WISC-V Interpretive Considerations for S***** *******(07/03/2022)

Interpretive considerations provide additional information to assist you, the examiner, in interpreting S******'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, as they 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.

Recommendation Considerations

Items listed in the 'Recommendations' section at the end of the report are meant to be an aid to you as a clinician, not a substitute for individualized recommendations that should be provided by a professional who is familiar with the examinee. Please read through the automatically generated recommendations carefully and edit them according to the examinee's individual strengths and needs.

The recommendation section entitled 'Recommendations for Verbal Comprehension Skills' was included in the report because the examinee's VCI was an area of strength and a personal strength relative to his overall cognitive ability level.

The recommendation section entitled 'Recommendations for Visual Spatial Skills' was included in the report because the examinee's VSI was an area of weakness relative to others his age and a personal weakness relative to his overall cognitive ability.

End of Interpretive Considerations

WISC®-V

Wechsler Intelligence Scale for Children®-Fifth Edition

Interpretive Report

Examinee Name	S***** *****	Date of Report	07/12/2022	
Examinee ID	4816	Grade	3	
Date of Birth	08/26/2012	Primary Language	Persian	
Gender	Male	Handedness	Right	
Race/Ethnicity	Asian	Examiner Name	VESAL Rehabilitation Center	
Date of Testing	07/03/2022	Age at Testing	9 years 10 months	Retest? No

Comments:

PsychCorp

[1.3 / RE1 / QG1]

TEST SESSION BEHAVIOR

S***** arrived on time for the test session unaccompanied. He was appropriately dressed and groomed. He was oriented to person and time.

ABOUT WISC-V SCORES

S***** was administered 12 subtests from the Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V). The WISC-V is an individually administered, comprehensive clinical instrument for assessing the intelligence of children ages 6:0-16:11. The primary and secondary subtests are on a scaled score metric with a mean of 10 and a standard deviation (*SD*) of 3. These subtest scores range from 1 to 19, with scores between 8 and 12 typically considered average. The primary subtest scores contribute to the primary index scores, which represent intellectual functioning in five cognitive areas: Verbal Comprehension Index (VCI), Visual Spatial Index (VSI), Fluid Reasoning Index (FRI), Working Memory Index (WMI), and the Processing Speed Index (PSI). This assessment also produces a Full Scale IQ (FSIQ) composite score that represents general intellectual ability. The primary index scores and the FSIQ are on a standard score metric with a mean of 100 and an *SD* of 15. The primary index scores range from 45 to 155; the FSIQ ranges from 40 to 160. For both the primary index scores and the FSIQ, scores ranging from 90 to 109 are typically considered average.

Ancillary index scores are also provided. The ancillary index scores represent cognitive abilities using different primary and secondary subtest groupings than do the primary index scores. The ancillary index scores are also on a standard score metric with a mean of 100 and an *SD* of 15. The Verbal (Expanded Crystallized) Index (VECI), Expanded Fluid Index (EFI), Quantitative Reasoning Index (QRI), and Auditory Working Memory Index (AWMI) scores have a range of 45-155. The remaining three ancillary index scores have a range of 40-160: Nonverbal Index (NVI), General Ability Index (GAI), and the Cognitive Proficiency Index (CPI). Scores ranging from 90 to 109 are typically considered average. Further, the WISC-V provides complementary index scores that measure additional cognitive processes related to academic achievement and learning-related issues. The complementary index scores include the Naming Speed Index (NSI), Symbol Translation Index (STI), and the Storage and Retrieval Index (SRI). Both the complementary subtests and index scores are on a standard score metric with a mean of 100 and an *SD* of 15, with a range of 45-155. Scores ranging from 90 to 109 are typically considered average.

A percentile rank (PR) is provided for each reported composite and subtest score to show S******'s standing relative to other same-age children in the WISC-V normative sample. If the percentile rank for his Verbal Comprehension Index score is 81, for example, it means that he performed as well as or better than approximately 81% of children his age. This appears in the report as PR = 81.

The scores obtained on the WISC-V reflect S******'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 his true score is likely to fall. Composite scores are reported with 95% confidence intervals to ensure greater accuracy when interpreting test scores. For each composite score reported for Shervin, there is a 95% certainty that his true score falls within the listed range.

It is common for children to exhibit score differences across areas of performance. Comparing the score. differences in relation to three separate benchmarks may yield a richer portrait of a child's strengths and weaknesses. The three types of score difference comparisons presented in this report use interpretive statements that describe what can be generically understood as strengths or weaknesses. Because many score comparisons are possible within the WISC-V, attention to exactly what the scores are compared to is necessary to understand S****'s performance. The first type of comparison may be used to detect a normative strength or weakness, which occurs if a composite or subtest score differs from what is typical in the normative sample. For the purposes of this report, scores that fall above or below the Average qualitative descriptor range suggest either a normative strength or a normative weakness. The report will include phrases such as 'very high for his age' or 'lower than most children his age' when this occurs. The second type of comparison may be used to examine score differences from an intrapersonal perspective. For this comparison, a score is described as a strength or weakness if a primary index or subtest score differs from an indicator of overall performance (i.e., the mean of the primary index scores, the mean of the FSIQ subtest scores, the mean of the primary subtest scores, or the mean of the FSIQ subtest scores). Statistically significant differences are described with phrases such as 'personal strength' or 'personal weakness' or as one of the child's 'strongest or weakest areas of performance'. The third type of comparison may be used to examine scores for a relative strength or weakness, which occurs if a composite or subtest score differs in relation to another score of the same type (e.g., scaled, standard). When a scaled or standard score is compared with another scaled or standard score, the phrases 'relative strength' and 'relative weakness' are used to describe statistically significant differences when comparing performance on one score in relation to another.

If the difference between two scores is statistically significant, it is listed in the report with a base rate to aid in interpretation. The statistical significance and base rate results provide different information. A statistically significant difference suggests that the result is reliable and would likely be observed again if the assessment were repeated (i.e., the difference is not due to measurement error). The base rate (BR) provides a basis for estimating how common or rare a particular score difference was among other children of similar ability in the WISC-V normative sample. For example, a base rate of <=10% is reported if the score for the the Verbal Comprehension Index is 13.00 points higher than the mean primary index score (MIS). This appears on the report as VCI > MIS, BR = <=10%. This means that <=10% of children of similar ability level in the WISC-V normative sample obtained a difference of this magnitude or greater between those two scores. In many cases, a statistically significant difference may be accompanied by a base rate of greater than 15%, which indicates that the difference, while reliable and not due to measurement error, is relatively common among children. This result does not necessarily reduce the importance of the difference, but does indicate a difference that large or larger is relatively common.

It is possible for intellectual abilities to change over the course of childhood. Additionally, a child's scores on the WISC-V can be influenced by motivation, attention, interests, and opportunities for learning. All scores may be slightly higher or lower if S***** were tested again on a different day. It is therefore important to view these test scores as a snapshot of S******'s current level of intellectual functioning. 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 WISC-V RESULTS

FSIQ

The FSIQ is derived from seven subtests and summarizes ability across a diverse set of cognitive functions. This score is typically considered the most representative indicator of general intellectual functioning. Subtests are drawn from five areas of cognitive ability: verbal comprehension, visual spatial, fluid reasoning, working memory, and processing speed. S*****'s FSIQ score is in the Average range when compared to other children his age (FSIQ = 105, PR = 63, CI = 99-110). Although the WISC-V measures various aspects of ability, a child's scores on this test can also be influenced by many factors that are not captured in this report. When interpreting this report, consider additional sources of information that may not be reflected in the scores on this assessment. While the FSIQ provides a broad representation of cognitive ability, describing S*****'s domain-specific performance allows for a more thorough understanding of his functioning in distinct areas. Some children perform at approximately the same level in all of these areas, but many others display areas of cognitive strengths and weaknesses.

Verbal Comprehension

The Verbal Comprehension Index (VCI) measured S******'s ability to access and apply acquired word knowledge. Specifically, this score reflects his ability to verbalize meaningful concepts, think about verbal information, and express himself using words. Overall, S******'s performance on the VCI was above average for his age and emerged as a relative strength for S***** (VCI = 113, PR = 81, High Average range, CI = 104-120; VCI > MIS, BR = <=10%). High scores in this area indicate a well-developed verbal reasoning system with strong word knowledge acquisition, effective information retrieval, good ability to reason and solve verbal problems, and effective communication of knowledge. Additionally, his performance on verbal comprehension tasks was particularly strong when compared to his performance on tasks that involved processing and evaluating visual spatial information (VCI > VSI, BR = 5.3%). S******'s relative strength on language-based subtests suggests that he may understand information more easily when it is presented in a verbal, rather than visual, format. His performance indicates a relative strength in using verbal stimuli in problem solving compared to visual spatial problem solving. Moreover, his performance on verbal comprehension tasks was stronger than his performance on tasks requiring him to mentally manipulate information and work quickly and efficiently (VCI > WMI, BR = 19.0%; VCI > PSI, BR = 13.3%).

With regard to individual subtests within the VCI, Similarities (SI) required S***** to describe a similarity between two words that represent a common object or concept and Vocabulary (VC) required him to name depicted objects and/or define words that were read aloud. He performed comparably across both subtests, suggesting that his abstract reasoning skills and word knowledge are similarly developed at this time (SI = 12; VC = 13). His score on Vocabulary was above average, suggesting that he learns new words and is able to explain them easily. This was one of his strongest areas of performance when compared to his overall ability (VC = 13; VC > MSS-P, BR = <=10%). This represents a strength that can be built upon in his future development.

A language evaluation in his primary language may result in a more complete understanding of his verbal reasoning abilities.

Visual Spatial

The Visual Spatial Index (VSI) measured S******'s ability to evaluate visual details and understand visual spatial relationships in order to construct geometric designs from a model. This skill requires visual spatial reasoning, integration and synthesis of part-whole relationships, attentiveness to visual detail, and visual-motor integration. During this evaluation, visual spatial processing was one of S******'s weaknesses, with performance that was slightly below other children his age (VSI = 89, PR = 23, Low Average range, CI = 82-98; VSI < MIS, BR = <=15%). Low scores in this area may occur due to deficits in spatial processing, difficulty with visual discrimination, poor visual attention, visuomotor integration deficits, or generally low reasoning ability. During this evaluation, S****** appeared to have some difficulty assembling block designs and puzzles in his mind, and his performance in this area was weak in relation to his performance on language-based tasks and logical reasoning tasks (VSI < VCI, BR = 5.3%; VSI < FRI, BR = 15.4%). S******'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. Additionally, his verbal problem-solving may be stronger than his visual spatial problem-solving. He may therefore benefit from additional support when presented with visual information.

The VSI is derived from two subtests. During Block Design (BD), S***** viewed a model and/or picture and used two-colored blocks to re-create the design. Visual Puzzles (VP) required him to view a completed puzzle and select three response options that together would reconstruct the puzzle. He performed comparably across both subtests, suggesting that his visual-spatial reasoning ability is equally developed, whether solving problems that involve a motor response and reuse the same stimulus repeatedly while receiving concrete visual feedback about accuracy, or solving problems with unique stimuli that must be solved mentally and do not involve feedback about accuracy (BD = 9; VP = 7). His score on Visual Puzzles was slightly below other children his age and was one of his weakest areas of performance (VP = 7; VP < MSS-P, BR = <=10%). This suggests that his mental rotation skills and ability to understand part-whole relationships are currently somewhat low when compared to his other abilities. These may be areas for further development. In addition to the BD score, the Block Design No Time Bonus score (BDn) was calculated. BDn is based on the child's performance on Block Design (BD) without including bonus points for rapid completion of items. The score's reduced emphasis on speed may be useful when a child's limitations, problem-solving strategies, or personality characteristics are believed to affect performance on timed tasks, as this score does not award extra points for working quickly. S*****'s BD score is significantly higher than his BDn score (BDn = 1), suggesting that speed did not attenuate Block Design performance (BR = 0.0%). The Block Design Partial score (BDp) was also calculated, which awards points for the number of blocks correctly placed when the time runs out, even if the child has not finished the entire design. This score reduces the emphasis on speed and attention to detail, providing an estimate of performance in children who are impulsive or who misperceive the design. S******'s BDp score (BDp = 9) is similar to his BD score. This suggests that rapid processing of visual-perceptual information and attention to detail do not overly influence his success with visual-spatial tasks.

Fluid Reasoning

The Fluid Reasoning Index (FRI) measured S******'s ability to detect the underlying conceptual relationship among visual objects and use reasoning to identify and apply rules. Identification and application of conceptual relationships in the FRI requires inductive and quantitative reasoning, broad

visual intelligence, simultaneous processing, and abstract thinking. Overall, S*****'s performance on the FRI was typical for his age (FRI = 103, PR = 58, Average range, CI = 96-110). His performance on fluid reasoning tasks was particularly strong when compared to his performance on tasks that involved visual spatial skills (FRI > VSI, BR = 15.4%). While subtests in both the FRI and VSI include visual stimuli, fluid reasoning subtests can be solved using logic, whereas visual spatial subtests require primarily visual spatial processing. S******'s relatively stronger fluid reasoning performance suggests that he makes sense of visual information more easily when it follows a logical pattern. He is better able to understand the relationship of visual information to abstract concepts than he is to use visual and spatial information for design construction.

The FRI is derived from two subtests: Matrix Reasoning (MR) and Figure Weights (FW). Matrix Reasoning required Shervin to view an incomplete matrix or series and select the response option that completed the matrix or series. On Figure Weights, he viewed a scale with a missing weight(s) and identified the response option that would keep the scale balanced. He performed comparably across both subtests, suggesting that his perceptual organization and quantitative reasoning skills are similarly developed at this time (MR = 10; FW = 11). In addition to the two subtests that contribute to the FRI, another fluid reasoning subtest was administered to gain a more detailed understanding of S******'s fluid reasoning skills. On Arithmetic (AR), a timed subtest requiring him to mentally solve math problems, S******'s performance was similar to other children his age. This suggests age-appropriate numerical reasoning and applied computational ability (AR = 11).

Working Memory

The Working Memory Index (WMI) measured S******'s ability to register, maintain, and manipulate visual and auditory information in conscious awareness, which requires attention and concentration, as well as visual and auditory discrimination. Shervin exhibited diverse performance on the WMI, but his overall performance was similar to other children his age (WMI = 100, PR = 50, Average range, CI = 92-108). Shervin recalled and sequenced series of pictures and lists of numbers at a level that was average for his age. His performance on these tasks was a relative weakness when compared to his performance on language-based tasks (WMI < VCI, BR = 19.0%).

Within the WMI, Picture Span (PS) required Shervin to memorize one or more pictures presented on a stimulus page and then identify the correct pictures (in sequential order, if possible) from options on a response page. On Digit Span (DS), he listened to sequences of numbers read aloud and recalled them in the same order, reverse order, and ascending order. Shervin showed uneven performance on these tasks. The discrepancy between S******'s scores on the Digit Span and Picture Span subtests is clinically meaningful. These subtests differ in the specific abilities involved, and consideration of the difference between the two scores informs interpretation of the WMI. Recalling and sequencing strings of numbers was a strength for Shervin during this evaluation (DS = 14; DS > MSS-P, BR = <=5%). However, he showed greater difficulty when asked to remember series of rapidly-presented pictures (PS = 6; PS < MSS-P, BR = <=5%; PS < DS, BR = 1.3%). This pattern of strengths and weaknesses suggests that Shervin best employs working memory when information is presented in an auditory versus visual format. Further, he performs better when a free recall paradigm is used, rather than a recognition paradigm. He may attend to and process information more readily when it is presented in an auditory rather than a visual format. It is also possible that he experienced a lapse in attention or motivation during administration, because material may not be repeated or re-exposed for these tasks. The Digit Span Forward (DSf) scaled process score is derived from the total raw score for the Digit Span Forward

task. On this task, S***** was required to repeat numbers verbatim, with the number of digits in each sequence increasing as the task progressed. This task required working memory when the number of digits exceeded his ability to repeat the digits without the aid of rehearsal. This task represents basic capacity in the phonological loop. His performance on DSf was extremely strong compared to other children his age (DSf = 18). On the Digit Span Forward task, S*****'s Longest Digit Span Forward score was recorded (LDSf = 8). This raw score reflects the maximum span length recalled on DSf and offers unique information about performance on this task. Examine the consistency of recall across trials or items with the same number of digits, to determine if S***** exhibited variable performance. When performance is variable, this score may provide further insight regarding his performance. The Digit Span Backward (DSb) scaled process score is derived from the total raw score for the Digit Span Backward task. This task invoked working memory because S***** was required to repeat the digits in a reverse sequence than was originally presented, requiring him to mentally manipulate the information before responding. His performance on DSb was typical compared to other children his age (DSb = 10). On the Digit Span Backward task, S****'s Longest Digit Span Backward score was recorded (LDSb = 3). The Digit Span Sequencing (DSs) scaled process score is derived from the total raw score for the Digit Span Sequencing task. This task required S***** to sequence digits according to value, invoking quantitative knowledge in addition to working memory. The increased demands for mental manipulation of information on the Digit Span Sequencing task places additional demands on working memory, as well as attention. His performance on DSs was above average compared to other children his age (DSs = 12). On the Digit Span Sequencing task, S******'s Longest Digit Span Sequence score was recorded (LDSs = 5).

S******'s performance on Digit Span provides information about his storage capacity versus his mental manipulation ability with regards to simple memory tasks as compared to more complex memory tasks. His pattern of performance suggests that he has sufficient memory capacity but has not yet mastered the skills of mental reversal and mental sequencing, may have been confused by the additional requirements to reverse digits or sequence digits in the task, or has difficulty with mental manipulation on the more complex Digit Span tasks. It is also possible that S***** has difficulty when there are increased demands on working memory. The Longest Picture Span Stimulus (LPSs) and Longest Picture Span Response (LPSr) raw process scores may help to further evaluate performance on the Picture Span subtest. These scores reflect the number of stimulus and response pictures, respectively, that appear on the last item with a perfect score. Given the variation in the length of response choices across items (i.e., number of responses may decrease when the stimulus span increases), LPSr should be interpreted in relation to LPSs. S*****'s performance pattern on LPSs and LPSr are worth noting. His Longest Picture Span Stimulus score was (LPSs = 3) and his Longest Picture Span Response score was (LPSr = 6).

Processing Speed

The Processing Speed Index (PSI) measured S******'s speed and accuracy of visual identification, decision making, and decision implementation. Performance on the PSI is related to visual scanning, visual discrimination, short-term visual memory, visuomotor coordination, and concentration. The PSI assessed his ability to rapidly identify, register, and implement decisions about visual stimuli. His performance across subtests that contribute to the PSI was diverse, but overall was typical for his age (PSI = 95, PR = 37, Average range, CI = 87-105). His performance on processing speed tasks, though average for his age, was weaker than his performance on language-based tasks (PSI < VCI, BR = 13.3%).

The PSI is derived from two timed subtests. Symbol Search required S****** to scan a group of symbols and indicate if the target symbol was present. On Coding, he used a key to copy symbols that corresponded with numbers. S****** demonstrated uneven performance across subtests within the PSI. The discrepancy between S*****'s scores on the Coding and Symbol Search subtests is clinically meaningful. These subtests differ in the specific abilities involved, and consideration of the difference between the two scores informs interpretation of the PSI. He worked quickly when scanning rows of symbols to mark the target (SS = 12). However, he showed greater difficulty on Coding, where his performance was weak in relation to his overall level of ability (CD = 6; CD < MSS-P, BR = <=10%; SS > CD, BR = 2.2%). His performance suggests that accurate visual scanning is a strength relative to associative memory and/or graphomotor speed. In addition to the subtests that contribute to the PSI, S****** was administered Cancellation (CA), another processing speed subtest, to gain a more detailed understanding of his processing speed ability. On this timed subtest, he scanned two arrangements of objects (one random, one structured) and marked target objects. Cancellation measures speed, scanning ability, and visual discrimination. His performance was typical compared to other children his age (CA = 10).

ANCILLARY INDEX SCORES

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

Quantitative Reasoning

Figure Weights and Arithmetic comprise the Quantitative Reasoning Index (QRI), which measures quantitative reasoning skills. Quantitative reasoning is closely related to general intelligence and can indicate a child's capacity to perform mental math operations and comprehend abstract relationships. S******'s overall index score was similar to other children his age (QRI = 106, PR = 66, Average range, CI = 99-112). Assessment of S*****'s performance on the QRI may help to predict his reading and math achievement scores, creative potential, standardized test performance, and future academic success.

Nonverbal

The Nonverbal Index (NVI) is derived from six subtests that do not require verbal responses. This index score can provide a measure of general intellectual functioning that minimizes expressive language demands for children with special circumstances or clinical needs. Subtests that contribute to the NVI are drawn from four of the five primary cognitive domains (i.e., Visual Spatial, Fluid Reasoning, Working Memory, and Processing Speed). S*****'s performance on the NVI fell in the Low Average range when compared to other children his age (NVI = 86, PR = 18, CI = 80-93). Low scores in this area may occur for many reasons including slow processing speed, poor working memory, abstract and conceptual reasoning difficulties, weak spatial reasoning skills, or low general intellectual ability. Assessment of S******'s performance on the NVI may help to estimate his overall nonverbal cognitive ability.

General Ability

S****** was administered the five subtests comprising the General Ability Index (GAI), an ancillary index score that provides an estimate of general intelligence that is less impacted by working memory and processing speed, relative to the FSIQ. The GAI consists of subtests from the verbal comprehension, visual spatial, and fluid reasoning domains. Overall, this index score was similar to other children his age (GAI = 107, PR = 68, Average range, CI = 101-112). The GAI does not replace the FSIQ as the best estimate of overall ability. It should be interpreted along with the FSIQ and all of the primary index scores. S******'s FSIQ and GAI scores were not significantly different, indicating that reducing the impact of working memory and processing speed resulted in little or no difference on his overall performance.

Cognitive Proficiency

S****** was also administered subtests that contribute to the Cognitive Proficiency Index (CPI). These four subtests are drawn from the working memory and processing speed domains. His index score suggests that he demonstrates average efficiency when processing cognitive information in the service of learning, problem solving, and higher-order reasoning (CPI = 96, PR = 39, Average range, CI = 89-104). The CPI is most informative when interpreted as part of a comprehensive evaluation, together with its counterpart, the GAI. The practitioner may consider evaluating the GAI-CPI pairwise comparison, as this may provide additional interpretive information regarding the possible impact of cognitive processing on his ability. S******'s performance on subtests contributing to the GAI was significantly stronger than his overall level of cognitive proficiency (GAI > CPI, BR = 20.2%). The significant difference between his GAI and CPI scores suggests that higher-order cognitive abilities may be a strength compared to abilities that facilitate cognitive processing efficiency.

Relative weaknesses in mental control and speed of visual scanning may sometimes create challenges as S***** engages in more complex cognitive processes, such as learning new material or applying logical thinking skills.

SUMMARY

S****** is a 9-year-old boy. The WISC-V was used to assess S*****'s performance across five areas of cognitive ability. When interpreting his scores, it is important to view the results as a snapshot of his current intellectual functioning. As measured by the WISC-V, his overall FSIQ score fell in the Average range when compared to other children his age (FSIQ = 105). The language skills assessed appear to be one of S******'s strongest areas of functioning. He showed above average performance on the Verbal Comprehension Index (VCI = 113). Performance on verbal comprehension tasks was particularly strong compared to his performance on working memory (WMI = 100) and processing speed (PSI = 95) tasks. He had some difficulty working with primarily visual information and the VSI demonstrates an area of weakness relative to his overall ability (VSI = 89). When compared to his fluid reasoning (FRI = 103) performance, visual spatial skills emerged as an area of personal weakness. Ancillary index scores revealed additional information about S******'s cognitive abilities using unique subtest groupings to better interpret clinical needs. His capacity to perform mental math operations and understand quantitative relationships, as measured by the Quantitative Reasoning Index (QRI), fell in the Average range (QRI = 106). On the Nonverbal Index (NVI), a measure of general intellectual ability that

minimizes expressive language demands, his performance was Low Average for his age (NVI = 86). He scored in the Average range on the General Ability Index (GAI), which provides an estimate of general intellectual ability that is less reliant on working memory and processing speed relative to the FSIQ (GAI = 107). Performance on the Cognitive Proficiency Index (CPI), which captures the efficiency with which he processes information, was comparatively low, falling in the Average range (CPI = 96). Potential areas for intervention are described in the following section.

RECOMMENDATIONS

Recommendations for Verbal Comprehension Skills

S*****'s overall performance on the VCI was High Average compared to other children his age. Verbal skills are an important component of academic success because classroom instruction involves listening comprehension, verbal reasoning, and oral communication. It is therefore important to continue to build S******'s verbal reasoning, knowledge, and comprehension skills by providing ongoing enrichment opportunities. Strategies to build verbal skills include approaches such as dialogic reading. This strategy involves adults asking the child specific questions about reading material to encourage interest, comprehension, and critical thinking. Verbal skills can also be enriched by exposing S****** to novel situations or materials and providing discussion about them. Adults can keep a list of terms, information, and concepts that S****** learns and periodically discuss it with him to expand S*****'s understanding. Discovering and investigating new concepts can help him to expand his verbal reasoning, knowledge, and comprehension skills. Adults can encourage S****** to elaborate on his thoughts, and can also expand on his contributions to the conversation.

Recommendations for Visual Spatial Skills

S******'s overall performance on the VSI was Low Average compared to other children his age. Children with low visual spatial skills may have difficulty understanding information that is presented nonverbally. In addition, he may benefit from interventions aimed at analyzing and synthesizing visual information. Examples of these interventions include learning to read maps and creating maps of his house, school, or neighborhood. He may be taught strategies to complete puzzles, such as identifying puzzle pieces with similar colors and lines. Mental rotation activities, such as drawing a simple shape from different perspectives, may also be helpful. A variety of digital games are available that might engage the child's visual spatial abilities. In addition to having difficulty understanding purely visual information, children with this pattern of functioning can sometimes be awkward in social situations because they may not understand others' subtle nonverbal cues. In such cases, it can be useful to prepare for novel situations. For example, before a new situation, adults can talk to S****** about what to expect. If he is anxious about how to respond or behave, role playing may help. Teachers may best support S******'s needs by explicitly presenting information verbally.

RECOMMENDATIONS

Recommendations for Attention Difficulties

S****** may maximize his productivity during study time by eliminating outside distractions, extraneous noise, and unnecessary interruptions. At school, S****** should be given a quiet place to work away from other students. At home, S******'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 S****** 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. S****** 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.

S******'s teachers may wish to use behavioral techniques to keep him on task by reinforcing target behaviors or charting successful completion of assignments.

S******'s tasks should be short, well within his attention span, varied, and should gradually increase in length. Long or complex tasks should be broken into smaller pieces that he can easily complete. For example, if a task consists of three steps, S****** should be given one step at a time rather than all at once.

Family and teachers are encouraged to establish eye contact with S****** before giving instructions.

Teachers are encouraged to use multiple teaching modalities when teaching S****** new material, as he will have significant difficulty attending to the same modality for extended periods of time.

S****** 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 behaviors.

Teachers could facilitate S******'s attention to important information by having him use highlighting or underlining to emphasize task directions or other areas of difficulty.

Recommendations to Build Reading Skills

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

S***** is encouraged to highlight important material (e.g., key words, instructions, main ideas) in texts or handouts.

Recommendations to Build Writing Skills

S****** should participate in an evidence-based writing intervention aimed at his specific areas of weakness. It is important that his progress is carefully monitored throughout this intervention to ensure that the intervention is meeting his needs and tailor the instruction as needed.

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

S******'s language development may be enhanced through writing activities. For example, S****** could write a short story and then rewrite the story by substituting synonyms or rhyming words for existing words.

Because of S******'s difficulties with visual-motor coordination, spatial visualization, and written language, teachers are encouraged to not penalize him for poor handwriting.

Recommendations for Emotional and Behavioral Difficulties

S****** may benefit from relaxation techniques, such as deep breathing, progressive muscle relaxation, and meditation when facing an upcoming, potentially stressful event.

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

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

VESAL Rehabilitation Center _____ Date _____

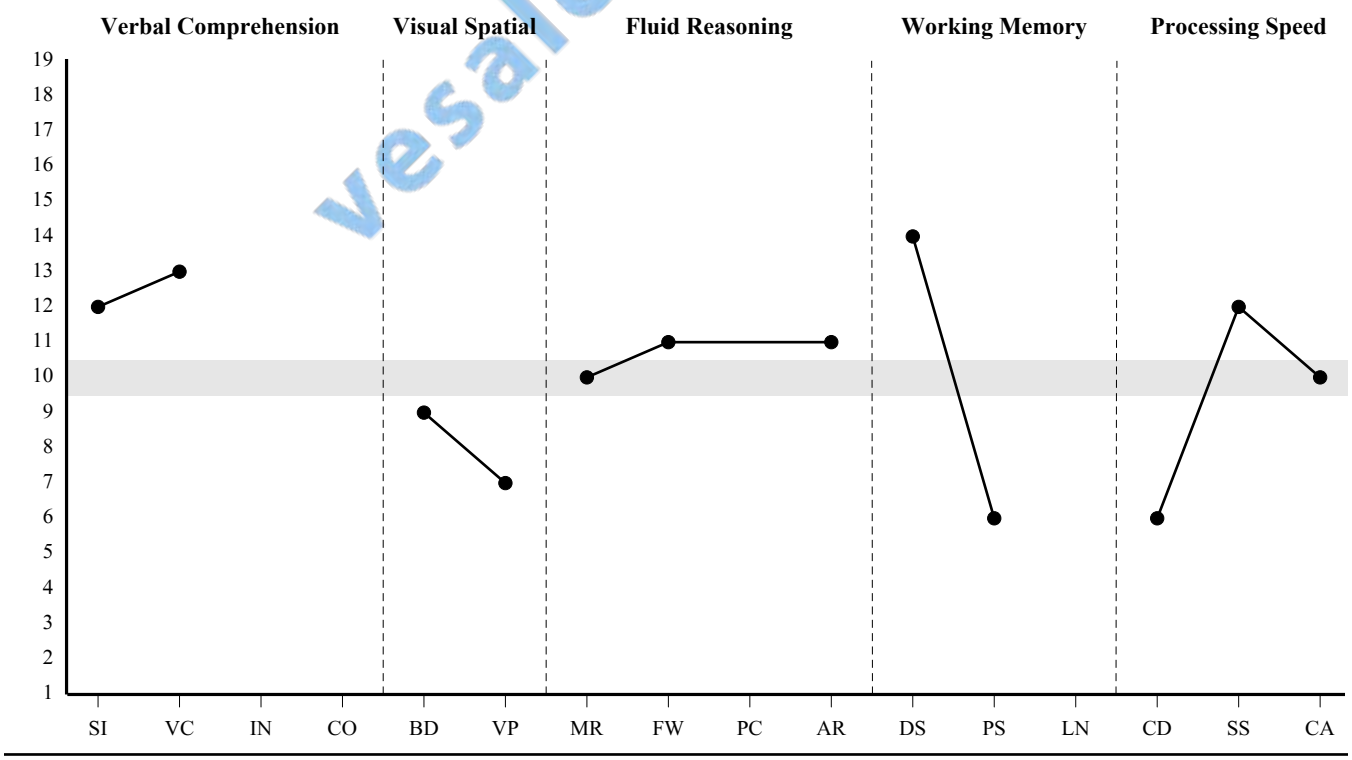
PRIMARY SUMMARY

Subtest Score Summary

Domain	Subtest Name		Total Raw Score	Scaled Score	Percentile Rank	Age Equivalent	*SEM*
Verbal Comprehension	**Similarities**	SI	28	12	75	11:6	1.04
	Vocabulary	VC	30	13	84	12:2	1.08
	(Information)	IN	-	-	-	-	-
	(Comprehension)	CO	-	-	-	-	-
Visual Spatial	**Block Design**	BD	22	9	37	8:6	1.24
	Visual Puzzles	VP	11	7	16	7:6	0.95
Fluid Reasoning	**Matrix Reasoning**	MR	18	10	50	9:10	1.08
	Figure Weights	FW	22	11	63	11:2	0.73
	(Picture Concepts)	PC	-	-	-	-	-
	(Arithmetic)	AR	20	11	63	10:10	0.95
Working Memory	**Digit Span**	DS	31	14	91	16:6	0.99
	Picture Span	PS	17	6	9	6:2	1.08
	(Letter-Number Seq.)	LN	-	-	-	-	-
Processing Speed	**Coding**	CD	24	6	9	<8:2	1.37
	Symbol Search	SS	26	12	75	11:2	1.34
	(Cancellation)	CA	57	10	50	9:10	1.24

Subtests used to derive the FSIQ are bolded. Secondary subtests are in parentheses.

Subtest Scaled Score Profile



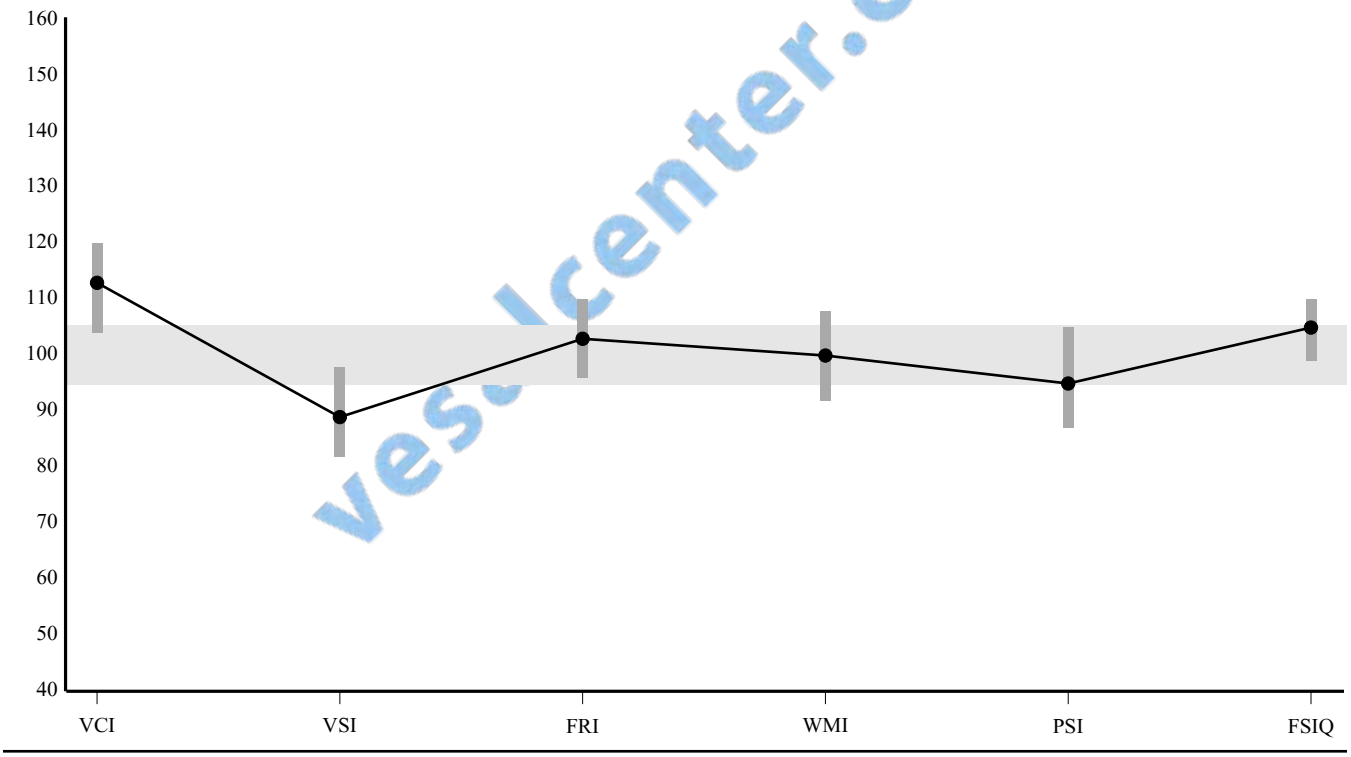
PRIMARY SUMMARY (CONTINUED)

Composite Score Summary

Composite		Sum of Scaled Scores	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description	*SEM*
Verbal Comprehension	VCI	25	113	81	104-120	High Average	3.97
Visual Spatial	VSI	16	89	23	82-98	Low Average	4.50
Fluid Reasoning	FRI	21	103	58	96-110	Average	3.97
Working Memory	WMI	20	100	50	92-108	Average	4.24
Processing Speed	PSI	18	95	37	87-105	Average	5.41
Full Scale IQ	FSIQ	75	105	63	99-110	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	113	100.0	13.0	9.41	S	<=10%
VSI	89	100.0	-11.0	10.32	W	<=15%
FRI	103	100.0	3.0	9.41		>25%
WMI	100	100.0	0.0	9.87		
PSI	95	100.0	-5.0	11.92		>25%

Comparison score mean derived from the five index scores (MIS).
Statistical significance (critical values) at the .05 level.
Base rates are reported by ability level.

Index Level Pairwise Difference Comparisons

Index Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
VCI - VSI	113	89	24	11.76	Y	5.3%
VCI - FRI	113	103	10	11.00	N	24.1%
VCI - WMI	113	100	13	11.38	Y	19.0%
VCI - PSI	113	95	18	13.15	Y	13.3%
VSI - FRI	89	103	-14	11.76	Y	15.4%
VSI - WMI	89	100	-11	12.12	N	25.2%
VSI - PSI	89	95	-6	13.79	N	40.6%
FRI - WMI	103	100	3	11.38	N	45.2%
FRI - PSI	103	95	8	13.15	N	31.9%
WMI - PSI	100	95	5	13.47	N	41.1%

Statistical significance (critical values) at the .05 level.
Base rates are reported by ability level.

PRIMARY ANALYSIS (CONTINUED)

Subtest Level Strengths and Weaknesses

Subtest	Score	Comparison Score	Difference	Critical Value	Strength or Weakness	Base Rate
SI	12	10.0	2.0	2.78		<=25%
VC	13	10.0	3.0	2.88	S	<=10%
BD	9	10.0	-1.0	3.26		>25%
VP	7	10.0	-3.0	2.57	W	<=10%
MR	10	10.0	0.0	2.88		
FW	11	10.0	1.0	2.07		>25%
DS	14	10.0	4.0	2.67	S	<=5%
PS	6	10.0	-4.0	2.88	W	<=5%
CD	6	10.0	-4.0	3.57	W	<=10%
SS	12	10.0	2.0	3.50		<=25%

Comparison score mean derived from the ten primary subtest scores (MSS-P).
Statistical significance (critical values) at the .05 level.

Subtest Level Pairwise Difference Comparisons

Subtest Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
SI - VC	12	13	-1	3.02	N	41.0%
BD - VP	9	7	2	3.04	N	27.0%
MR - FW	10	11	-1	2.60	N	44.9%
DS - PS	14	6	8	2.89	Y	1.3%
CD - SS	6	12	-6	3.63	Y	2.2%

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

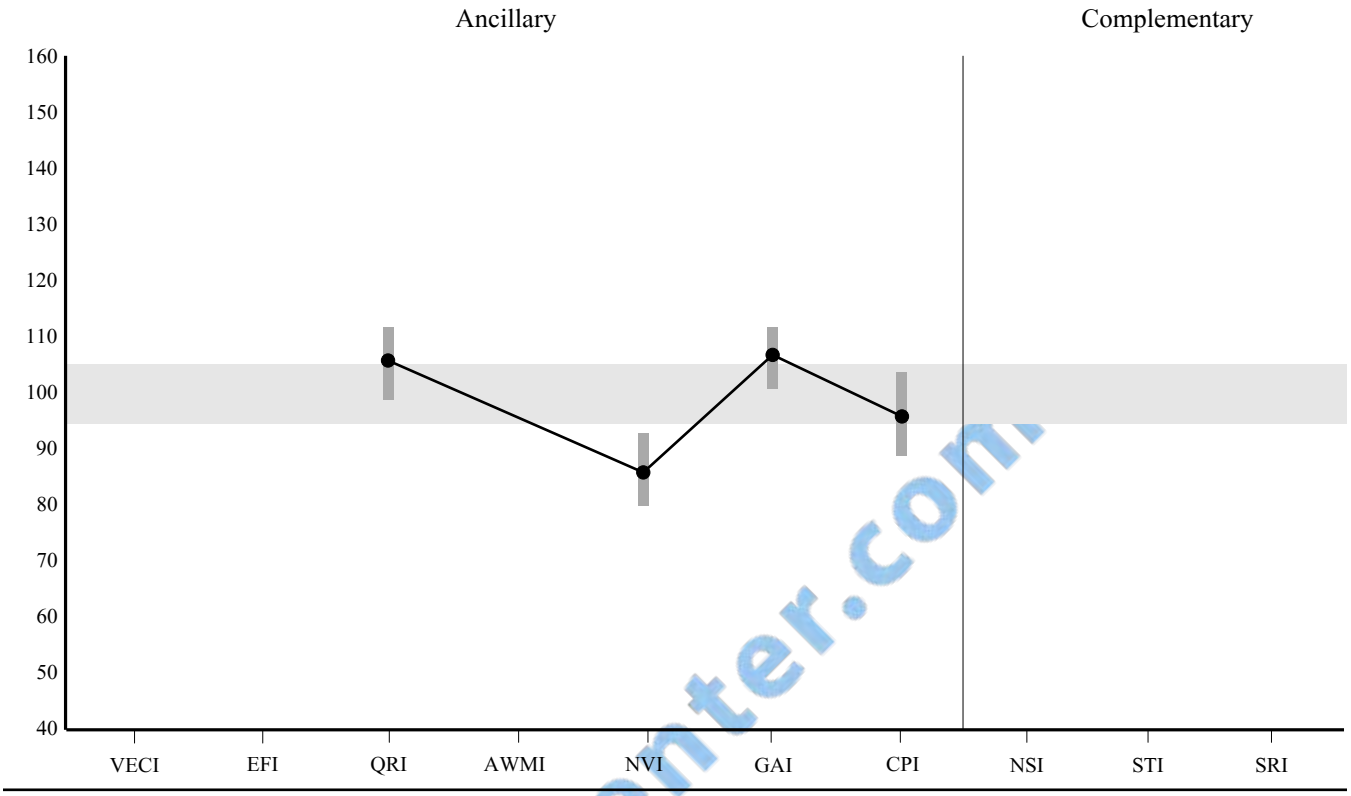
ANCILLARY & COMPLEMENTARY SUMMARY

Index Score Summary

Composite		Sum of Scaled/ Standard Scores	Index Score	Percentile Rank	95% Confidence Interval	Qualitative Description	*SEM*
Ancillary							
Verbal (Expanded Crystallized)	VECI	-	-	-	-	-	-
Expanded Fluid	EFI	-	-	-	-	-	-
Quantitative Reasoning	QRI	22	106	66	99-112	Average	3.67
Auditory Working Memory	AWMI	-	-	-	-	-	-
Nonverbal	NVI	49	86	18	80-93	Low Average	3.35
General Ability	GAI	55	107	68	101-112	Average	3.00
Cognitive Proficiency	CPI	38	96	39	89-104	Average	4.24
Complementary							
Naming Speed	NSI	-	-	-	-	-	-
Symbol Translation	STI	-	-	-	-	-	-
Storage & Retrieval	SRI	-	-	-	-	-	-

Ancillary index scores are reported using standard scores.

Ancillary/Complementary Index Score Profile



Note. Vertical bars represent the Confidence Intervals.

ANCILLARY & COMPLEMENTARY SUMMARY (CONTINUED)

Subtest Score Summary

Scale	Subtest/Process Score		Total Raw Score	Standard Score	Percentile Rank	Age Equivalent	*SEM*
Naming Speed	Naming Speed Literacy	NSL	-	-	-	-	-
	Naming Speed Quantity	NSQ	-	-	-	-	-
Symbol Translation	Immediate Symbol Translation	IST	-	-	-	-	-
	Delayed Symbol Translation	DST	-	-	-	-	-
	Recognition Symbol Translation	RST	-	-	-	-	-

ANCILLARY & COMPLEMENTARY ANALYSIS

Index Level Pairwise Difference Comparisons

Index Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
Ancillary						
GAI - FSIQ	107	105	2	3.62	N	36.6%
GAI - CPI	107	96	11	10.18	Y	20.2%
WMI - AWMI	-	-	-	-	-	-
Complementary						
NSI - STI	-	-	-	-	-	-

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

Base rates are reported by ability level.

Subtest Level Pairwise Difference Comparisons

Subtest Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
Ancillary						
FW - AR	11	11	0	2.33	N	
DS - LN	-	-	-	-	-	-
Complementary						
NSL - NSQ	-	-	-	-	-	-
IST - DST	-	-	-	-	-	-
IST - RST	-	-	-	-	-	-
DST - RST	-	-	-	-	-	-

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

PROCESS ANALYSIS

Total Raw Score to Scaled Score Conversion

Process Score		Raw Score	Scaled Score
Block Design No Time Bonus	BDn	0	1
Block Design Partial Score	BDp	30	9
Digit Span Forward	DSf	14	18
Digit Span Backward	DSb	8	10
Digit Span Sequencing	DSs	9	12
Cancellation Random	CAr	30	11
Cancellation Structured	CAs	27	9

Process Level Pairwise Difference Comparisons (Scaled Scores)

Process Score Comparison	Score 1	Score 2	Difference	Critical Value	Significant Difference	Base Rate
BD - BDn	9	1	8	3.40	Y	0.0%
BD - BDp	9	9	0	3.11	N	
DSf - DSb	18	10	8	3.69	Y	1.8%
DSf - DSs	18	12	6	3.63	Y	4.5%
DSb - DSs	10	12	-2	3.66	N	30.5%
LN - DSs	-	-	-	-	-	-
CAr - CAs	11	9	2	3.59	N	20.9%

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

PROCESS ANALYSIS (CONTINUED)

Total Raw Score to Base Rate Conversion

Process Score		Raw Score	Base Rate
Longest Digit Span Forward	LDSf	8	4.5%
Longest Digit Span Backward	LDSb	3	92.0%
Longest Digit Span Sequence	LDSs	5	66.5%
Longest Picture Span Stimulus	LPSs	3	98.5%
Longest Picture Span Response	LPSr	6	97.5%
Longest Letter-Number Sequence	LLNs	-	-
Block Design Dimension Errors	BDde	0	<=25%
Block Design Rotation Errors	BDre	0	<=25%
Coding Rotation Errors	CDre	0	<=15%
Symbol Search Set Errors	SSse	0	<=10%
Symbol Search Rotation Errors	SSre	0	<=10%
Naming Speed Literacy Errors	NSLe	-	-
Naming Speed Quantity Errors	NSQe	-	-

Base rates are reported by age group.

Process Level Pairwise Difference Comparisons (Raw Scores)

Process Score Comparison	Raw Score 1	Raw Score 2	Difference	Base Rate
LDSf - LDSb	8	3	5	2.0%
LDSf - LDSs	8	5	3	8.0%
LDSb - LDSs	3	5	-2	96.0%

Base rates are reported by age group.

End of Report