**Initial Speech-Language Evaluation Summary**

**Name**: Mario Hernandez-Brunet **Evaluation Date**: December 15 & 19, 2022

**Date of Birth:** August 21, 2018

**Age:** 4 years, 3 months

**Relevant Background Information**

Mario, a 4-year, 3-month-old male was seen for an initial speech-language evaluation at Riviera Schools on December 15, 2022 and December 19, 2022. His mother served as a reliable informant via filling out case history and phone call with clinician.

As per information obtained from the case history, Mario was born at 35 weeks gestation. Birth and medical history were reported unremarkable.

Early developmental milestones were reported to be achieved within normal limits. As per information obtained from case history, concerns regarding Mario arose recently via teacher at school. He

Mario currently attends Riviera Schools and is in Pre-K 4. He is exposed to both English and Spanish via home and school setting.

**Instrumentation**

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

* Social Behavioral Observation
* Preschool Language Scales – Fifth Edition (PLS-5)
* Oral-Peripheral Observation
* Articulation/ Phonology
* Speech-Language Sample

All measures were performed in English, as this is the language Mario primarily understands and uses at this time. 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. Mario demonstrated adequate response to name, awareness of others, eye contact, communicative intent, and social reciprocity. In addition, play skills were observed to be appropriate. Mario enjoyed playing with Paw Patrol toys. Throughout the course of the assessment, Mario was very social and engaged with clinician.

Throughout the course of formal assessment measures, Mario was able to sit independently on the floor with clinician. Initially, Mario attempted all tasks enthusiastically. As formal assessment measure continued and became more challenging, Mario was observed to become inattentive and demonstrated an increase in off task behaviors. He required extra time, redirection, and repetition to complete some assessment items. Additionally, Mario was observed to be impulsive while administering formal assessment measure. Occasionally, given additional time and redirection, he was able to self-correct. Therefore, it should be noted Mario’s language abilities might be higher than testing scores indicated due to his preference of activities, inattentiveness, and impulsivity in testing when presented more challenging tasks.

Mario was also observed during snack time with his class. When Mario went outside for snack, multiple classmates called for him to sit with them. Mario was observed to initiate conversations with classmates via words, gestures, and showing items. Additionally, he was able to maintain conversation with classmates using same communication methods. Receptive and expressive language difficulties were observed to affect Mario’s social language use. At times, he demonstrated difficulty understanding a more complex social interaction and responded with taking a cookie from classmate’s snack. Additionally, he demonstrated difficulty using expanded and more complex sentences with classmates.

**Preschool Language Scale Fifth Edition (PLS-5):**

A standardized assessment of receptive and expressive language skills was administered in order to assess overall language skills. The PLS-5 is designed for children from birth through seven years, eleven months of age. It evaluates all aspects of an individual’s oral language and language comprehension through the use of pictures, manipulatives, and observation.

The test is comprised of two subscales: auditory comprehension and expressive communication. These subscales are used to evaluate how much language a child understands and how well they communicate with others.

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 yielded:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Subtests | Standard Score | Confidence Interval | Percentile Rank | Age Equivalent | Severity |
| Auditory Comprehension | 73 | 68 to 82 | 4% | 2-9 | Moderate to Severe Delay |
| Expressive Communication | 77 | 72 to 85 | 6% | 2-10 | Moderate Delay |
| Total Language Score | 74 | 69 to 82 | 4% | 2-10 | Moderate to Severe Delay |

**Auditory Comprehension** - On the receptive portion of the PLS-5, Mario obtained a standard score of 73, yielding an age equivalent of 2 year, 9 months. Standard score is on the lower end of one standard deviation below the mean and age equivalence is 1 year, 6 months below chronological age. This standard score and age equivalence yielded a moderate to severe receptive language delay.

Mario demonstrated relative strength with the following receptive language tasks:

* Understanding use of objects (e.g. “Show me what you use to drink water.”)
* Understanding spatial concepts (*in, on, out of, off*) – Mario required redirection in order to complete this item.
* Making inferences
* Identifying colors

However, Mario demonstrated difficulty with the following receptive language tasks that were expected for a child in her age range:

* Understanding quantitative concepts (*one, some, rest, all)*
* Understanding analogies (e.g. “You sleep in a bed. You sit on a ­­­­\_\_\_\_.”)
* Understanding negatives in sentences (e.g. “Look at all the babies. Show me the baby who is not crying.”)
* Understanding sentences with post-noun elaboration (e.g. “Look at these kittens. Point to a kitten that is not black.”
* Understanding spatial concepts (*under, in back of, next to, in front of*)
* Understanding pronouns (*his, her, he, she, they*)
* Understanding quantitative concepts (*more, most*)
* Identifying shapes (“Point to all of the things that look like a star.”)
* Identifying letters

It should be noted that Mario’s receptive abilities might be higher than testing scores indicated due to his preference of activities and inattentiveness in testing when presented with non-preferred activities.

**Expressive Communication** - On the expressive portion, Mario obtained a standard score of 77, yielding an age equivalent of 2 years, 10 months. Standard score is one standard deviation below the mean and age equivalence is 1 year, 5 months below chronological age. This standard score and age equivalence yielded a moderate expressive language delay.

Mario demonstrated relative strength with the following expressive language tasks:

* Producing four- or five- word sentence
* Using present progressive (verb + -*ing*)
* Using plurals

However, Mario demonstrated difficulty with the following expressive language tasks:

* Answering *what* and *where* questions (e.g. “Look at this boy. Where is he?”)
* Naming a described object (e.g. “Now I want you to try and figure out what I am talking about. What do you use after a bath or shower. You dry yourself with it.”)
* Answering questions logically (e.g. “What do you do when you are cold?”)
* Using possessives
* Telling how an object is used

**Total Language** ­– Mario’s total language scores revealed a standard score of 74 and an age equivalence of 2 years, 10 months. This standard score and age equivalence yielded a moderate to severe total language delay.

**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 was significant for slight malocclusion causing open bite. At this time, Mario’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), single voiced, nasal and un-voiced phonemes could be produced (/a/, /m/, and /h/). Jaw movements were significant for an occasional open mouth posture. Jaw stability is important for speech as it allows the tongue and lips to move independently to produce speech in a quick and efficient manner. In the area of Labial-Facial Control, Flaccid cheeks were noted due to underuse of the musculature. Furthermore, lip movements show decreased access/control to contact (medial one third of labial surface) as evident by difficulty with individual lip movement. Labial facial muscle movements were significant for decreased retraction and protrusion. In the area of Lingual Control (tongue) in connected speech, decreased tongue tip and body access/control was noted as evident by reduced precision of the tongue when articulating lingual sounds. Overall, facial muscles were observed to have decreased combined alternate movements and coordinated functioning.

**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. The Clinical Assessment of Articulation and Phonology - 2nd Edition (CAAP-2)was administered. Additionally, 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 Mario’s chronological age at the time of the assessment, the following relevant substitutions, distortions, and omissions were noted:

|  |  |
| --- | --- |
| Error | Example |
| Inconsistent substitution of /k/ for /g/ | /pik/ for /pig/  /dok/ for /dog/  (When repeated a second time, repeated correctly, however /g/ was still weak) |
| Inconsistent substitution of /f/ and /th/ for /s/ | /houth/ for /house/  /theal/ for /seal/  /thun/ for /sun/ |
| Substitution of /b/ for /f/ | /bish/ for /fish/ |
| Substitution of /b/ for /v/ | /ban/ for /van/ |
| Substitution of /w/ for /l/ | /weaf/ for /leaf/ |
| Substitution of /th/ for /z/ | /thoo/ for /zoo/  /cheethe/ for /cheese/ |
| Various inconsistent errors of sounds were noted in sequenced movements in spontaneous speech as a result of difficulty moving oral motor musculature appropriately during connected speech, difficulty with combined alternative movements of the facial muscles, and poor integration of jaw, lips, and cheek movements to support development of lingual control. | /mouf/ for /mouse/  /wep/ for /web/  /ga/ for /gate/  /be/ for /bed/  /sea/ for /seal/  tongue protrusion for /gate/  inconsistent omissions and substitutions of sounds in multisyllabic words |

In addition, the following errors were found to be developmentally appropriate at this time, but should be monitored based on chronological age and sound development:

|  |  |
| --- | --- |
| Error | Example |
| Substitution of /ts/ for /th/ | /teets/ for /teeth/ |
| Substitution of /v/ for /th/ (voiced) | /vem/ for /them/  /bave/ for /bathe/ |

These errors affected Mario’s overall intelligibility at the single word level and conversational level. Better productions of 1-2 syllable words/utterances with simple movements (e.g. basic CVCV and CV) was noted. Length and complexity of movements required to articulate the word and/or utterance contributed to unintelligibility. Furthermore, inconsistent, off target attempts on words of increased length or complexity were observed. Mario’s speech in spontaneous conversation was judged to be decodable using context of the setting and gestures. However, multiple sound substitutions and deletions make it difficult for an unfamiliar listener to understand Mario’s utterances more than 50% of the time.

**Speech-Language Sample:**

A language sample was observed in order to evaluate spontaneous speech and obtain more information about Mario’s language skills in a less structured environment. A speech-language sample can help identify the types of speech-language behaviors in a child’s repertoire and provides an enhanced overview of speech-language development. The speech-language sample was collected informally through play and observed for semantic, syntactic, morphological, and pragmatic language abilities using the Preschool Language Scale (PLS-5) Language Sample Checklist. The following was observed:

Mario’s language structure consisted of 3-5 word utterances, with inconsistent use of expanded sentences. However, Mario demonstrated difficulty with use of complex sentences, as well as, proper use of tense markers, pronouns, and other grammatical markers.

Mario’s language content consisted of occasional use of naming objects, describing objects, and using some action words. However, Mario demonstrated difficulty with using a variety of age appropriate lexicon to name, label actions, denote possession, describe, and to give reason. As a result, Mario was observed to use jargon (e.g. “Hey wait you xxxx yellow xxxxx”).

Mario’s social language use consisted of using words and/or gestures to direct attention, trying to get to do something, talking about what doing, role-play familiar themes (e.g. role played Paw Patrol scenes while playing with toys), and playing with clinician. However, Mario demonstrated difficulty using words to talk about an event or object, maintain conversation, answer appropriately when talked to, talk about recent experience. Overall social language use was judged to be within normal limits at this time. However, Mario’s receptive and expressive language delays appears to be affecting his social language capabilities.

Speech intelligibility in connected speech was judged to be fair to poor. Furthermore, Mario’s connected speech contained frequent use of jargon and was judged to be disorganized, off topic, at times, and out of sequence.

Overall, information obtained from the speech-language sample revealed that Mario’s language skills in conversation were consistent with results obtained from the administration of the PLS-5.

**Impressions**

Based on the results of formal and informal assessment, as well as, parent interview and clinical observation, Mario, a 4-year, 3-month-old male presents with a moderate to severe delay in overall speech, language, and communication skills.

It is important to note that all components of attention have a role in language acquisition. A language learner must focus on relevant linguistic input, discounting irrelevant input. He or she must sustain this focus in order to take in complete input for processing. When the source of language input shifts, the language learner must also shift his or her attention to avoid missing relevant input. Finally, he or she must attend to processing the information in order to make it available for future use.

Finally, longer-term impressions about Mario’s development potential based on these test results cannot be made at this time. The results of this assessment should be interpreted in terms of relative strengths and weakness so that they may be addressed through intervention. Future assessments may yield different results. These results may be higher or lower due to a variety of intervening factors.

Based on the results from this evaluation, Mario’s age, family and school support, as well as, adherence to recommendations that follow, prognosis for improved communication skills is favorable.

**Recommendations**

Based on the information obtained through the assessment tools and observation, the following recommendations are made:

1. Individual speech-language therapy 3-4 times a week for 30 minutes to improve overall 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.
4. Continue to monitor open bite malocclusion and refer to dentist/orthodontist as necessary.

It has been a pleasure meeting and working with Mario 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,

Text

Description automatically generated with medium confidence

Speech-Language Pathologist