ | Average | 109 | 73 |
| Verbal Comprehension | Average | 106 | 66 |
| Similarities | Average | 10 | 50 |
| Vocabulary | High Average | 12 | 75 |
| Information | Low Average | 7 | 16 |
| Comprehension | Average | 9 | 37 |
| Visual Spatial | Average | 100 | 50 |
| Visual Puzzles | High Average | 13 | 84 |
| Block Design | Low Average | 7 | 16 |
| Fluid Reasoning | High | 126 | 96 |
| Matrix Reasoning | Average | 11 | 63 |
| Figure Weights | Extremely High | 18 | 99.6 |
| Picture Concepts | Low Average | 8 | 25 |
| Arithmetic | Average | 11 | 63 |
| Working Memory | Average | 107 | 68 |
| Picture Span | High Average | 12 | 75 |
| Digit Span | Average | 10 | 50 |
| Letter-Number Sequencing | High Average | 12 | 75 |
| Processing Speed | Average | 100 | 50 |
| Coding | Average | 11 | 63 |
| Symbol Search | Average | 9 | 37 |
| Cancellation | Average | 10 | 50 |
| Naming Speed | High Average | 112 | 79 |
| Naming Speed Literacy | Average | 102 | 55 |
| Naming Speed Quantity | High Average | 118 | 88 |
| Symbol Translation | Average | 104 | 61 |
| Immediate Symbol Translation | Average | 101 | 53 |
| Delayed Symbol Translation | Average | 104 | 61 |
| Recognition Symbol Translation | Average | 108 | 70 |

Note: Scaled scores have a mean of 10 and a standard deviation of 3. Index scores have a mean of 100 and a standard deviation of 15.

Kaufman Test of Educational Achievement, Third Edition (KTEA-3)

| Scale | Range | Score | Percentile |
| --- | --- | --- | --- |
| Reading | Average | 91 | 27 |
| Letter & Word Recognition | Low Average | 84 | 14 |
| Reading Comprehension | Average | 101 | 53 |
| Math | Average | 108 | 70 |
| Math Concepts | High Average | 114 | 82 |
| Math Computation | Average | 101 | 53 |
| Written Expression | Low Average | 81 | 10 |
| Written Expression | Low Average | 84 | 14 |
| Spelling | Low | 79 | 8 |
| Sound-Symbol | Average | 104 | 61 |
| Phonological Processing | High Average | 114 | 82 |
| Nonsense Word Decoding | Average | 93 | 32 |
| Decoding | Low Average | 88 | 21 |
| Letter & Word Recognition | Low Average | 84 | 14 |
| Nonsense Word Decoding | Average | 93 | 32 |
| Reading Fluency | Average | 103 | 58 |
| Word Recognition Fluency | Average | 106 | 66 |
| Decoding Fluency | Average | 91 | 27 |
| Silent Reading Fluency | High Average | 112 | 79 |
| Reading Understanding | Average | 97 | 42 |
| Reading Comprehension | Average | 101 | 53 |
| Reading Vocabulary | Average | 93 | 32 |
| Comprehension | Average | 101 | 53 |
| Reading Comprehension | Average | 101 | 53 |
| Listening Comprehension | Average | 100 | 50 |
| Expression | Low Average | 85 | 16 |
| Written Expression | Low Average | 84 | 14 |
| Oral Expression | Low Average | 90 | 25 |
| Orthographic Processing | Average | 101 | 53 |
| Word Recognition Fluency | Average | 106 | 66 |
| Spelling | Low | 79 | 8 |
| Letter Naming Facility | High Average | 117 | 87 |
| Academic Fluency | High Average | 112 | 79 |
| Decoding Fluency | Average | 91 | 27 |
| Math Fluency | High Average | 110 | 75 |
| Writing Fluency | High | 129 | 97 |
| Oral Language | Average | 98 | 45 |
| Oral Expression | Low Average | 90 | 25 |
| Listening Comprehension | Average | 100 | 50 |
| Associational Fluency | Average | 107 | 68 |
| Oral Fluency | Average | 107 | 68 |
| Associational Fluency | Average | 107 | 68 |
| Object Naming Fluency | Average | 104 | 61 |

Note: Index scores have a mean of 100 and a standard deviation of 15.

Woodcock-Johnson IV

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| --- | --- | --- | --- |
| Scale | Range | Score | Percentile |
| Auditory Processing (Ga) | Average | 105 | 63 |
| Phonological Processing | Average | 102 | 55 |
| Nonword Repetition | Average | 105 | 63 |

Note: Scaled scores have a mean of 10 and a standard deviation of 3. Index scores have a mean of 100 and a standard deviation of 15.