WPPSI-IV Interpretive Considerations for Charlie O. Jackson (11/27/2013)

Interpretive considerations provide additional information to assist you, the examiner, in interpreting the child's performance. *This section should not be provided to the parent or recipient of the report.*

Please review these interpretive considerations before reading the report. These interpretive considerations may suggest that you make changes to the report settings in Q-global. If you make changes to the report settings, you can re-run the report without being charged.

This file contains two full reports: first, the interpretive report, and second, the parent report. Be sure to separate these reports before providing them to the recipients.

Test Behavior Considerations

Expressive language difficulties were identified that may significantly affect the accuracy of verbal comprehension and auditory memory estimates, depending upon the nature and severity of the impairment. You have indicated that Charlie exhibited expressive language or speech-related difficulties. His verbal intellectual scores may underestimate his actual abilities.

Receptive language difficulties were identified that may significantly affect the accuracy of test scores, depending upon the nature and severity of the impairment. All tests on the WPPSI-IV require the child to understand the examiner's instructions. You have indicated that Charlie exhibited receptive language or speech-related difficulties. Receptive language difficulties may affect test performance in subtle ways. The examinee may appear inattentive or uncooperative. Problems following directions may result in poor performance across a variety of tasks. His Verbal Comprehension scores may underestimate his actual abilities.

Referral Reason Considerations

Charlie was referred for an assessment of language functioning. For children with language difficulties, scores on verbal intellectual measures may underestimate the individual's actual abilities. Such scores, although dependent on intact language functioning, are not intended as a measure of grammatical, lexical, and syntactic integrity or as a measure of language pragmatics.

Score Interpretation Considerations

Charlie's overall performance on the VAI is Low Average compared to other children his age. Slow vocabulary development may place him at risk for reading comprehension difficulties in the future. Vocabulary enrichment activities should be considered as part of a comprehensive treatment plan for reading difficulties. Further testing may be warranted. Charlie exhibited expressive problems during testing that reportedly did not impact his performance. However, his performance on the VAI was relatively low and suggests that his language difficulties may have interfered with his performance.

Recommendation Considerations

These recommendations are meant to be an aid to you as a clinician, but they are not meant as a substitute for individualized recommendations generated by an individual who is familiar with the child. Please read through the automatically generated recommendations carefully and edit them according to the child's individual strengths and needs.

The recommendation section entitled 'Recommendations for Verbal Skills' was included in the report because the child's verbal skills were an area of weakness relative to his overall ability level.

The recommendation section entitled 'Recommendations for Visual Spatial Skills' was included in the report because the child's visual spatial skills were an area of strength relative to other areas of cognitive functioning.

The recommendation section entitled 'Recommendations for Fluid Reasoning Skills' was included in the report because fluid reasoning skills were an area of weakness relative to other areas of cognitive ability.

The recommendation section entitled 'Recommendations for Working Memory Skills' was included in the report because the child's working memory skills were an area of weakness relative to other areas of cognitive functioning.

The recommendation section entitled 'Recommendations for Processing Speed Skills' was included in the report because the child's processing speed skills were an area of weakness.

End of Interpretive Considerations

WPPSI™-IV

WECHSLER PRESCHOOL AND PRIMARY SCALE OF INTELLIGENCE — FOURTH EDITION

WPPSI™-IV

Wechsler Preschool and Primary Scale of Intelligence-Fourth Edition

Interpretive Report

Examinee Name	Charlie O. Jackson		Date of Report	12/16/2013	
Examinee ID			Grade	1	
Date of Birth	07/13/2008		Primary Language	English	
Gender	Male		Handedness	Right	
Race/Ethnicity	Multiracial		Examiner Name	Amy Schmid	
Date of Testing	11/27/2013		Age at Testing	5 years 4 months	Retest? Yes

Comments:

PsychCorp

[1.3 / RE1 / QG1]

ALWAYS LEARNING

PEARSON

REASON FOR REFERRAL

Charlie was referred for an evaluation by Mrs. Swihart, his mother, secondary to school related concerns (reading difficulty, writing difficulty, inattentive behavior, symptoms of hyperactivity), language concerns (receptive language, expressive language), and social/emotional concerns (symptoms of anxiety).

BACKGROUND

Home
Charlie is a 5-year-old child who lives with his parents. There is 1 sibling residing in the same home with him. His mother attended graduate school and his father is a high school graduate.

Language
Charlie's primary language is English. He has been exposed to English since birth and speaking English since first talking.

Development
Charlie was born with no apparent complications. Charlie began sitting alone and crawling within the expected time frame. He began speaking first words and speaking short sentences later than expected. His social interaction skills developed normally. Additional information about his developmental milestones is not known.

Health
Charlie's health history was provided by his mother. Charlie's most recent vision screening revealed that he has normal visual acuity. Charlie's most recent hearing screening revealed that he hears within normal limits. Reported sensory problems include auditory processing. Charlie was previously diagnosed with Attention-Deficit Hyperactivity Disorder and sensory-motor difficulties. Charlie is currently diagnosed with auditory processing disorder.

Education
Charlie's educational history was provided by his mother. Charlie's early education experience includes a special services preschool program and a full-day kindergarten program. Charlie currently attends 1st grade at Newhall Elementary School. He is receiving RTI services and obtains inconsistent grades. He currently has good attendance and has occasional interpersonal difficulties. He is experiencing some academic difficulties. Thus far Charlie's academic performance has demonstrated personal strengths in the areas of art and athletics. When compared to his peers, he has shown weaknesses in the areas of reading, writing, and language. On recent standardized achievement tests, Charlie's performance was below average in reading.

TEST SESSION BEHAVIOR

Charlie arrived on time for the test session accompanied by his parent. He was appropriately dressed and groomed. Signs of inattention and hyperactivity were observed during testing. This may have had a mild impact on his ability to perform to the best of his ability. He exhibited notable difficulties with expressive language during testing. In particular, frequent difficulties were seen in the area of word finding. Charlie also exhibited notable difficulties with receptive language during testing. Specifically, he required occasional repetition of instructions and occasional clarification or simplification of the instructions. His receptive language difficulties may have mildly affected his performance on verbal tasks that involve answering questions presented orally. Receptive language difficulties also have the potential to affect his ability to understand orally-presented instructions, which are a component of both verbal and nonverbal tasks.

ABOUT WPPSI-IV SCORES

Charlie was administered 12 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 Charlie 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 Charlie'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 Charlie's standing relative to other children the same age in the WPPSI-IV normative sample. If the percentile rank for Charlie's Verbal Comprehension Index score is 25, for example, it means that Charlie performed as well as or better than approximately 25% of children his age. This appears on the report as PR = 25.

The scores obtained on the WPPSI-IV reflect Charlie'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 Charlie, 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 or among children of a similar ability level. For example, a base rate of 1%-2% is reported if the scaled score for Block Design (BD) is 5.60 points higher than the mean scaled score for the primary index subtests (MSS-I). This appears on the report as BD > MSS-I, BR = 1%-2%. This means that 1%-2% of children in the WPPSI-IV normative sample or among children of a similar ability level 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 Charlie were tested again on a different day. It is therefore important to view these test scores as a snapshot of Charlie'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. Charlie's FSIQ was measured in the Average range when compared to other children his age (FSIQ = 99, PR = 47, CI = 93-105). While the FSIQ provides a broad representation of cognitive functioning, describing Charlie'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 Index (VCI) measured Charlie's knowledge acquired from his environment, verbal concept formation, and verbal reasoning. Overall, Charlie's performance on subtests within the VCI was typical for his age but was an area of relative weakness compared to his overall level of ability (VCI = 90, PR = 25, Average range, CI = 84-97; VCI < MIS, BR = 5%-10%). His scores on verbal comprehension tasks were weaker than his performance on tasks that required him to figure things out by looking at them and use logic to solve problems (VCI < VSI, BR = 2.2%; VCI < FRI, BR = 11.1%). Additionally, his Verbal Comprehension performance was somewhat weaker than scores obtained on tasks requiring him to hold information in his mind (VCI < WMI, BR = 22.0%). Overall, verbal comprehension scores suggest that Charlie's verbal development is currently lagging in comparison to his development of visual spatial and 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 Charlie to identify similarities between common objects and concepts. He performed comparably across both subtests, suggesting that these verbal skills are similarly developed.

Relatively weak verbal skills are consistent with his reported difficulties with expressive and receptive 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. During this evaluation, visual spatial processing was one of Charlie's strengths, with performance that was somewhat advanced for his age (VSI = 118, PR = 88, High Average range, CI = 107-125; VSI > MIS, BR = 2%-5%). Charlie quickly and accurately put together the pieces of puzzle-like tasks, and his performance in this area was particularly strong in relation to his performance on language-based tasks and logical reasoning tasks (VSI > VCI, BR = 2.2%; VSI > FRI, BR = 20.6%). Because his visual spatial skills currently appear stronger than his fluid reasoning skills, he may work easily with purely visual information, but have greater difficulty applying complex reasoning to visual stimuli. His visual spatial scores were also particularly strong when compared to his performance on working memory tasks and tests of processing speed (VSI > WMI, BR = 17.8%; VSI > PSI, BR = 4.4%). His relative strength in visual spatial skills compared to working memory skills suggests that at this time, he may show relative skill when processing visual information, but he may experience relative difficulty making distinctions between the visual information that he previously viewed, and the visual information that he is currently viewing.

The VSI consists of two tasks. On the Block Design (BD) subtest, Charlie 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. Charlie showed uneven performance on these tasks. Putting together multicolored blocks to match pictures on Block Design was a strength for Charlie (BD = 16; BD > MSS-I, BR = 1%-2%). However, he showed greater difficulty on Object Assembly, in which he put together pictures of common objects (OA = 10; BD > OA, BR = 3.7%). This pattern of scores suggests that his ability to analyze and synthesize abstract visual information may be somewhat stronger than his ability to understand part-whole relationships and engage in trial-and-error learning.

Fluid Reasoning

The Fluid Reasoning Index (FRI) measured Charlie's inductive reasoning skills, broad visual intelligence, simultaneous thinking, conceptual thinking, and classification ability. Overall, Charlie's performance on subtests within this index was typical for his age (FRI= 106, PR = 66, Average range, CI = 98-113). His performance on fluid reasoning tasks was particularly strong when compared to his performance on tasks that involved language-based skills (FRI > VCI, BR = 11.1%). Moreover, his overall performance on this index was stronger than performance on tasks that measured processing speed (FRI > PSI, BR = 21.7%). While Charlie's fluid reasoning performance during this assessment appeared stronger than some cognitive abilities, it was also weaker than others. His current performance evidenced difficulty with fluid reasoning tasks in relation to his performance on visual spatial tasks (FRI < VSI, BR = 20.6%).

The FRI consists of two subtests: Matrix Reasoning and Picture Concepts. Matrix Reasoning (MR) required Charlie 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.

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. In the area of working memory, Charlie exhibited diverse performance on the WMI, but his overall performance was similar to other children his age (WMI = 103, PR = 58, Average range, CI = 95-111). Charlie showed average recall of series of pictures and locations of animal cards. His performance on these tasks was relatively strong compared to his performance on language based tasks (WMI > VCI, BR = 22.0%). While Charlie's performance on working memory tasks was stronger than some cognitive abilities, it was also somewhat weaker than others. Working memory performance was relatively low compared to his performance on visual spatial tasks (WMI < VSI, BR = 17.8%).

With regard to subtests within the WMI, the Picture Memory (PM) subtest required Charlie 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. Charlie showed uneven performance on these tasks. When he viewed the location of animal cards and was asked to place the cards in the correct location, his performance was above average for his age (ZL = 13) however, he showed greater difficulty remembering series of rapidly-presented pictures (PM = 8; PM < MSS-I, BR = 10%-25%; PM < ZL, BR = 8.2%). 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 Index (PSI) measured Charlie's ability to quickly and correctly scan or discriminate simple visual information. Charlie's performance across subtests in the PSI was diverse but overall was typical for his age (PSI = 94, PR = 34, Average range, CI = 85-104). When compared with his scores on visual spatial subtests, Charlie's performance on processing speed subtests was relatively weak (PSI < VSI, BR = 4.4%). Additionally, his processing speed scores appeared weak compared to his performance on tasks requiring him to use logic-based reasoning (PSI < FRI, BR = 21.7%).

The PSI consists of two subtests in which Charlie 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. Charlie demonstrated uneven performance across subtests within the PSI. He worked quickly when scanning an array of pictures to mark target objects (CA = 12). However, he showed greater difficulty on Bug Search, where his performance was weak in relation to his overall level of ability (BS = 6; BS < MSS-I, BR = 2%-5%; CA > BS, BR = 5.0%). This pattern of strengths and weaknesses suggests that he currently processes concrete, lifelike images more efficiently than abstract illustrations. His visual recognition skills may also be better developed than his visual short-term memory and visual discrimination skills.

ANCILLARY INDEXES

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

Vocabulary Acquisition

Charlie 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 = 83, PR = 13, Low Average range, CI = 77-91). 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 = 7; PN = 7). These scores suggest that his expressive and receptive language abilities are similarly developed. His somewhat weak performance on VAI subtests is consistent with his reported receptive and expressive language difficulties. His performance may also have been impacted by receptive language difficulties observed during testing.

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. Charlie's performance on the NVI fell in the Average range when compared to other children his age (NVI = 103, PR = 58, CI = 97-109).

General Ability and Cognitive Proficiency

Charlie 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 similar to other children his age (GAI = 108, PR = 70, Average range, CI = 101-114). His GAI score was significantly higher than his FSIQ score (GAI > FSIQ, BR = 3.2%).

Charlie 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). Charlie's performance on subtests contributing to the GAI was significantly stronger than his overall level of cognitive proficiency (GAI > CPI, BR = 22.8%).

The significant difference between Charlie's GAI and FSIQ indicates that the contributions of working memory and processing speed may have led to a lower overall FSIQ. Relative weaknesses in mental control and speed of visual scanning may sometimes create challenges as he engages in more complex cognitive processes, such as learning new material or applying logical thinking skills. This pattern of

cognitive functioning is consistent with his attention problems.

SUMMARY

Charlie is a 5-year-old boy referred for this evaluation by Mrs. Swihart, his mother, secondary to school related concerns (reading difficulty, writing difficulty, inattentive behavior, symptoms of hyperactivity), language concerns (receptive language, expressive language), and social/emotional concerns (symptoms of anxiety). 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. When interpreting his performance on this evaluation, it is important to consider that receptive language problems appeared to interfere with his ability to demonstrate his optimal performance. All subtests on the WPPSI-IV require a child to understand spoken directions. Challenges with inattention and hyperactivity may have also interfered with optimal performance. As measured by the WPPSI-IV, his overall FSIQ fell in the Average range when compared to other children his age (FSIQ = 99). He exhibited diverse visual spatial skills, but overall this area was a relative strength when compared to his overall ability (VSI = 118). When compared to his fluid reasoning (FRI = 106), working memory (WMI = 103), and processing speed (PSI = 94) performance, visual spatial skills emerged a particular strength. Language skills were one of his lowest areas of functioning during the current evaluation, as he showed age-appropriate performance on the Verbal Comprehension Index (VCI = 90). Verbal scores emerged as an area of need when compared to his performance on fluid reasoning tasks (FRI = 106) and working memory tasks (WMI = 103). Charlie's fluid reasoning skills were similar to other children his age (FRI = 106), and were relatively strong compared to his performance on processing speed tasks (PSI = 94). Ancillary Index scores revealed additional information about Charlie's cognitive profile. His overall level of vocabulary development, as measured by the Vocabulary Acquisition Index, fell in the Low Average range (VAI = 83). On the Nonverbal Index, a measure general intellectual functioning that minimizes language demands, his performance was Average for his age (NVI = 103). He scored in the Average 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 = 108). Performance on the Cognitive Proficiency Index, which captures the efficiency with which he processes information, was comparatively low, falling in the Average range (CPI = 98). Charlie's reported reading difficulties may be related to his relatively weak verbal reasoning skills and vocabulary development. His relatively weak performance on the Verbal Comprehension Index and Vocabulary Acquisition Index is consistent with his reported receptive and expressive language difficulties. Potential areas for intervention are described in the following section.

RECOMMENDATIONS

Recommendations for Verbal Skills

Charlie's overall performance on the VCI was age-appropriate compared to other children his age. While verbal skills were within normal limits, they were an area of weakness compared to other areas of cognitive functioning. 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 Charlie to novel situations and encouraging him to ask the names of unknown objects. Adults can keep a list of words that Charlie learns and review them periodically with him. Researching new concepts can help to concretize new vocabulary in his mind. Adults may wish to encourage Charlie 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 Charlie to engage in supervised age-appropriate conversation in the community. Family members should encourage Charlie 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 Charlie to elaborate on his thoughts, and making positive comments about his contributions to the conversation.

Recommendations for Visual Spatial Skills

Charlie's visual spatial skills fell in the High Average range and were an area of personal strength. Visual spatial ability involves skills such as understanding things by looking at them and picturing how individual elements, such as blocks and puzzle pieces, go together to create a bigger picture. Visual spatial skills may be an important element of academic success because they may help a child understand how individual parts are related to complex concepts. They may also assist in the acquisition of early reading skills. As such, it is important to support Charlie's visual spatial strengths by providing activities that bolster these skills. For example, he can be encouraged to engage in visual spatial tasks that he enjoys, such as putting together puzzles, creating maps, drawing, or playing with construction-type toys. Many computer games are available that engage children's visual spatial abilities. When new information is presented in the classroom, Charlie may benefit if visual content supplements verbal content. Providing opportunities for visually based learning may help Charlie understand and remember new ideas. As strategies are used to augment Charlie's learning, it is important that they are monitored for effectiveness and are modified according to his needs.

Additionally, Charlie's visual skills are particularly strong when compared to his verbal skills. Children with this pattern of functioning may sometimes experience difficulty putting their ideas into words. If this is the case, it may be helpful to reduce language demands when appropriate. For example, if Charlie experiences difficulty explaining his emotions, it may be helpful to provide a series of pictures depicting emotions, and ask him to point to the picture that shows how he feels. In school, if Charlie has a difficult time generating verbal responses, it may be helpful to provide him with several possible responses and ask him to choose the appropriate response. When possible, it may be helpful to ask Charlie to draw a picture of the information or create a collage in addition to describing it aloud. As Charlie develops his literacy skills, it may be useful to choose books that are rich in visual imagery in order to enhance his enjoyment of reading.

Visual spatial performance also emerged as a particular strength when compared to fluid reasoning performance. Children with this pattern of functioning may show relatively strong accuracy when identifying important patterns and details in visual information, but they may have relative difficulty

understanding how to use that information in complex problem solving. It may be helpful to build on Charlie's visual spatial strengths by teaching him to put visual spatial information into words, so that he can think about it in multiple ways. For example, when putting together pieces of a puzzle, he can be taught to verbalize what he is doing, e.g., 'The top curve goes with the top curve' and 'The yellow line goes with the yellow line.' When identifying the missing pieces of visual patterns, he could be taught to verbalize what he sees, such as 'Big circle, little circle, big circle. Little circle comes next.' These simple activities may help him use his visual spatial skills when completing more complex tasks.

Recommendations for Fluid Reasoning Skills

Charlie 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. Charlie 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, Charlie can be asked to identify the main idea of the story. Adults in his life 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

Charlie's working memory scores fell in the Average range. Working memory skills are an area of weakness compared to other areas of cognitive functioning, which may make it difficult for him to concentrate and attending to information that is presented to him. This may impact his school performance in the future. Relatively weak working memory skills may also be contributing to his reading difficulties, and can lead to reading comprehension problems as text becomes more complex in future grades. Several recommendations are made based upon this score. Because WPPSI-IV only measures visual working memory, further testing may be useful in assessing Charlie's auditory working memory. A complete understanding of his current working memory functioning may be helpful in informing intervention. Computerized interventions may be helpful in building his capacity to exert mental control, ignore distraction, and manipulate information in his mind. Other strategies that may be useful in increasing working memory include teaching Charlie to chunk information and connect new information to concepts that he already knows. As part of a comprehensive intervention plan, literacy goals such as learning letters and identifying the main idea of stories that are read aloud can be identified. It is important to reinforce Charlie's progress during these interventions. Goals should be small and measurable, and should steadily increase in complexity as his skills grow stronger.

Recommendations for Processing Speed

Overall processing speed scores an area of relative weakness, indicating that this is a potential area for intervention. While Charlie's processing speed was measured in the Average range compared to other children his age, it was an area of personal weakness. This may lead to difficulty keeping up with the pace of classroom activities. It is important to identify the factors contributing to Charlie'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 Charlie'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 Charlie 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 may be helpful in building his fluency in simple tasks. During the initial stages of these interventions, Charlie 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.

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

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

_____   _____

 Amy Schmid   Date

PRIMARY SUMMARY

Scaled Score Summary

Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	*SEM*
Information	IN	18	8	25	4:6	0.99
Similarities	SI	20	9	37	5:0	0.85
(Vocabulary)	VC	-	-	-	-	-
(Comprehension)	CO	-	-	-	-	-
Block Design	BD	27	16	98	7:7	1.12
Object Assembly	OA	25	10	50	5:6	1.08
Matrix Reasoning	MR	16	12	75	6:4	0.95
Picture Concepts	PC	12	10	50	5:4	0.85
Picture Memory	PM	12	8	25	4:6	0.95
Zoo Locations	ZL	12	13	84	6:8	1.20
Bug Search	BS	13	6	9	<4:0	1.20
Cancellation	CA	42	12	75	6:4	1.53
(Animal Coding)	AC	-	-	-	-	-

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

Subtest Scaled Score Profile
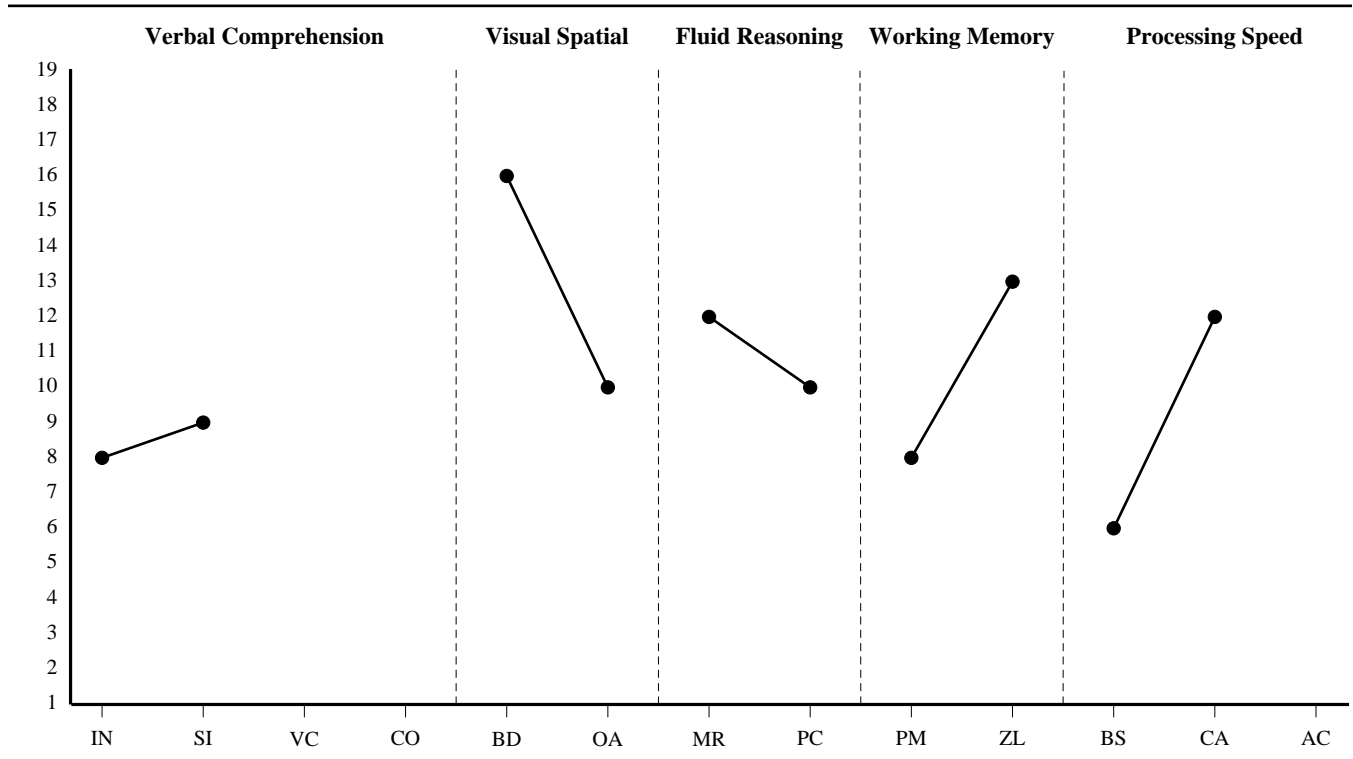
PRIMARY SUMMARY (CONTINUED)

Composite Score Summary

Composite		Sum of Scaled Scores	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description	SEM
Verbal Comprehension	VCI	17	90	25	84-97	Average	3.67
Visual Spatial	VSI	26	118	88	107-125	High Average	4.50
Fluid Reasoning	FRI	22	106	66	98-113	Average	3.67
Working Memory	WMI	21	103	58	95-111	Average	4.50
Processing Speed	PSI	18	94	34	85-104	Average	5.61
Full Scale IQ	FSIQ	59	99	47	93-105	Average	3.00

Confidence intervals are calculated using the Standard Error of Estimation.

Composite Score Profile
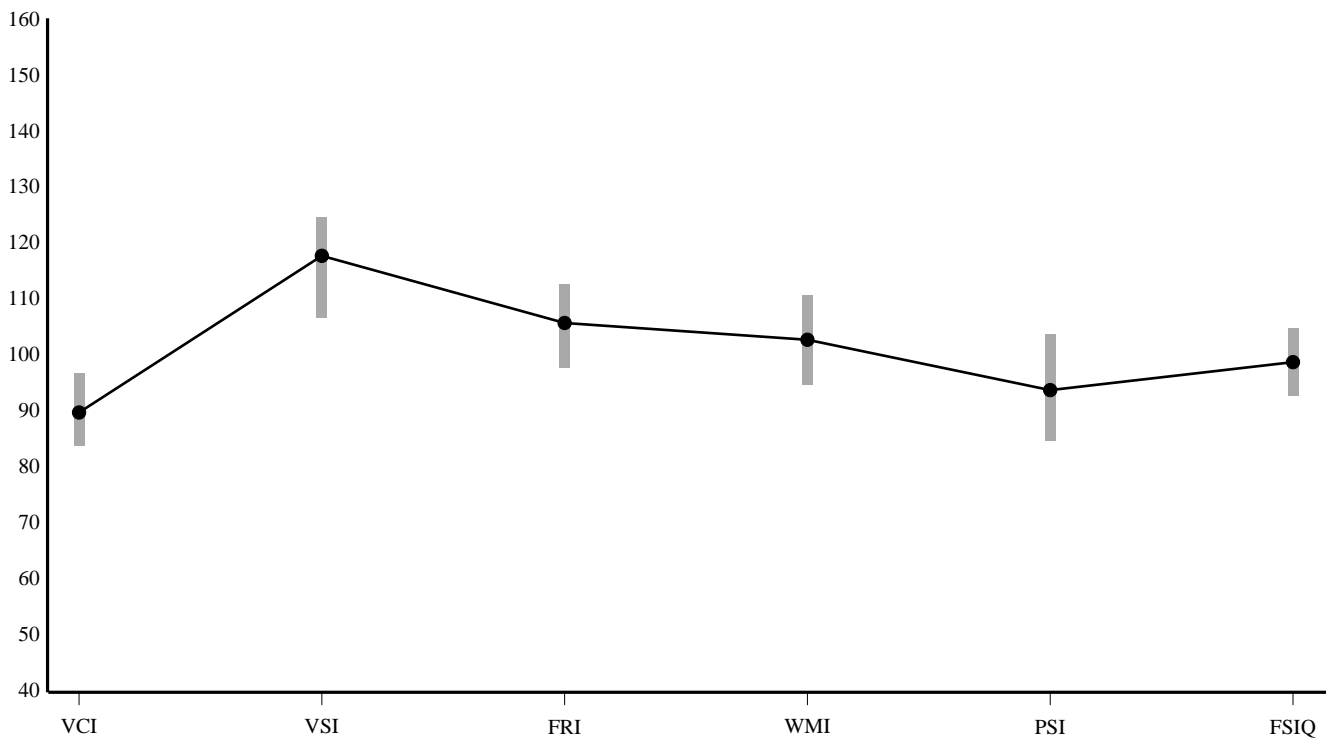
Note. Vertical bars represent the Confidence Intervals.

PRIMARY ANALYSIS

Index Level Strengths and Weaknesses

Index	Score	Comparison Score	Difference	Critical Value	Strength or Weakness	Base Rate
VCI	90	102.20	-12.20	7.49	W	5%-10%
VSI	118	102.20	15.80	8.67	S	2%-5%
FRI	106	102.20	3.80	7.49		>25%
WMI	103	102.20	0.80	8.67		>25%
PSI	94	102.20	-8.20	10.32		10%-25%

Comparison score mean derived from the five index scores.
Statistical significance (critical values) at the .15 level.
Base rate for overall sample.

Index Level Pairwise Difference Comparisons

Index Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
VCI - VSI	90	118	-28	8.36	Y	2.2%
VCI - FRI	90	106	-16	7.47	Y	11.1%
VCI - WMI	90	103	-13	8.36	Y	22.0%
VCI - PSI	90	94	-4	9.65	N	44.3%
VSI - FRI	118	106	12	8.36	Y	20.6%
VSI - WMI	118	103	15	9.16	Y	17.8%
VSI - PSI	118	94	24	10.36	Y	4.4%
FRI - WMI	106	103	3	8.36	N	46.5%
FRI - PSI	106	94	12	9.65	Y	21.7%
WMI - PSI	103	94	9	10.36	N	26.5%

Statistical significance (critical values) at the .15 level.
Base rate for ability level.

PRIMARY ANALYSIS (CONTINUED)

Subtest Level Strengths and Weaknesses

Subtest	Score	Comparison Score	Difference	Critical Value	Strength or Weakness	Base Rate
IN	8	10.40	-2.40	2.30	W	10%-25%
SI	9	10.40	-1.40	2.02		10%-25%
BD	16	10.40	5.60	2.56	S	1%-2%
OA	10	10.40	-0.40	2.48		>25%
MR	12	10.40	1.60	2.22		10%-25%
PC	10	10.40	-0.40	2.02		>25%
PM	8	10.40	-2.40	2.22	W	10%-25%
ZL	13	10.40	2.60	2.73		10%-25%
BS	6	10.40	-4.40	2.73	W	2%-5%
CA	12	10.40	1.60	3.42		25%

Comparison score mean derived from the ten core subtest scores.
Statistical significance (critical values) at the .15 level.

Subtest Level Pairwise Difference Comparisons

Subtest Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
IN - SI	8	9	-1	1.83	N	41.1%
BD - OA	16	10	6	2.39	Y	3.7%
MR - PC	12	10	2	2.01	N	30.5%
PM - ZL	8	13	-5	2.11	Y	8.2%
BS - CA	6	12	-6	2.79	Y	5.0%

Statistical significance (critical values) at the .15 level.

ANCILLARY SUMMARY

Scaled Score Summary

Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	*SEM*
Receptive Vocabulary	RV	15	7	16	3:10	0.90
Picture Naming	PN	13	7	16	4:1	1.04
Cancellation Random	CAR	20	11	63	6:6	1.72
Cancellation Structured	CAS	22	12	75	6:4	1.80

Index Score Summary

Composite		Sum of Scaled Scores	Standard Score	Percentile Rank	95% Confidence Interval	Qualitative Description	*SEM*
Vocabulary Acquisition	VAI	14	83	13	77-91	Low Average	3.97
Nonverbal	NVI	52	103	58	97-109	Average	3.00
General Ability	GAI	45	108	70	101-114	Average	3.35
Cognitive Proficiency	CPI	39	98	45	91-106	Average	4.24

Ancillary Index Score Profile
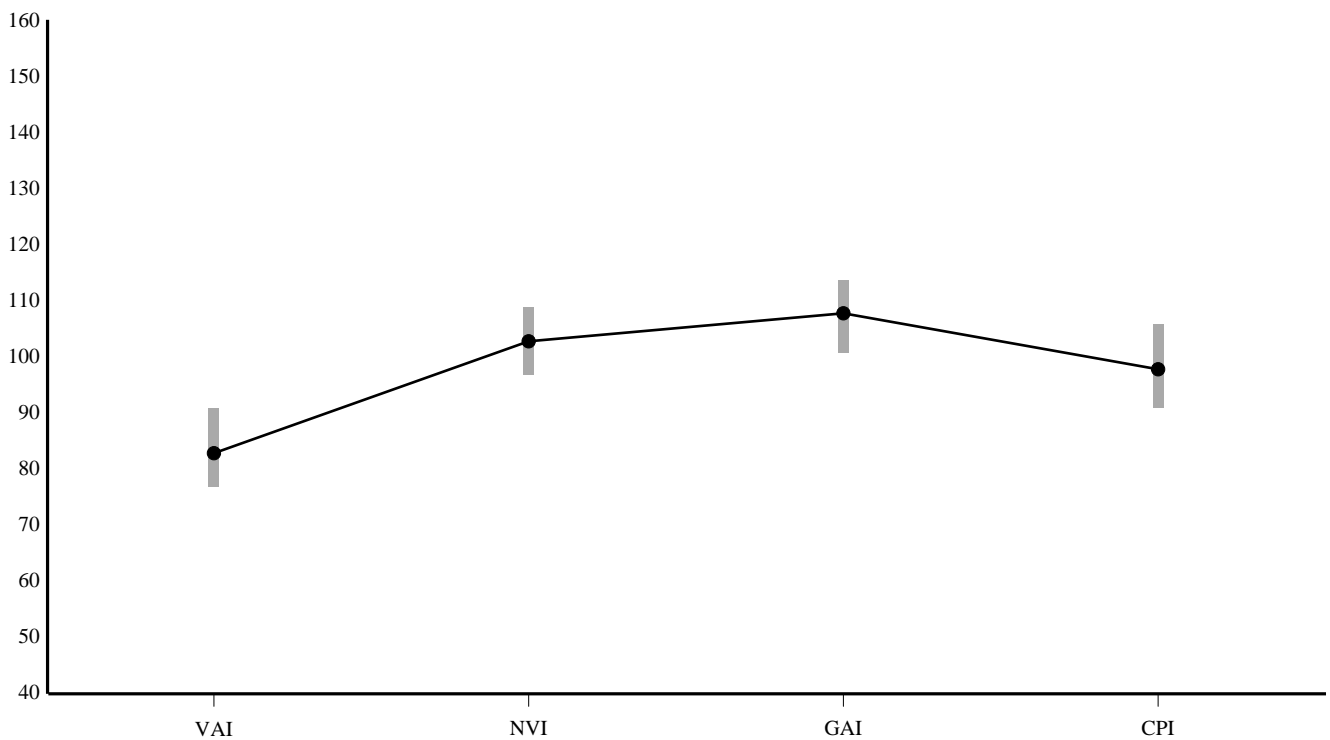
Note. Vertical bars represent the Confidence Intervals.

ANCILLARY ANALYSIS

Index Level Pairwise Difference Comparisons

Index Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
GAI - FSIQ	108	99	9	3.01	Y	3.2%
GAI - CPI	108	98	10	7.78	Y	22.8%

Statistical significance (critical values) at the .15 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	7	7	0	2.02	N	
CAR - CAS	11	12	-1	3.37	N	38.5%

Statistical significance (critical values) at the .15 level.

End of Report

WPPSI™-IV

WECHSLER PRESCHOOL AND PRIMARY
SCALE OF INTELLIGENCE — FOURTH EDITION

WPPSI™-IV

Wechsler Preschool and Primary Scale of Intelligence-Fourth Edition

Parent Summary Report

Examinee Name	Charlie O. Jackson		Date of Report	12/16/2013	
Examinee ID			Grade	1	
Date of Birth	07/13/2008		Primary Language	English	
Gender	Male		Handedness	Right	
Race/Ethnicity	Multiracial		Examiner Name	Amy Schmid	
Date of Testing	11/27/2013		Age at Testing	5 years 4 months	Retest? Yes

PsychCorp™

[1.3 / RE1 / QG1]

REASON FOR REFERRAL

Charlie was referred for an evaluation by Mrs. Swihart, his mother, secondary to school related concerns (reading difficulty, writing difficulty, inattentive behavior, symptoms of hyperactivity), language concerns (receptive language, expressive language), and social/emotional concerns (symptoms of anxiety).

BACKGROUND

Home
Charlie is a 5-year-old child who lives with his parents. There is 1 sibling residing in the same home with him. His mother attended graduate school and his father is a high school graduate.

Language
Charlie's primary language is English. He has been exposed to English since birth and speaking English since first talking.

Development
Charlie was born with no apparent complications. Charlie began sitting alone and crawling within the expected time frame. He began speaking first words and speaking short sentences later than expected. His social interaction skills developed normally. Additional information about his developmental milestones is not known.

Health
Charlie's health history was provided by his mother. Charlie's most recent vision screening revealed that he has normal visual acuity. Charlie's most recent hearing screening revealed that he hears within normal limits. Reported sensory problems include auditory processing. Charlie was previously diagnosed with Attention-Deficit Hyperactivity Disorder and sensory-motor difficulties. Charlie is currently diagnosed with auditory processing disorder.

Education
Charlie's educational history was provided by his mother. Charlie's early education experience includes a special services preschool program and a full-day kindergarten program. Charlie currently attends 1st grade at Newhall Elementary School. He is receiving RTI services and obtains inconsistent grades. He currently has good attendance and has occasional interpersonal difficulties. He is experiencing some academic difficulties. Thus far Charlie's academic performance has demonstrated personal strengths in the areas of art and athletics. When compared to his peers, he has shown weaknesses in the areas of reading, writing, and language. On recent standardized achievement tests, Charlie's performance was below average in reading.

TEST SESSION BEHAVIOR

Charlie arrived on time for the test session accompanied by his parent. He was appropriately dressed and groomed. Signs of inattention and hyperactivity were observed during testing. This may have had a mild impact on his ability to perform to the best of his ability. He exhibited notable difficulties with expressive language during testing. In particular, frequent difficulties were seen in the area of word finding. Charlie also exhibited notable difficulties with receptive language during testing. Specifically, he required occasional repetition of instructions and occasional clarification or simplification of the instructions. His receptive language difficulties may have mildly affected his performance on verbal tasks that involve answering questions presented orally. Receptive language difficulties also have the potential to affect his ability to understand orally-presented instructions, which are a component of both verbal and nonverbal tasks.

ABOUT THE WPPSI-IV

The WPPSI-IV is used to measure the general thinking and reasoning skills of children aged 2 to 7 years. This assessment provides a composite score that represents Charlie's overall intellectual ability (FSIQ), as well as index scores that represent the following areas of cognitive functioning: verbal comprehension, visual spatial, fluid reasoning, working memory, and processing speed. Charlie was also administered subtests from four ancillary indexes that provide additional information about his cognitive skills.

WPPSI-IV scores show how well Charlie performed compared to a group of children his age from the United States. An index score can range from 40 to 160, with scores from 90 to 109 considered average. It is common for children to exhibit strengths and weaknesses across index 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 Charlie were tested again on a different day. It is therefore important to view these test scores as a snapshot of Charlie'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.

WPPSI-IV SCORE INTERPRETATION

Primary Indexes

Charlie's FSIQ score, a measure of overall intellectual ability, was in the Average range compared to other children who are 5 years and 4 months old (FSIQ = 99). Overall, his performance on these tasks was better than approximately 47 out of 100 children in his age group.

The Verbal Comprehension Index (VCI) measured Charlie's knowledge learned from his environment, his ability to verbalize meaningful concepts, and his ability to reason with language-based information. His overall score on the VCI fell in the Average range (VCI = 90). This means that he performed better than approximately 25 out of 100 children in the same age group. During this evaluation, verbal skills emerged as one of his weakest areas of performance and are an area for continued development.

On the Visual Spatial Index (VSI), which measures the ability to organize visual information and understand part-whole relationships, Charlie's overall score was in the High Average range (VSI = 118). Tasks in this index involve constructing designs and puzzles under a time constraint. His performance was better than approximately 88 out of 100 children his age. Charlie's performance in this area was relatively strong compared to his overall level of ability. This may be an area that can be built upon in his future development.

The Fluid Reasoning Index (FRI) measured Charlie's logical thinking skills, his ability to think about multiple things at once, and his ability to classify concepts. His overall score on the FRI fell in the Average range (FRI = 106). This means that he performed better than approximately 66 out of 100 children in the same age group.

The Working Memory Index (WMI) measured Charlie's attention, concentration, mental control, and reasoning skills. His overall score on the WMI fell in the Average range (WMI = 103). This means that he performed better than approximately 58 out of 100 children in the same age group.

On the Processing Speed Index (PSI), which measures the ability to quickly and correctly scan visual information, Charlie's overall score was in the Average range (PSI = 94). His performance was better than approximately 34 out of 100 children his age.

Ancillary Indexes

An additional set of tasks was administered in order to evaluate Charlie's level of vocabulary development. He obtained a score of 83 on the Vocabulary Acquisition Index (VAI) and scored higher than approximately 13 out of 100 children his age. In general, his vocabulary development falls in the Low Average range (VAI = 83).

The Nonverbal Index (NVI) is a measure of general ability derived from scores on tasks that do not require verbal responses. On this ancillary index, Charlie's overall score fell in the Average range, and was higher than approximately 58 out of 100 children his age (NVI = 103).

The General Ability Index (GAI) is 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. His overall score on the GAI fell in the Average range. His score was higher than approximately 70 out of 100 children his age (GAI = 108).

The Cognitive Proficiency Index (CPI) provides a summary score of Charlie's working memory and processing speed performance. On this ancillary index, his overall score fell in the Average range, and was higher than approximately 45 out of 100 children his age (CPI = 98).

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

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

_____   _____

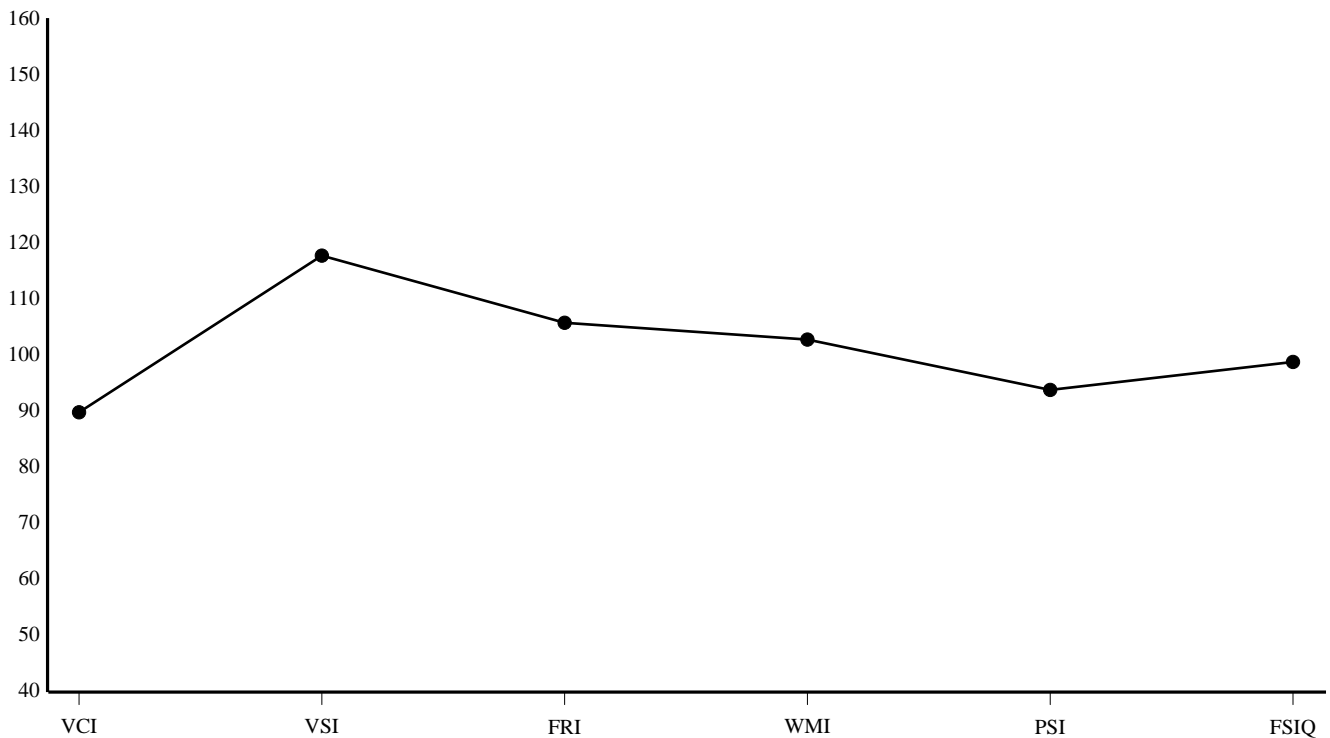 Amy Schmid   Date

WPPSI-IV TEST SCORES

Score Summary

Composite		Score	Percentile Rank	Qualitative Description
Verbal Comprehension	VCI	90	25	Average
Visual Spatial	VSI	118	88	High Average
Fluid Reasoning	FRI	106	66	Average
Working Memory	WMI	103	58	Average
Processing Speed	PSI	94	34	Average
Full Scale IQ	FSIQ	99	47	Average

Composite Score Profile

Ancillary Score Summary

Composite		Score	Percentile Rank	Qualitative Description
Vocabulary Acquisition	VAI	83	13	Low Average
Nonverbal	NVI	103	58	Average
General Ability	GAI	108	70	Average
Cognitive Proficiency	CPI	98	45	Average

Ancillary Index Score Profile