**Initial Speech-Language Evaluation Summary**

**Name**: George Puerto **Evaluation Date**: February 10, 2023

**Date of Birth:** October 14, 2014 February 14, 2023

**Age:** 8 years, 3 months

**Relevant Background Information**

George, an 8-year, 3-month-old male was seen on February 10, 2023 and February 14, 2023 at St. Theresa Catholic School for an initial speech-language evaluation. A full evaluation was recommended following Psychoeducational Evaluation.

As per information obtained from the case history, George was born following a full-term pregnancy via unplanned cesarean section. Mother reported “during labor, his heart rate would decline with each contraction”. Additionally, birth history was significant for Colic Reflux Disease and frequent colds. At the age of 4, George had his tonsils and adenoids removed, as well as, his frenulum surgically remedied. His mother reported George is in good health at this time.

Early developmental milestones were reported to be developing within normal limits with the exception of language. George’s mother reported that he received speech-language intervention and occupational therapy from 2 to 4 years of age. As per information obtained from case history, concerns regarding George’s development resurfaced this school year. George was evaluated by Cristina Olaechea, Ed.S. at Coral Gables Counseling Center in October 2022 through November 2022. Results from that evaluation revealed George’s overall intelligence is in the low average range. Concerns in the areas of processing speed, working memory, phonological awareness, auditory memory, motor coordination, and language were shown. Additionally, results revealed George meets the criteria for a Specific Learning Disorder with impairments in reading, math, and written expression, as well as, Attention Deficit/Hyperactivity Disorder Predominantly Inattentive Type. Refer to report from Cristina Olaechea, Ed.S. for additional information.

At this time, George currently attends St. Theresa Catholic School and is in the second grade. He also receives individualized assistance from Dr. Pascal at his school, in addition to a reading specialist and a tutor outside of school. He is also exposed to both English and Spanish.

**Instrumentation**

Formal and informal measures performed during the evaluation included the following:

* Social Behavioral Observation
* Clinical Evaluation of Language Fundamentals- Fifth Edition (CELF-5)
* Oral-Peripheral Examination
* Articulation/ Phonology
* Speech-Language Sample

All measures were performed in English. Results of all formal and informal assessments appear to be reliable.

**Outcome of Evaluation**

**Social Behavioral Observation:**

Observation was used to assess behavioral components in various structured and unstructured activities throughout the evaluation. The following social behavioral observations were noted:

* George walked from his classroom to the treatment room independently with clinician. While walking, George engaged in appropriate conversation with clinician. George appeared to enjoy engaging in conversation with clinician.
* George demonstrated adequate communicative intent and awareness of others. In addition, appropriate eye contact was present.
* Throughout the course of formal assessment measures, George demonstrated good initial attention to task.
* After administering a few items, George appeared distracted by the room and often times looked out the window and would move around in his seat. George was observed to engage the clinician in off topic conversation whenever there was a pause between items. However, he was very easily verbally redirected and would return to task.
* Overall, George was compliant throughout the entire assessment. Formal assessment measures were broken down and George was provided with breaks throughout.
* It should be noted that George did require additional time, as well as repetitions to complete some assessment items.
* It was also noted that when George appeared to not be listening, overall comprehension was affected. During administration of the CELF-5, it was observed that George’s inconsistent attention affected overall comprehension.
* Throughout the portions of the CELF-5 where repetitions were allowed, George required them in order to increase performance.
* It should be noted that visuals in the assessment were useful in aiding with overall comprehension.
* Generally, George performed all tasks willingly and interacted well with the clinician. He attempted all tasks. Throughout the course of the evaluation, verbal praise, visuals, and breaks were proven to be effective in keeping George motivated and on task.

**The Clinical Evaluation of Language Fundamentals- 5th Edition (CELF-5)** a standardized assessment of receptive and expressive language skills was administered in order to assess overall language skills. The CELF-5 is designed for students ages 5-21 years to assess language and communication skills in a variety of contexts.

**Core Language Score and Index Scores-** The Core Language Score and Index Scores are composite scores. These scores are based on the sum of various test scaled scores.

Standard Scores are based on a scale with a mean of 100 and a standard deviation of +/- 15. The following interpretation of standard scores is applicable:

|  |  |
| --- | --- |
| **Standard Score Range** | **Interpretation** |
| Above 115 | Above Average |
| 86-114 | Average/ Within Normal Limits |
| 78-85 | Marginal/Below Average/Mild |
| 71-77 | Low Range/Moderate |
| 70-50 | Very low range/Severe |
| 50 and below | Profound |

The following results were obtained:

|  |  |  |  |
| --- | --- | --- | --- |
| Core Language Score and Index Scores | Standard Score | Percentile Rank | Interpretation |
| Core Language Score | 76 | 5% | Moderate Delay |
| Receptive Language Index | 82 | 12% | Mild Delay |
| Expressive Language Index | 76 | 5% | Moderate Delay |
| Language Content Index | 86 | 18% | Mild Delay |
| Language Structure Index | 76 | 5% | Moderate Delay |

Core Language Score - The Core Language Score is a measure of general language ability and provides an easy and reliable way to quantify overall language performance. The Core Language Score is derived by summing the scaled scores from Sentence Comprehension, Word Structure, and Expressive Vocabulary. George received a Core Language Score of 76 and a percentile rank of 5%. This standard score and percentile rank yields a moderate delay.

Receptive Language Index - The Receptive Language Index is a measure of listening and auditory comprehension skills. The Receptive Language Index is derived by summing the scaled scores for Sentence Comprehension, Following Directions, and Word Classes. George received a Receptive Language Index score of 82 and a percentile rank of 12%. This standard score and percentile rank yields a mild delay.

Expressive Language Index - The Expressive Language Index is a measure of expressive aspects of language including oral language expression. The Expressive Language Index is derived by summing the scaled scores from Word Structure, Expressive Vocabulary, and Recalling Sentences. George received an Expressive Language Index score of 76 and percentile rank of 5%. This standard score and percentile rank yields a moderate delay.

Language Content Index - The Language Content Index is a measure of vocabulary and word knowledge. The Language Content Index is derived by summing the scaled scores from Expressive Vocabulary, Following Directions, and Word Classes. George received a Language Content Index score of 86 and a percentile rank of 18%. This standard score and percentile rank yields a mild delay.

Language Structure Index – The Language Structure Index is a measure of understanding and production of syntactical structures and morphology. The Language Structure Index is derived by summing the scaled scores from Sentence Comprehension, Word Structure, and Recalling Sentences. George received a Language Content Index score of 76 and a percentile rank of 5%. This standard score and percentile rank yields a moderate delay.

**Test Scaled Scores-** Test scaled scores provide performance information about the language content that each test targets. Test scaled scores are based on a scale with a mean of 10 and a standard deviation of +/- 3. Subtest scaled scores that are between 7 and 13 are considered to be average. The following interpretation of scaled scores is applicable:

|  |  |
| --- | --- |
| **Scaled Score Range** | **Classification** |
| 13 and above | Above Average |
| 8 to 12 | Average |
| 7 | Marginal/Borderline/At risk |
| 6 and below | Low to very low |

The following results were obtained:

|  |  |  |  |
| --- | --- | --- | --- |
| Test | Scaled Score | Age Equivalence | Interpretation |
| Sentence Comprehension | 6 | 6-6 | Low |
| Linguistic Concepts | 8 | 6-6 | Low Average |
| Word Structure | 6 | 5-6 | Low |
| Word Classes | 9 | 7-10 | Low Average |
| Following Directions | 6 | 5-10 | Low |
| Formulated Sentences | 5 | 5-8 | Very low |
| Recalling Sentences | 6 | 5-7 | Low |
| Understanding Spoken Paragraphs | 7 | N/A | At Risk |

**Sentence Comprehension-** The Sentence Comprehension subtest is used to evaluate the ability to interpret spoken sentences of increasing length and complexity and select the picture that illustrates referential meaning of the sentences. George obtained a scaled score of 6 and age equivalence of 6 years, 6 months. This scaled score and age equivalence are in the low range. He demonstrated relative strength with understanding modifications, prepositional phrases, direct/indirect objects, infinitives, relative clauses, subordinate clauses, interrogatives, direct requests, and compound sentences. However, George demonstrated difficulty with understanding negation, verb phrases, and indirect requests.

**Linguistic Concepts-** The Linguistic Concepts subtest assessed George’s ability to interpret spoken directions that contain basic concepts and identify mentioned objects from among several pictured choices. George obtained a scaled score of 8 and an age equivalence of 6 years, 6 months. This scaled score and age equivalence are in the lower end of average. He demonstrated relative strength with verbal commands including inclusion/exclusion (e.g., with, and, different, all, not, without, all but one), location, quantity, sequence, (e.g., middle, beginning, before), and temporal (e.g., until, at the same time). However, George demonstrated difficulty with inclusion/exclusion (either…or, neither…nor) and conditional (e.g., unless).

**Word Structure -** The Word Structure subtest is used to evaluate a child’s knowledge of grammatical rules in a sentence-completion task. George was asked to complete a sentence that pertains to an illustration using the targeted word structures. Information from this subtest can help determine how George is acquiring the morphological rules of the English language. George obtained a scaled score of 6 and an age equivalence of 5 years, 6 months. This scaled score and age equivalence are in the low range. He demonstrated relative strength with using regular plurals, third person singular, auxiliary + -ing, possessive pronouns, future tense verbs, uncontractible copula (e.g., he is, she is), reflexive pronouns (e.g., myself, herself), and irregular past tense verbs. George demonstrated difficulty with irregular plurals, possessive nouns, derivation of nouns, contractible copula (e.g., it’s), regular past tense verbs, objective pronouns (e.g., them, her), comparative and superlative (e.g., faster, biggest), and subjective pronouns.

**Word Classes-** The Word Classes subtest evaluates the ability to understand and express relationships between words that are related by semantic class relationships. George was asked to choose the items that best represent the desired relationship. This subtest provides information on George’s development of categorization skills and ability to associate word meanings. George obtained a scaled score of 9 and an age equivalence of 7 years, 10 months. This scaled score and age equivalence are in the lower end of average. He demonstrated relative strength with semantic classes, location, and object function.

**Following Directions -** The Following Directions subtest is used to evaluate a child’s ability to interpret, recall, and execute oral commands of increasing length and complexity. George was asked to remember the names, characteristics, and order of pictured animals, and point to them in response to an oral direction. George obtained a scaled score of 6 and an age equivalence of 5 years, 10 months. This scaled score and age equivalence are in the low range. He demonstrated relative strength with following 1-level commands with no orientation and following commands with one modifier. George demonstrated difficulty following 1-level commands with orientation, 2-level commands, and 3-level commands.

**Formulated Sentences-** The Formulated Sentences subtest assesses ability to formulate simple, compound, and complex sentences when given grammatical (semantic and syntactic) constraints. George obtained a scaled score of 5 and an age equivalence of 5 years, 8 months. This scaled score and age equivalence are in the very low range. He demonstrated relative strength with formulating sentences using pronouns, verbs, and coordination. However, George demonstrated difficulty formulating sentences using nouns, adjectives, adverbs, prepositions, and subordinating clauses.

**Recalling Sentences-** The Recalling Sentences subtest is used to evaluate the child’s ability to repeat sentences of varying length and complexity without changing any word meanings or structure. The child’s response indicates if critical meaning or structural features are internalized for recall. The ability to remember spoken sentences is required in following directions and other situations in school and home settings. George obtained a scaled score of 6 and an age equivalence of 5 years, 7 months. This scaled score and age equivalence are in the low range. George was able to recall various short sentences. However, as length and complexity increased, he missed at least one component of the sentence.

**Understanding Spoken Paragraphs-** The Understanding Spoken Paragraphs subtest assesses the ability to sustain attention, create meaning from oral narratives, and supply critical thinking strategies. Questions are probed to assess memory for facts and details, ability to identify main idea, and make inferences. George received a scaled score of 7 which is in the at risk range. He demonstrated relative strength recalling key details of a paragraph. However, he demonstrated difficulty with main idea, sequencing, predictions, and social context.

**Oral Peripheral Observation:** Informal assessment of the oral speech mechanism was performed through observation to assess the adequacy of the structures and functions of the oral-motor mechanism. Cursory observation revealed:

Structure – The face was observed to be symmetrical in shape. The mandible and maxilla were in proper alignment, height, shape, and size. Dental occlusion, the palatal arch and oral/dental structures were observed to be unremarkable based on chronological age. At this time, George’s oral structure was observed to be adequate for speech production.

Function – The body, trunk, and facial tone were observed to be normal. All reflexes were inhibited (no observable reflexes when eating or performing verbal tasks). Phonation and breath support were adequate (1-3 seconds of sustained phonation), for single voiced, nasal and un-voiced phonemes could be produced. Labial-facial control and jaw movements were observed to be adequate. Lingual Control (tongue) was also observed to be adequate.

**Articulation/Phonology:** The ability to produce speech sounds was assessed throughout the course of the evaluation in order to measure articulation of sounds and determine types of misarticulation. Spontaneous speech was elicited both in words and connected speech. Data was collected and analyzed using the Age of Customary Consonant Production chart as recommended by The American Speech-Language-Hearing Association (ASHA). The acquisition of speech sounds is a developmental process and children often demonstrate "typical" errors and phonological patterns during this acquisition period. Developmentally appropriate error patterns were taken into consideration during assessment of speech sounds in order to differentiate typical errors from those that are not.

Based on George’s chronological age at the time of the assessment, the following relevant substitutions were noted:

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| --- | --- |
| Error | Example |
| Substitution of /f/ for /θ/ (Voiceless th) | /teef/ for /teeth/  /maf/ for /math/ |
| Substitution of /d/ for /ð/ (Voiced th) | /dere/ for /there/  /feader/ for /feather/ |

These sound substitutions affected George’s overall intelligibility at the conversational level, making it difficult for an unfamiliar listener to understand George’s utterances. His intelligibility at the conversational level is understood approximately 90% of the time. By the age of 8, George’s intelligibility at the conversational level should be 100% for an unfamiliar listener. Therefore, articulation skills were judged to be delayed for his chronological age.

**Speech-Language Sample:** A speech-language sample was observed in order to evaluate spontaneous speech and obtain more information about George’s language skills in a less structured environment. A language sample can help identify the types of language behaviors in a child’s repertoire and provides an enhanced overview of language development. The speech-language sample was collected informally and observed for semantic, syntactic, morphological, and pragmatic language abilities. The following was observed:

Spontaneous language consisted predominantly of four- to five- word utterances with some expanded utterances. Expanded utterances were observed to be off topic, at times. Language content consisted of naming objects, using action words, using words to describe objects, and using words denoting place, possession, quantity, time, and reason. However, word finding difficulties were noted in conversation.

George’s social language use consisted of using phrases and sentences to request, get the clinician’s attention, talk about what he was doing, naming an object, greeting the clinician, answering the clinician’s questions, and asking the clinician questions. Additionally, he was able to talk about a recent event, maintain a conversation with the clinician, and repeat messages that weren’t understood. George demonstrated difficulty turn taking in social interactions and preferred to control the conversation. He often times interrupted the clinician in conversation. Additionally, he preferred to speak about topics of interest to him and demonstrated difficulty maintaining conversational topics.

Intelligibility in connected speech was judged to be good to fair. At times, longer utterances were difficult to understand somewhat of the time without relying on context clues. Intelligibility results from the language sample were consistent with results obtained from the articulation portion of the assessment.

Overall, observations collected from the speech-language sample were consistent with results obtained from the formal assessment, as well as, information collected via case history and parent interview.

**Impressions**

Based on the results of formal and informal assessment as well as parent interview and clinical observation, George, an 8-year, 3-month-old male presents with a moderate pragmatic delay, mild receptive language delay, moderate expressive language delay, and mild speech delay secondary to a Specific Learning Disorder and Attention Deficit/Hyperactivity Disorder Predominantly Inattentive Type.

Social behavioral observation revealed George engaged in appropriate conversation with clinician, demonstrated adequate communicative intent and awareness of others. In addition, appropriate eye contact was present. Throughout the course of formal assessment measures, George demonstrated good initial attention to task. However, after administering a few items, George appeared distracted by the room. George was observed to look out of the window and move around in his seat, as well as engage the clinician in off topic conversation whenever there was a pause between items. However, he was easily redirected and would return. Generally, George performed all tasks willingly. Formal assessment measures were broken down and George was provided with breaks throughout. George required additional time and repetition to complete some assessment items. Additionally, it was noted that George’s inconsistent attention affected overall comprehension. Overall, it was observed that when length and complexity of utterances increased, comprehension was affected, as evident by the scores obtained in the individual sections of the CELF-5.

Results from administration of formal assessment measure, the CELF-5, revealed receptive language and language content yielded a mild delay. Additionally, overall core language, expressive language, and language structure yielded a moderate delay. Information collected from the subtests of the CELF-5 revealed George’s linguistic concepts and word classes were in the low average range. Additionally, his ability to understand spoken paragraphs were in the at risk range. His sentence comprehension, word structure, following directions, and recalling sentences abilities were in the low range and his formulated sentences were in the very low range.

Cursory observation of the oral speech mechanism revealed that the face was observed to be symmetrical in shape. No gross structural asymmetries or abnormalities were noted at this time. George’s oral structure was observed to be adequate for speech production.

George’s intelligibility was judged to be good to fair in both structured conversation and spontaneous conversation. It was difficult to understand somewhat of the time without relying on context clues and/or gestures. Intelligibility results from the language sample were consistent with results obtained from the articulation portion of the assessment.

Overall, observations collected from the speech-language sample were consistent with results obtained from the formal assessment, as well as information collected via case history and parent interview.

Results from the psycho-educational evaluation conducted in October and November 2022 revealed George’s overall intelligence to be in the Low Average range. Deficits in processing speed, working memory, phonological awareness, auditory memory, and motor coordination were shown. Additionally, results revealed George meets the criteria for a Specific Learning Disorder and Attention Deficit/Hyperactivity Disorder Predominantly Inattentive Type.

During early speech and language development, children learn skills that are important to the development of literacy. Phonological awareness is strongly connected to early reading and writing. Speech-language Pathologists have a key role in promoting the emergent literacy skills of all children. As per information collected from parent interview, George is currently receiving intervention from a reading specialist and a tutor. At this time, we will not be including these goals in our intervention plan. However, we will continue to monitor reading development as it pertains to speech and language and add goals as needed.

Furthermore, it is important to note that individuals with difficulties with attention exhibit some form of impairment in executive functioning. Executive functioning includes areas of working memory, cognitive flexibility, and self-regulation. Executive functioning involves higher order language and cognitive skills. These skills are highly connected with academic and life success. Goals targeted toward the areas of executive functioning should also be included in George’s intervention plan.

Based on the results from this evaluation, family support, and adherence to recommendations that follow, prognosis for improved communication skills is favorable.

**Recommendations**

Based on the information obtained through the assessment tools and parent, the

following recommendations are made:

1. Individual speech-language therapy 2-3 times a week for 45 minutes to improve overall speech-language skills.
2. Goals should be reviewed and updated monthly and a re-evaluation is recommended in 6 months to evaluate progress.
3. Implement at home activities focusing on goals targeted in therapy.

It has been a pleasure meeting and working with George and his family. If you have any questions and/or concerns feel free to contact me directly via telephone at (786) 622-2353 or via email at [info@iplcmiami.com](mailto:info@iplcmiami.com).

Sincerely,

Sophia Fernandez, M.S., CF-SLP

Speech-Language Pathologist