Mr. Client completed the Wechsler Intelligence Scale for Children – 5th Edition (WISC-V). This is one of the most widely used and researched intelligence scales for children and youth. This instrument is comprised of a possible 21 subtests and yields a Full-Scale IQ score along with 13 other composite Index scores that provide insight into an individual's cognitive strengths and weaknesses compared to other individuals his/her age and compared to the rest of his/her own cognitive profile.

**Full-Scale Intellectual Abilities**

The Full-Scale IQ score (FSIQ) is the most reliable score and is considered most representative of general intellectual functioning. Mr. Client achieved a FSIQ that placed him in the **average** range (27th percentile) as compared to other Canadian youth his age. It is highly likely (95% chance) that Mr. Client's true FSIQ is somewhere within the range of the 25th and 32nd percentile. A score at the 27th percentile signifies that 27% of youth his age scored equal or below his result.

**Primary Index Analyses**

The five primary index scores provide for in-depth analysis of Mr. Client's intellectual abilities. His highest performance came on the Visual Spatial Index. The Visual Spatial Index measures the ability to evaluate visual details and understand visual spatial relationships to construct geometric designs. Mr. Client's visual spatial reasoning system was assessed by tasks that required him to recreate pictured designs using blocks (63rd percentile) and use three pieces to reconstruct a completed puzzle (50th percentile). Mr. Client's overall results on the VSI placed him at the 55th percentile, or in the **average** range. These scores reflect generally average capacity to apply spatial reasoning and analyze visual details. From a real world perspective, visual spatial abilities are typically associated with "hands-on" work tasks and these findings therefore predict Mr. Client would have average experiences in these types of tasks. Mr. Client's visual spatial ability is considered a significant strength in comparison to the rest of his own profile. In fact, the magnitude of this strength is so large that it is not commonly achieved by other individuals his age. Therefore, Mr. Client's visual spatial ability is likely a noteworthy personal asset in his daily functioning.

Mr. Client’s next highest performance came on the Verbal Comprehension Index. The Verbal Comprehension Index measures the ability to access and apply acquired word knowledge. Mr. Client's verbal reasoning system was assessed by tasks that required him to find concrete and abstract similarities between words (50th percentile), name pictures and define words (37th percentile), demonstrate a fund of general factual information (63rd percentile) and verbally elaborate general principles and social reasoning (50th percentile). Mr. Client's overall results on the VCI placed him at the 50th percentile, or in the **average** range. These scores reflect generally average word knowledge and ability to reason and solve verbal problems. From a real world perspective, verbal comprehension abilities are typically associated with academic success and these findings therefore predict Mr. Client would have an average scholastic experience barring any learning disability or other cognitive, neurological, or psychological impairment. Mr. Client's verbal comprehension is considered a significant strength in comparison to the rest of his own profile. In fact, the magnitude of this strength is so large
that it is not commonly achieved by other individuals his age. Therefore, Mr. Client's verbal comprehension is likely a noteworthy personal asset in his daily functioning.

Mr. Client’s next highest performance came on the Fluid Reasoning Index. The Fluid Reasoning Index measures the ability to detect conceptual relationships among visual objects to identify and apply rules. Mr. Client’s fluid reasoning skills were assessed by tasks that required him to select options to complete a matrix (75th percentile), select weights to keep a scale balanced (25th percentile), select pictures to form a group with common characteristics (75th percentile) and mentally solve arithmetic problems within a time limit (9th percentile). Mr. Client’s overall results on the FRI placed him at the 37th percentile, or in the average range. The variability among Mr. Client's performances on the two core tasks of the FRI was unusually large however, indicating his fluid reasoning abilities are not best summarized by the FRI score. The direction of this variability implies a relative strength in inductive reasoning relative to quantitative reasoning. From a real world perspective, fluid abilities are typically associated with ambiguous work tasks that require abstract thinking to find the best solutions, and these findings therefore predict Mr. Client would have variable experiences generating these types of solutions depending on the cognitive demands of the task at hand.

Mr. Client's next highest performance came on the Processing Speed Index. The Processing Speed Index measures speed and accuracy of visual identification and decision-making implementation. Mr. Client's processing speed skills were assessed by tasks that required him to use a key to quickly and accurately copy symbols (16th percentile), search groups for targets within a time limit (5th percentile) and quickly scan and mark target objects (25th percentile). Mr. Client's overall results on the PSI placed him at the 10th percentile, or in the low average range. Low PSI scores may occur due to visual discrimination problems, distractibility, slow decision-making, motor difficulties, or generally slow cognitive speed. From a real world perspective, these findings indicate Mr. Client works at a slightly slower pace than the norm and a school or work environment would need to understand and accommodate this pattern of thinking. Mr. Client would work well in a setting where there are routine tasks, clear expectations for performance, and where he can learn at his own pace. Mr. Client’s processing speed is considered a significant weakness both in comparison to his peers and the rest of his own profile. In fact, the magnitude of this weakness is so large that it is not commonly found in other individuals his age. Therefore, Mr. Client’s processing speed is regarded as a high priority concern and suggests he may have an impairment or disorder affecting this area of basic cognitive functioning.

Mr. Client's lowest scores were demonstrated on the Working Memory Index. The Working Memory Index measures the ability to register, maintain, and manipulate visual and auditory information in conscious awareness. Mr. Client’s working memory skills were assessed by tasks that required him to recall numbers in forward, reverse or ascending order (16th percentile), select memorized objects in sequential order (5th percentile) and recall numbers and letters in a specified order (25th percentile). Mr. Client's overall results on the WMI placed him at the 7th percentile, or in the very low range. Low WMI scores may occur due to distractibility, visual or auditory discrimination problems, difficulty maintaining information in conscious awareness, low storage capacity, or general low cognitive functioning. Given that his scores on this index are below the norm, Mr. Client may benefit from learning strategies to aid his working memory. Mr. Client's working memory is considered a significant
weakness both in comparison to his peers and the rest of his own profile. In fact, the magnitude of this weakness is so large that it is not commonly found in other individuals his age. Therefore, Mr. Client's working memory is regarded as a high priority concern and suggests he may have an impairment or disorder affecting this area of basic cognitive functioning.

Specific comparisons of relative strengths and weaknesses of the primary indexes can further illuminate Mr. Client's cognitive profile. The magnitude of difference between these personal (not normative) strengths and weaknesses may be either rarely or commonly observed in the sample population at his ability level. In this case, Mr. Client showed the following relative strengths and weaknesses:

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Commonness*</th>
</tr>
</thead>
<tbody>
<tr>
<td>solving of complex problems</td>
<td>mental manipulation of information</td>
<td>Extremely Rare</td>
</tr>
<tr>
<td>solving of complex problems</td>
<td>speed and accuracy of decision-making</td>
<td>Extremely Rare</td>
</tr>
</tbody>
</table>

* Extremely Rare (<=2% of population at Mr. Client's ability level)
  Rare (<=5% of population at Mr. Client's ability level)
  Uncommon (<=15% of population at Mr. Client's ability level)
  Common (>15% of population at Mr. Client's ability level)

Ancillary and Complementary Index Analyses

The Ancillary and Complementary Indices of the WISC-V provide insight into specific and tailored referral questions regarding Mr. Client's abilities.

The General Ability Index (GAI) provides an estimate of general intellectual functioning that is less reliant on working memory and processing speed. It is particularly helpful in determining the intellectual abilities of youth with neurodevelopmental disorders such as learning disorders, ADHD, language disorders, or autism spectrum disorders, as these individuals may have a deflated FSIQ score due to working memory and processing speed limitations. It may also be helpful in interpreting the profile of gifted students who tend to have higher GAI scores relative to FSIQ and CPI scores. Mr. Client's overall results on the GAI placed him at the 53rd percentile, or in the average range. Mr. Client's scores reflect predominantly average abstract conceptual reasoning, visual-perceptual and spatial reasoning, and verbal problem solving. In this case, Mr. Client's GAI score is significantly higher than his CPI score in a pattern often found in those diagnosed with a neurodevelopmental or learning disorder.

The Nonverbal Index (NVI) is derived from "language reduced" subtests across various cognitive domains that do not require any verbal responses. It can be particularly useful in providing a measure of general intellectual ability for youth with special circumstances (e.g., English language learners or children who are deaf or hard of hearing) or clinical needs (e.g., autism spectrum disorder with language impairment, or other language disorder). Mr. Client's overall results on the NVI placed him at the 50th percentile, or in the average range. Mr. Client's scores reflect predominantly average general intellectual functioning for visually presented material.

The Naming Speed Index (NSI) is a broad indicator of automaticity of basic naming ability drawn from tasks requiring the rapid naming of colors, objects, letters, numbers, and the quantity of objects in a
box. Its primary use is the assessment of youth with suspected learning disabilities, and is not to be considered a measure of intellectual ability. Mr. Client's naming speed automaticity was assessed by two core tasks. The first task assesses literary automaticity and the possibility of learning disorders in reading and/or written expression (63rd percentile), whereas the second task assesses quantitative automaticity and the possibility of a learning disorder in mathematics (19th percentile). Mr. Client's overall results on the NSI placed him at the 50th percentile, or in the average range. The variability among Mr. Client's performances on the two core tasks of the NSI was unusually large however, indicating his naming speed abilities are not best summarized by the NSI score. The direction of this variability implies Mr. Client's naming facility abilities are stronger in tasks that utilize stimuli associated with literacy skills than for those tasks with stimuli associated with mathematics. In this regard, tailoring the presentation of stimuli to utilize his strengths and practice in areas of weakness would be beneficial for Mr. Client.

The **Symbol Translation** Index (STI) is a broad indicator of visual-verbal associative memory drawn from tasks requiring immediate, delayed and recognition memory. Its primary use is the assessment of youth with suspected learning disorders or declarative memory impairment, and is not to be considered a measure of intellectual ability. Mr. Client's visual-verbal memory was assessed by three core tasks. The first task assesses immediate memory (63rd percentile), the second task assesses delayed memory (4th percentile), and the third task assesses recognition memory (21st percentile). Mr. Client's overall results on the STI placed him at the 30th percentile, or in the average range. The variability among Mr. Client's performances on the three core tasks of the STI was unusually large however, indicating his memory shows strengths and weaknesses and is not best summarized by the STI score. The direction of this variability implies Mr. Client's immediate recall is superior to his delayed recall and delayed recognition. This suggests he is forgetting more information than expected, based on initial learning, even when presented with information to cue his long-term memory. It is important to note that Mr. Client's delayed recognition is also superior to his delayed recall, implying that presenting information to cue his long-term memory is still helpful. As his results on this index are variable, experimentation with different memory strategies would be beneficial for Mr. Client.

The **Storage and Retrieval** Index (SRI) provides a broad estimate of long-term storage and retrieval accuracy and fluency for reading, mathematics, and writing and is particularly helpful in the investigation of learning disorders and other clinical conditions. Mr. Client's overall results on the SRI placed him at the 25th percentile, or in the average range. Mr. Client's scores reflect predominantly average capacity for new learning and average speed of access to existing verbal knowledge stores. In this case, Mr. Client's SRI score does not reflect the pattern often found in those diagnosed with a neurodevelopmental or learning disorder.

The **Quantitative Reasoning** Index (QRI) is an indicator of quantitative reasoning skills and assists in more accurately predicting reading and mathematics achievement scores, academic success and educational attainment, success in gifted programs, and professional examination performance. Mr. Client's overall results on the QRI placed him at the 16th percentile, or in the low average range. Low QRI scores may occur due to difficulties with mental math operations, difficulties understanding and applying quantitative relationships, low working memory, or general difficulties with abstract conceptual
reasoning. In this case, Mr. Client's low QRI score reflects a pattern often found in those diagnosed with a learning disorder in mathematics.

The **Cognitive Proficiency** Index (CPI) provides an estimate of the efficiency with which information is processed. Good cognitive proficiency can reduce cognitive demands and liberate mental resources to facilitate problem solving and deeper thinking. The CPI estimates the degree to which the use of quick visual speed and good mental control aids the acquisition of new learning. As such, this index may be helpful in interpreting the profile of youth with neurodevelopmental disorders such as learning disorders, ADHD, language disorders, or autism spectrum disorders, as these individuals may have a lower CPI score relative to FSIQ and GAI scores. Mr. Client's overall results on the CPI placed him at the 9th percentile, or in the **low average** range. Mr. Client's low CPI scores may occur for many reasons including visual or auditory processing deficits, inattention, distractibility, visuomotor difficulties, limited working memory storage or mental manipulation capacity, or general low cognitive ability. In this case, Mr. Client's CPI score is significantly lower than his GAI score in a pattern often found in those diagnosed with a neurodevelopmental or learning disorder.

The **Auditory Working Memory** Index (AWMI) is an indicator of auditory working memory skills and the utilization of a phonological loop to temporarily store, rehearse and manipulate auditory information. Mr. Client's overall results on the AWMI placed him at the 1st percentile, or in the **extremely low** range. Low AWMI scores may occur due to auditory processing difficulties, inattention, distractibility, low auditory working memory storage or manipulation, or general low working memory ability. Mr. Client's scores on this index reflect his marked difficulties registering and manipulating verbally-presented material.

Specific comparisons of relative strengths and weaknesses of ancillary and complementary scores can further illuminate Mr. Client's cognitive profile. The magnitude of difference between these personal (not normative) strengths and weaknesses may be either rarely or commonly observed in the sample population at his ability level. In this case, Mr. Client showed the following relative strengths and weaknesses:

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Commonness*</th>
<th>Interpretive Possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>higher-order cognitive abilities</td>
<td>cognitive processing efficiency</td>
<td>Extremely Rare</td>
<td>reading disorder, ADHD – Inattentive Type (not Combined type), mild intellectual disability, traumatic brain injury, motor impairment</td>
</tr>
<tr>
<td>visual working memory</td>
<td>auditory working memory</td>
<td>Uncommon</td>
<td>memory deficits for verbally-presented material</td>
</tr>
</tbody>
</table>

*Extremely Rare (<=2% of population at Mr. Client's ability level)
Rare (<=5% of population at Mr. Client’s ability level)
Uncommon (<=15% of population at Mr. Client’s ability level)
Common (>15% of population at Mr. Client’s ability level)