

WPPSI®-IVCDN

Wechsler Preschool and Primary Scale of Intelligence-Fourth Edition: Canadian Interpretive Report (Canadian Norms)

| Examinee Name | Child A Sample Report | Date of Report | 07/04/2014 | |
|--------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------|------------|
| Examinee ID | 123456 | Grade | Kindergarten | |
| Date of Birth | 05/05/2008 | Primary Language | Bilingual English & French | |
| Gender | Male | Handedness | Left | |
| Race/Ethnicity | White and Japanese | Examiner Name | Clinical Psychologist | |
| Date of Testing | 07/04/2014 | Age at Testing | 5 years 11 months | Retest? No |
| Date of Birth Gender Race/Ethnicity Date of Testing | 05/05/2008 Male White and Japanese 07/04/2014 | Primary Language Handedness Examiner Name Age at Testing | Bilingual English & FrenchLeftClinical Psychologist5 years 11 months | Retest? No |

Comments:



Copyright © 2013 by NCS Pearson, Inc. Canadian adaptation copyright © 2014 by NCS Pearson, Inc. All rights reserved. Adapted and reproduced by Pearson Canada Assessment Inc.

Pearson, the PSI logo, PsychCorp the Wechsler logo, and WPPSI are trademarks in the U.S. and/or other countries of Pearson Education, Inc., or its affiliate(s).

PEARSON

[1.4/RE1/QG1]

ALWAYS LEARNING

REASON FOR REFERRAL

Child A was referred for an evaluation by his teacher secondary to school related concerns (low academic achievement, learning problems, reading difficulty, writing difficulty, inattentive behaviour, symptoms of hyperactivity, low homework completion), social/emotional concerns (emotion regulation, social skills), and cognitive concerns (attention problems).

BACKGROUND

Home

Child A is a 5-year-old child who lives with his parents. There are 2 siblings residing in the same home with him. His mother completed a 1 to 3 year college/technical school program and his father completed the 12th grade.

Language

Child A is bilingual in English and French. He has been exposed to English since birth and speaking English since first talking. His English skills are adequate.

Development

According to his mother, Child A was born premature. Child A began eating solids earlier than expected. He began sitting alone, standing alone, walking alone, babbling, speaking first words, speaking short sentences, and self-feeding within the expected time frame. He began crawling, using the toilet, and staying dry at night later than expected. His social interaction skills developed normally.

<u>Health</u>

Child A's health history was provided by his mother. Child A's most recent vision screening revealed that he has normal visual acuity. Child A's most recent hearing screening revealed that he hears within normal limits. No history of sensory dysfunction or motor dysfunction was reported. Child A's medical history is not known.

Education

Child A's educational history was provided by his father. Child A currently attends kindergarten at Elementary School. He has attended the same school or school system since initial enrollment in school. He currently has many excused absences and has frequent behaviour problems. He is experiencing some academic difficulties. Thus far Child A's academic performance has demonstrated personal strengths in the areas of science, art, and athletics and weaknesses in the areas of reading, writing, and language. When compared to his peers, he has shown strengths in the areas of mathematics, science, and art and weaknesses in reading, writing, and language.

TEST SESSION BEHAVIOUR

Child A arrived on time for the test session accompanied by his parent. His appearance was neat. He was not oriented to person. He exhibited notable difficulties with expressive language during testing. In particular, occasional difficulties were seen in the areas of word finding and vocabulary and frequent difficulties were seen in the area of pragmatics. His expressive language difficulties may have had a mild effect on his performance on tasks requiring oral responses.

ABOUT WPPSI-IV SCORES

Child A was administered 15 subtests from the Wechsler Preschool and Primary Scale of Intelligence-Fourth Edition (WPPSI-IV). This assessment measures ability across five areas of cognitive functioning and produces scores that show how well Child A performed in these areas, as well as producing a composite score that represents his overall intellectual ability (FSIQ). Each subtest produces a scaled score that can range from 1 to 19, with scores between 7 and 12 usually considered average. The subtest scaled scores contribute to index scores that represent Child A's performance in the five broad areas of cognitive ability. An index score can range from 40 to 160, with scores from 90 to 109 considered average.

A percentile rank (PR) is provided for each index score to show Child A's standing relative to other children the same age in the WPPSI-IV normative sample. If the percentile rank for Child A's Verbal Comprehension Index score is 4, for example, it means that Child A performed as well as or better than approximately 4% of children his age. This appears on the report as PR = 4.

The scores obtained on the WPPSI-IV reflect Child A's true abilities combined with some degree of measurement error. His true score is more accurately represented by a confidence interval (CI), which is a range of scores within which the true score is likely to fall. Composite scores are reported with 95% confidence intervals to ensure greater accuracy when interpreting the test scores. For each composite score reported for Child A, there is 95% certainty that his true score falls within the listed range.

It is common for children to exhibit significant discrepancies across areas of performance. If the difference between two scores is statistically significant, it is listed in the report with a base rate to aid in interpretation. The base rate (BR) provides a basis for estimating how rare a particular score difference was in the WPPSI-IV normative sample. For example, a base rate of 2%-5% is reported if the scaled score for Information (IN) is 3.70 points lower than the mean scaled score of subtests that contribute to FSIQ (MSS-F). This appears on the report as IN < MSS-F, BR = 2%-5%. This means that 2%-5% of children in the WPPSI-IV normative sample obtained a difference of this magnitude or greater between those two scores.

Young children's intellectual abilities may change substantially over the course of early childhood. Additionally, a child's scores on the WPPSI-IV can be influenced by motivation, attention, interests, and opportunities for learning. All scores may be slightly higher or lower if Child A were tested again on a different day. It is therefore important to view these test scores as a snapshot of Child A's current level of intellectual development. When these scores are used as part of a comprehensive evaluation, they contribute to an understanding of his current strengths and any needs that can be addressed.

INTERPRETATION OF WPPSI-IV RESULTS

Full Scale IQ

The Full Scale IQ (FSIQ) composite score is derived from six subtests and summarizes ability across a diverse set of cognitive functions. This score is considered the most representative indicator of global intellectual functioning. Subtests are drawn from five areas of cognitive ability: verbal comprehension, fluid reasoning, visual-spatial ability, processing speed, and working memory. Child A's FSIQ was measured in the Borderline range when compared to other children his age (FSIQ = 75, PR = 5, CI = 70-82). While the FSIQ provides a broad representation of cognitive functioning, describing Child A's specific cognitive abilities provides a more thorough understanding of his current level of functioning. Some children perform at approximately the same level in all of these areas, but most children display areas of cognitive strengths and weaknesses.

Verbal Comprehension

The Verbal Comprehension scale measured Child A's knowledge acquired from his environment, verbal concept formation, and verbal reasoning. Within this scale, the Verbal Comprehension Index (VCI) consists of two subtests. Child A's performance on subtests within the VCI was diverse but overall was low for his age (VCI = 73, PR = 4, Borderline range, CI = 68-82). His scores on verbal comprehension tasks were weaker than his performance on tasks that required him to use logic to solve problems (VCI < FRI, BR = 2.7%). Additionally, his Verbal Comprehension performance was somewhat weaker than scores obtained on tasks requiring him to hold information in his mind (VCI < WMI, BR = 0.6%). While variability was seen among verbal comprehension subtests, the overall pattern of scores suggests that Child A's verbal development is currently lagging in comparison to his development of logical reasoning skills and is an area for continued intervention.

With regard to individual subtests within the VCI, the Information (IN) subtest consists of general knowledge questions and the Similarities (SI) subtest required Child A to identify similarities between common objects and concepts. He exhibited uneven performance on subtests within the VCI. He showed low-average performance when describing similarities between two words (SI = 7). However, his performance on Information was weaker, with performance that was significantly lower than other children his age. This was an area of weakness relative to his overall level of ability (IN = 3; IN < 3) MSS-F, BR = 2%-5%; SI > IN, BR = 9.6%). This pattern of performance suggests that his verbal concept formation and abstract reasoning skills are currently stronger than his ability to acquire, remember, and retrieve general knowledge. While his level of general knowledge is currently an area of weakness within the VCI, it may increase through exposure to an enriched environment and participation in vocabulary development activities. In addition to the two subtests in the VCI, two other subtests in the Verbal Comprehension scale were administered to gain a more comprehensive understanding of Child A's language skills. For the Vocabulary (VC) subtest, he identified the definitions of verbally-presented words. His performance was slightly below other children his age, suggesting somewhat weak word knowledge and ability to verbalize meaningful concepts (VC = 7). On Comprehension (CO), a subtest requiring him to answer questions about general principles and social situations, Child A's performance was similar to other children his age. This suggests age-appropriate understanding of practical knowledge and ability to verbalize meaningful concepts (CO = 8).

Relatively weak verbal performance is not uncommon among bilingual children. Borderline verbal skills are consistent with his reported difficulties with expressive language and may also contribute to his current difficulties with reading.

Visual Spatial

Visual spatial processing involves organizing visual information, understanding part-whole relationships, attending to visual detail, and integrating visual and motor functions. In the area of visual spatial processing, Child A exhibited performance that was below most other children his age (VSI = 70, PR = 2, Borderline range, CI = 65-83). During this evaluation, Child A appeared to have significant difficulty putting together the pieces of puzzle-like tasks, and his performance in this area was weak in relation to his performance on logical reasoning tasks (VSI < FRI, BR = 1.6%). His visual spatial scores were also relatively weak when compared to his performance on working memory tasks (VSI < WMI, BR = 0.7%). Child A's relative weakness on visual spatial subtests suggests that he may have relative difficulty understanding visual information when it is abstract or cannot be figured out using words.

The VSI consists of two tasks. On the Block Design (BD) subtest, Child A viewed designs and used blocks to re-create each design. The Object Assembly (OA) subtest required him to assemble the pieces of puzzles to create pictures of common objects. He performed comparably across both subtests, suggesting that his ability to analyze and synthesize visual information and his ability to understand part-whole relationships are similarly developed.

Borderline performance on visual spatial tasks is consistent with Child A's reported difficulties with reading and writing.

Fluid Reasoning

The Fluid Reasoning Index (FRI) measured Child A's inductive reasoning skills, broad visual intelligence, simultaneous thinking, conceptual thinking, and classification ability. Overall, Child A's performance on subtests within this index was typical for his age and emerged as one of Child A's strongest areas of performance during the current assessment (FRI= 100, PR = 50, Average range, CI = 92-108; FRI > FSIQ, BR = 1%). Additionally, his performance on fluid reasoning tasks was particularly strong when compared to his performance on tasks that involved language-based and visual spatial skills (FRI > VCI, BR = 2.7%; FRI > VSI, BR = 1.6%). While subtests in both the FRI and VSI include visual stimuli, fluid reasoning subtests can be solved using logic, whereas visual spatial subtests consist of purely visual processing. Child A's relatively strong fluid reasoning performance suggests that he makes sense of visual information more easily when it follows a logical pattern. Moreover, his overall performance on this index was stronger than performance during this assessment appeared stronger than some cognitive abilities, it was also weaker than others. During this evaluation, he showed difficulty with fluid reasoning tasks in relation to his performance on working memory tasks (FRI < WMI, BR = 14.1%).

The FRI consists of two subtests: Matrix Reasoning and Picture Concepts. Matrix Reasoning (MR) required Child A to select the missing pieces in incomplete patterns. On Picture Concepts (PC), he was asked to choose pictures from two or three rows to form a group with a common trait. He performed comparably across both subtests, suggesting that his perceptual organization and categorical reasoning

skills are similarly developed at this time. His score on Matrix Reasoning was typical for his age, but was one of his strongest areas of performance when compared to his overall ability (MR = 10; MR > MSS-F, BR = 2%-5%). This suggests that broad visual intelligence, classification and spatial ability, and perceptual organization may be areas of relative strength at this time. This represents a strength that can be built upon in his further development. Additionally, his score on Picture Concepts was similar to other children his age and was one of his strongest areas of performance (PC = 10; PC > MSS-F, BR = 10%). This suggests that his inductive and categorical reasoning skills may currently be areas of strength when compared to his overall level of ability. This represents a strength that can be built upon in his further development.

Working Memory

Working memory involves attention, concentration, and mental control. The WPPSI-IV Working Memory Index (WMI) measures specific aspects of working memory such as visual working memory, visual-spatial working memory, and ability to resist interference from previously memorized items. Working memory was one of Child A's strongest areas of performance, with scores that were somewhat advanced for his age (WMI = 118, PR = 88, High Average range, CI = 109-124; WMI > FSIQ, BR = <1%). Child A easily recalled series of pictures and locations of animal cards. His performance on these tasks was relatively strong compared to his performance on language based and visual spatial tasks (WMI > VCI, BR = 0.6%; WMI > VSI, BR = 0.7%). His working memory performance was also strong when compared to his performance on logical reasoning and processing speed tasks (WMI > FRI, BR = 14.1%; WMI > PSI, BR = 0.7%). The significant difference between working memory and processing speed performance suggests that he may show relatively strong ability to hold important visual information in his mind, but may have relative difficulty working quickly.

With regard to subtests within the WMI, the Picture Memory (PM) subtest required Child A to memorize pictures and identify them on subsequent pages. On the Zoo Locations (ZL) subtest, he memorized the location of animal cards on a map and then placed the cards in the same location. Child A showed uneven performance on these tasks. Remembering the location of animal cards was a strength for Child A during this evaluation (ZL = 17; ZL > MSS-F, BR = <1%). However, he showed greater difficulty remembering series of rapidly-presented pictures (PM = 9; PM < ZL, BR = 2.3%). This pattern of strengths and weaknesses suggests that he may attend more easily to information during interactive tasks, or when information is supplemented by spatial cues.

Processing Speed

The Processing Speed scale measured Child A's ability to quickly and correctly scan or discriminate simple visual information. Within this scale, the Processing Speed Index (PSI) consists of two timed subtests. Child A's overall processing speed performance was low for his age (PSI = 79, PR = 8, Borderline range, CI = 72-92). Child A's processing speed scores appeared weak compared to his performance on tasks requiring him to use logic-based reasoning and hold information in his mind (PSI < FRI, BR = 9.9%; PSI < WMI, BR = 0.7%).

The PSI consists of two subtests in which Child A scanned pictures and marked target pictures with an ink dauber. During the Bug Search (BS) subtest, he marked pictures of bugs in a search group that matched the target bug. The Cancellation (CA) subtest required him to mark target objects in a random and structured array. Performance across these tasks was similar, suggesting that Child A's perceptual

speed, short-term visual memory, scanning ability, and visual recognition are similarly developed. In addition to the subtests in the PSI, Child A was administered Animal Coding (AC), another subtest in the Processing Speed scale, to gain a fuller understanding of his processing speed ability. On this timed subtest he used a key to mark shapes that correspond to pictures of animals. His performance was slightly low compared to other children his age (AC = 7). Animal Coding measures speed, short-term memory, learning and visual scanning ability, as well as cognitive flexibility.

Relatively slow processing speed may be related to symptoms of inattention and hyperactivity reported in his history. Additionally, Child A's performance on processing speed tasks, with their associated motor and speed demands, may be related to his difficulties with writing.

ANCILLARY INDEXES

In addition to the indexes described above, Child A was administered several ancillary indexes. Ancillary indexes do not replace FSIQ and the primary index scores, but are meant to provide additional information about Child A's cognitive profile.

Vocabulary Acquisition

Child A was administered the two subtests comprising the Vocabulary Acquisition Index (VAI), an ancillary index that provides a simpler, more focused measure of verbal abilities. His overall performance was slightly below other children his age (VAI = 82, PR = 12, Low Average range, CI = 76-91). His performance was similar on both tasks, which required him to point to pictures that best represented words read aloud, and to name objects in pictures (RV = 6; PN = 8). These scores suggest that his expressive and receptive language abilities are similarly developed. His somewhat weak performance on VAI subtests may be related to expressive language difficulties observed during testing. When interpreting Child A's performance on the VAI, it is important to consider the fact that he is bilingual.

Nonverbal Index

The Nonverbal Index (NVI) is derived from five subtests that do not require verbal responses. This index can provide a measure of general intellectual functioning that minimizes language demands for children with special clinical needs such as speech and language problems. Subtests in this index are drawn from the Visual Spatial, Fluid Reasoning, Working Memory, and Processing Speed scales. Child A's performance on the NVI fell in the Low Average range when compared to other children his age (NVI = 83, PR = 13, CI = 77-91).

General Ability and Cognitive Proficiency

Child A was administered the four subtests comprising the General Ability Index (GAI), an ancillary index that provides an estimate of general intelligence that is less sensitive to the influence of working memory and processing speed difficulties than FSIQ. The GAI consists of subtests from the visual spatial, fluid reasoning, and verbal domains. His overall performance on this index was below most other children his age (GAI = 75, PR = 5, Borderline range, CI = 70-82). His FSIQ and GAI scores were not significantly different.

Child A was also administered the Cognitive Proficiency Index (CPI), which consists of four subtests drawn from the working memory and processing speed domains. His performance on this Index suggests that he exhibits average efficiency when processing cognitive information in the service of learning, problem solving, and higher-order reasoning (CPI = 98, PR = 45, Average range, CI = 91-106). Child A's performance on subtests contributing to the GAI was significantly weaker than his overall level of cognitive proficiency (GAI < CPI, BR = 5.6%).

SUMMARY

Child A is a 5-year-old boy referred for this evaluation by his teacher secondary to school related concerns (low academic achievement, learning problems, reading difficulty, writing difficulty, inattentive behaviour, symptoms of hyperactivity, low homework completion), social/emotional concerns (emotion regulation, social skills), and cognitive concerns (attention problems). The WPPSI-IV was used to assess his cognitive ability across five areas of cognitive functioning. When interpreting these scores, it is important to view these results as a snapshot of his current intellectual functioning. As measured by the WPPSI-IV, his overall FSIQ fell in the Borderline range when compared to other children his age (FSIQ = 75). He showed age-appropriate logical thinking skills, exhibiting one of his strongest areas of performance during this evaluation (FRI = 100). Performance on fluid reasoning tasks was an area of particular strength when compared to his performance on verbal comprehension tasks (VCI = 73), visual spatial tasks (VSI = 70), and processing speed tasks (PSI = 79). Although his working memory performance was variable, overall he showed above average performance on working memory tasks, which measure concentration and mental control. This was also an area of strength relative to his overall level of ability (WMI = 118). When compared to his verbal comprehension (VCI = 73), visual spatial (VSI = 70), and processing speed (PSI = 79) performance, working memory skills were particularly strong. Ancillary Index scores revealed additional information about Child A's cognitive profile. His overall level of vocabulary development, as measured by the Vocabulary Acquisition Index, fell in the Low Average range (VAI = 82). On the Nonverbal Index, a measure of general intellectual functioning that minimizes language demands, his performance was Low Average for his age (NVI = 83). He scored in the Borderline range on the General Ability Index, which provides an estimate of general intelligence that is less sensitive to the influence of working memory and processing speed difficulties than FSIQ (GAI = 75). Performance on the Cognitive Proficiency Index, which captures the efficiency with which he processes information, was comparatively strong, falling in the Average range (CPI = 98). Child A's learning difficulties and low academic achievement may be related to his relatively low FSIQ. He may have difficulty keeping up with other children in classroom, and is likely to require additional assistance in order to grasp new concepts. Child A's reported reading difficulties may be related to his relatively weak verbal reasoning skills, visual spatial processing abilities, and vocabulary development. Additionally, his challenges making sense of complex visual information and relatively slow completion of visual motor tasks are likely contributing to his reported difficulties with written language. Potential areas for intervention are described in the following section.

RECOMMENDATIONS

Recommendations for General Cognitive Functioning

Child A's FSIQ was measured in the Borderline range, which means that his overall level of cognitive ability is greater than 5 percent of children his age. Children with this level of ability may experience significant difficulty in multiple areas of functioning. In school, Child A may benefit from multiple interventions aimed at supporting his academic progress. Pre-teaching and re-teaching lessons learned in school will give him additional exposure to new concepts and may facilitate his comprehension and recall of information. It may be helpful to present new content material in multiple modalities, using simple vocabulary and sentence structure. Adults may wish to set small, measurable goals in each academic content area. Child A can be involved in creating small rewards that he earns for each goal that is met. Tracking his own success on a chart may provide him with a sense of accomplishment. In addition to these academic goals, an adaptive behaviour assessment may be helpful in identifying goals in adaptive functioning. Children with this level of ability sometimes benefit from directed training in areas such as self-care, community interactions, and household chores. It is also recommended that adults involve Child A in enjoyable hobbies and extracurricular activities in order to build skills and success in multiple areas of functioning.

Recommendations for Verbal Skills

Child A's overall performance on the VCI was weak compared to other children his age. Verbal skills were also weak compared to other areas of cognitive functioning. This may have occurred because he is bilingual. However, it remains important to build his verbal skills. Relatively weak verbal skills place a child at risk for reading comprehension problems and may make it difficult to keep up with peers in the classroom. Classroom activities often involve listening comprehension, verbal reasoning, and oral responding. It is therefore recommended that interventions are provided in this area. Verbal interventions include shared reading strategies such as dialogic reading. This strategy allows adults to ask the child specific questions that encourage interest, comprehension, and critical thinking. Vocabulary can be enriched by exposing Child A to novel situations and encouraging him to ask the names of unknown objects. Adults can keep a list of words that Child A learns and review them periodically with him. Researching new concepts can help to concretize new vocabulary in his mind. Adults may wish to encourage Child A to engage in verbal discourse by creating an open, positive environment for conversation. For example, adults can ask him open-ended questions and allow him sufficient time to formulate a complete response. Family members can encourage Child A to engage in supervised age-appropriate conversation in the community. For example, he can be encouraged to order his own food at a restaurant or ask questions to a store clerk. Adults may wish to give him positive feedback when engaging in conversation. Positive feedback includes engaging in further reciprocal conversation, asking Child A to elaborate on his thoughts, and making positive comments about his contributions to the conversation.

Recommendations for Visual Spatial Skills

Child A's visual spatial skills were weak compared to other children his age. Children with relatively low visual spatial skills may have difficulty understanding information that is presented without using words. It may be helpful for teachers to support Child A's needs by explicitly presenting information using words. He may benefit from interventions aimed at analyzing and synthesizing visual information. Examples of these interventions include learning to read maps and creating his own maps of his house, school, or neighbourhood. He may be taught strategies to complete puzzles, such as identifying puzzle pieces with similar colours and lines. Mental rotation activities, such as drawing a simple shape from different perspectives, may also be helpful. A variety of computerized games are available that engage a child's visual spatial abilities. In addition to having difficulty understanding purely visual information, children with this pattern of functioning can sometimes have difficulty understanding social situations because they may not always understand subtle nonverbal cues from those around them. In such cases, it can be useful to directly prepare children for problem-solving in novel situations. For example, before a novel situation, adults can talk to Child A about what to expect in a new situation. If he is anxious about how to respond to a situation, role playing may be useful.

Recommendations for Fluid Reasoning Skills

Child A exhibited Average performance on the FRI. While this score is within normal limits for his age, it was an area of relative weakness. Children who have relative difficulty with fluid reasoning tasks may have difficulty solving problems, applying logical reasoning skills, and understanding complicated concepts. Child A may benefit from practicing skills in this area. He may benefit from structure and practice when approaching tasks that are challenging to him. With regard to specific fluid reasoning interventions, he can be asked to identify patterns or to look at a series and identify what comes next. Additionally, he can be given a group of objects and asked to think of multiple ways to group those objects. Adults can ask him to explain each of his groupings. Performing age-appropriate science experiments may be helpful in building logical thinking skills. For example, adults can help him form a hypothesis and then perform a simple experiment, using measurement techniques to determine whether or not his hypothesis was correct. Asking questions about stories can also build fluid reasoning skills. For example, when reading a book or watching a movie, Child A can be asked to identify the main idea of the story. Adults can ask him open-ended questions that utilize his fluid reasoning skills. They can ask him questions such as, 'What do you think would happen if...' and help him to think logically about his responses. Reinforcing his responses with positive feedback may encourage him to continue engaging his fluid reasoning skills.

Recommendations for Working Memory Skills

Child A's working memory scores fell in the High Average range and were a strength relative to other cognitive skills. Working memory skills can help a child ignore distraction and exert mental control. They are an important component of academic success because they help children efficiently process information in service of learning. It is important to continue to build this area of strength. Computerized interventions may be helpful in strengthening both verbal and visual spatial working memory skills. Other strategies that may be useful in increasing working memory include teaching Child A to chunk information into categories and connect new information to concepts that he already knows. It is important to reinforce Child A's progress during these interventions. Goals should be small and measurable, and should steadily increase in complexity as his skills continue to grow.

Recommendations for Processing Speed

Overall processing speed scores are an area of relative weakness, indicating that this is a potential area for intervention. Children with relatively low processing speed may work more slowly than same-age peers, which can make it difficult for them to keep up with classroom activities. It is important to identify the factors contributing to Child A's performance in this area; while some children simply work at a slow pace, others are slowed down by perfectionism, visual processing problems, inattention, or fine motor coordination difficulties. In addition to interventions aimed at these underlying areas, processing speed skills may be built through practice. Interventions can focus on building Child A's fluency on simple tasks. For example, he can play card-sorting games in which he quickly sorts cards according to increasingly complex rules. Fluency in academic skills can also be increased through practice. Speeded flash card drills, such as asking Child A to identify letters or solve simple addition problems under a time constraint, may help develop automaticity that can free up cognitive resources in service of more complex academic tasks. Computerized interventions, Child A can be rewarded for working quickly rather than accurately, as perfectionism can sometimes interfere with speed. As his performance improves, both accuracy and speed can be rewarded.

RECOMMENDATIONS

Recommendations for Attention Difficulties

Child A may maximize his productivity during study time by eliminating outside distractions, extraneous noise, and unnecessary interruptions. At school, Child A should be given a quiet place to work away from other students. At home, Child A's family may help him complete his homework assignments by providing a location where he can be monitored. It is recommended that he not do his homework in an unsupervised room, as this affords too many opportunities for distraction.

To help Child A maintain focus on cognitive tasks, teachers are encouraged to provide "motor breaks." These are periods of 3 to 5 minutes of physical movement or motor activity, and occur after every 15 to 20 minutes of cognitive effort. Child A would additionally benefit from stretch breaks. This means that he should be allowed, when appropriate, to stand up and stretch during extended periods of cognitive effort.

Children with attention problems may find it useful to relieve excess physical energy by fidgeting during class. To allow him to fidget, Child A can be given a "wiggle seat" or stress ball to squeeze during class. This allows him a chance to relieve his excess physical energy in a socially appropriate manner.

Child A would benefit from a well-structured learning environment that is carefully planned and consistently implemented in terms of the physical arrangement, schedule of activities, and expected behaviours.

Recommendations to Build Reading Skills

Child A should receive an evidence-based intervention to remediate reading difficulties. It is important that Child A's reading progress is carefully monitored so that the intervention can be tailored to his needs.

Because of Child A's reading difficulties, teachers are encouraged to reduce the number of questions or problems to be completed at one time. For example, the teacher could indicate the essential items to be completed and give bonus points for additional items that Child A completes.

Due to Child A's reading difficulties, it is recommended that he receive additional time to complete tests, quizzes, and assignments requiring this skill.

Recommendations to Build Writing Skills

Child A's family may help him learn to spell words by playing games in which Child A is asked to make words (or made-up words) from a group of letters.

Child A could develop a list of his problem words, that is, words that he commonly misspells. He could then concentrate on learning these words and could add and remove words from the list as appropriate.

Recommendations for School Difficulties

Teachers are encouraged to complete weekly progress reports to assist Child A in monitoring his accomplishments and areas in need of improvement.

Recommendations to Build Social Skills

Child A may be encouraged to maintain appropriate eye contact with adults and peers. If eye contact is uncomfortable for him, he can be encouraged to employ compensatory strategies such as looking between or slightly above peers' eyes when speaking.

Rather than punishing Child A for lack of communication, teachers and family members are encouraged to reward any appropriate behaviours as they are observed.

Recommendations for Further Evaluation

It is recommended that Child A's abilities or skills be tested further with an individual achievement measure, an assessment of basic conceptual knowledge, or an assessment of emerging literacy skills.

Thank you for the opportunity to assess Child A. Please contact me with any questions you have about these results.

This report is only valid if signed by a qualified professional:

Clinical Psychologist

Date

PRIMARY SUMMARY

Scaled Score Summary

| Subtest Name | | Total Raw Score | Scaled Score | Percentile Rank | Age Equivalent | SEM |
|------------------|----|--------------------|--------------|--------------------|-------------------|------|
| Information | IN | 15 | 3 | 1 | 3:8 | 1.27 |
| Similarities | SI | 15 | 7 | 16 | 4:5 | 0.85 |
| (Vocabulary) | VC | 15 | 7 | 16 | 4:5 | 0.99 |
| (Comprehension) | СО | 15 | 8 | 25 | 5:0 | 1.08 |
| Block Design | BD | 15 | 5 | 5 | 3:7 | 1.41 |
| Object Assembly | OA | 15 | 5 | 5 | 3:10 | 1.24 |
| Matrix Reasoning | MR | 15 | 10 | 50 | 5:10 | 0.95 |
| Picture Concepts | PC | 15 | 10 | 50 | 5:10 | 1.04 |
| Picture Memory | PM | 15 | 9 | 37 | 5:3 | 0.99 |
| Zoo Locations | ZL | 15 | 17 | 99 | >7:7 | 1.31 |
| Bug Search | BS | 15 | 6 | 9 | 4:2 | 1.31 |
| Cancellation | CA | 30 | 7 | 16 | 4:6 | 1.41 |
| (Animal Coding) | AC | 15 | 7 | 16 | 4:6 | 1.41 |

Subtests used to derive the FSIQ are bolded. Subtests not typically core for any composite score are in parentheses.

Subtest Scaled Score Profile



PRIMARY SUMMARY (CONTINUED)

Composite Score Summary

| | | | | | 95% | | |
|----------------------|------|-------------------------|--------------------|--------------------|------------------------|----------------------------|------|
| Composite | | Sum of Scaled Scores | Composite Score | Percentile Rank | Confidence Interval | Qualitative Description | SEM |
| Verbal Comprehension | VCI | 10 | 73 | 4 | 68-82 | Borderline | 4.50 |
| Visual Spatial | VSI | 10 | 70 | 2 | 65-83 | Borderline | 5.41 |
| Fluid Reasoning | FRI | 20 | 100 | 50 | 92-108 | Average | 4.24 |
| Working Memory | WMI | 26 | 118 | 88 | 109-124 | High Average | 4.74 |
| Processing Speed | PSI | 13 | 79 | 8 | 72-92 | Borderline | 5.61 |
| Full Scale IQ | FSIQ | 40 | 75 | 5 | 70-82 | Borderline | 3.67 |

Confidence intervals are calculated using the Standard Error of Estimation.

Composite Score Profile



Note. Vertical bars represent the Confidence Intervals.

PRIMARY ANALYSIS

Index Level Strengths and Weaknesses

| | | Comparison | | Strength or | | | |
|-------|-------|------------|------------|-----------------------|----------|------------------|--|
| Index | Score | Score | Difference | Critical Value | Weakness | Base Rate | |
| VCI | 73 | 75.00 | -2.00 | 10.21 | | >25% | |
| VSI | 70 | 75.00 | -5.00 | 12.28 | | >25% | |
| FRI | 100 | 75.00 | 25.00 | 11.76 | S | 1% | |
| WMI | 118 | 75.00 | 43.00 | 12.51 | S | <1% | |
| PSI | 79 | 75.00 | 4.00 | 13.05 | | >25% | |

Comparison score is the FSIQ.

Statistical significance (critical values) at the .05 level.

Base rate for overall sample.

Index Level Pairwise Difference Comparisons

| | | | | | Significant | |
|------------------|---------|---------|------------|----------------|-------------|-----------|
| Index Comparison | Score 1 | Score 2 | Difference | Critical Value | Difference | Base Rate |
| VCI - VSI | 73 | 70 | 3 | 13.79 | N | 42.1% |
| VCI - FRI | 73 | 100 | -27 | 12.12 | Y | 2.7% |
| VCI - WMI | 73 | 118 | -45 | 12.81 | Y | 0.6% |
| VCI - PSI | 73 | 79 | -6 | 14.10 | Ν | 39.9% |
| VSI - FRI | 70 | 100 | -30 | 13.47 | Y | 1.6% |
| VSI - WMI | 70 | 118 | -48 | 14.10 | Y | 0.7% |
| VSI - PSI | 70 | 79 | -9 | 15.28 | Ν | 30.1% |
| FRI - WMI | 100 | 118 | -18 | 12.46 | Y | 14.1% |
| FRI - PSI | 100 | 79 | 21 | 13.78 | Y | 9.9% |
| WMI - PSI | 118 | 79 | 39 | 14.39 | Y | 0.7% |

Statistical significance (critical values) at the .05 level. Base rate for overall sample.

PRIMARY ANALYSIS (CONTINUED)

| Subtest | Score | Comparison Score | Difference | Critical Value | Strength or Weakness | Base Rate |
|---------|-------|---------------------|------------|----------------|-------------------------|-----------|
| IN | 3 | 6.70 | -3.70 | 3.19 | W | 2%-5% |
| SI | 7 | 6.70 | 0.30 | 2.35 | | >25% |
| BD | 5 | 6.70 | -1.70 | 3.48 | | 10%-25% |
| OA | 5 | 6.70 | -1.70 | 3.71 | | 25% |
| MR | 10 | 6.70 | 3.30 | 2.54 | S | 2%-5% |
| PC | 10 | 6.70 | 3.30 | 3.19 | S | 10% |
| PM | 9 | 6.70 | 2.30 | 2.62 | | 10%-25% |
| ZL | 17 | 6.70 | 10.30 | 3.90 | S | <1% |
| BS | 6 | 6.70 | -0.70 | 3.27 | | >25% |
| СА | 7 | 6.70 | 0.30 | 4.16 | | >25% |

Subtest Level Strengths and Weaknesses

Comparison score is the Mean Scaled Score for FSIQ subtests.

Statistical significance (critical values) at the .05 level.

Subtest Level Pairwise Difference Comparisons

| | | | | | Significant | |
|--------------------|---------|---------|------------|----------------|-------------|-----------|
| Subtest Comparison | Score 1 | Score 2 | Difference | Critical Value | Difference | Base Rate |
| IN - SI | 3 | 7 | -4 | 2.52 | Y | 9.6% |
| BD - OA | 5 | 5 | 0 | 3.40 | N | |
| MR - PC | 10 | 10 | 0 | 2.75 | N | |
| PM - ZL | 9 | 17 | -8 | 2.76 | Y | 2.3% |
| BS - CA | 6 | 7 | -1 | 3.79 | N | 39.2% |

Statistical significance (critical values) at the .05 level.

ANCILLARY SUMMARY

Scaled Score Summary

| Subtest Name | | Total Raw Score | Scaled Score | Percentile Rank | Age Equivalent | SEM |
|-------------------------|-----|--------------------|--------------|--------------------|-------------------|------|
| Receptive Vocabulary | RV | 15 | 6 | 9 | 3:7 | 0.99 |
| Picture Naming | PN | 15 | 8 | 25 | 4:7 | 1.20 |
| Cancellation Random | CAR | 15 | 8 | 25 | 4:9 | 1.41 |
| Cancellation Structured | CAS | 15 | 7 | 16 | 4:6 | 1.67 |

Index Score Summary

| | | | | | 95% | | |
|------------------------|-----|-------------------------|-------------------|--------------------|------------------------|----------------------------|------|
| Composite | | Sum of Scaled Scores | Standard Score | Percentile Rank | Confidence Interval | Qualitative Description | SEM |
| Vocabulary Acquisition | VAI | 14 | 82 | 12 | 76-91 | Low Average | 4.50 |
| Nonverbal | NVI | 40 | 83 | 13 | 77-91 | Low Average | 3.97 |
| General Ability | GAI | 25 | 75 | 5 | 70-82 | Borderline | 3.97 |
| Cognitive Proficiency | CPI | 39 | 98 | 45 | 91-106 | Average | 4.24 |

Ancillary Index Score Profile



Note. Vertical bars represent the Confidence Intervals.

ANCILLARY ANALYSIS

Index Level Pairwise Difference Comparisons

| Index Comparison | Score 1 | Score 2 | Difference | Critical Value | Significant Difference | Base Rate |
|------------------|---------|---------|------------|----------------|---------------------------|-----------|
| GAI - FSIQ | 75 | 75 | 0 | 4.62 | Ν | |
| GAI - CPI | 75 | 98 | -23 | 11.38 | Y | 5.6% |

Statistical significance (critical values) at the .05 level. Base rate for overall sample.

Subtest and Process Level Pairwise Difference Comparisons

| Subtest Comparison | Score 1 | Score 2 | Difference | Critical Value | Significant Difference | Base Rate |
|--------------------|---------|---------|------------|----------------|---------------------------|-----------|
| RV - PN | 6 | 8 | -2 | 2.93 | N | 30.4% |
| CAR - CAS | 8 | 7 | 1 | 4.59 | Ν | 39.0% |

Statistical significance (critical values) at the .05 level.

End of Report