

, a six year-old male, was seen for an auditory processing evaluation at the Clinic for Hearing and Balance at Nova Southeastern University on the above date.

Background:

reported that has slight attention difficulties and a mild expressive/receptive language delay. related that has been receiving language therapy since the age of two, and has made improvements. began language therapy and occupational therapy when Mrs. noticed that his social skills did not seem to “be on par with other kids his age.” Mrs. related that seems to understand phonics; however, he is not reading at this time. She related that she feels he is motivated to learn. Mrs. reported that follows multi-step directions well and is beginning to answer questions about stories. Educational evaluation indicated better non-verbal performance skills than verbal performance skills and an overall intelligence quotient in the average range. Mrs. indicated that attends the Academy, a school with 11 children per classroom and two teachers.

Findings:

Previous hearing evaluation conducted indicated normal hearing sensitivity for each ear.

Auditory pattern recognition was assessed with the **Pitch Pattern Sequence Test**. Auditory pattern recognition assesses the ability to recognize the prosodic aspects of speech, including intonation. Prosody is the ability to place meaning to words by stress pattern (**permit** versus **permit**, **conduct** versus **conduct**). was able to hum each pattern with 100% accuracy for each ear, indicating normal auditory pattern recognition skills.

Binaural integration, or divided auditory attention, was assessed with the **Dichotic Digits** test. Response patterns within these tests yield information concerning neuromaturation of the auditory nervous system and interhemispheric transfer of auditory information.

repeated 75% of the digits correctly for the right ear and 60% of the digits correctly for the left ear, indicating normal binaural integration skills.

Auditory closure was measured with the **NU-6 Filtered Word Test**. Response patterns within the test yield information concerning the ability to fill in the missing information to a degraded acoustic signal. This skill is used daily, in the classroom, to “fill in” auditory information lost to background noise. repeated 52% of the words correctly for the right ear and 48% of the words correctly for the left ear, indicating a delay in auditory closure skills.

Selective auditory attention was measured with the **Staggered Spondaic Word (SSW)** test. Response patterns within the test yield information concerning auditory memory, auditory sequencing, and sound-symbol association skills. The Number of Errors (NOE) analysis indicated a significant number of errors in the right competing condition.

Temporal gap detection was assessed with the **Auditory Fusion Test – Revised**. Response patterns within this test yield information regarding gap detection or the ability to recognize varying time delays between two tone pulses. 's gap detection thresholds were 80 ms for 1000 Hz and 85 ms for 4000 Hz indicating elevated gap detection thresholds. These results suggest

Binaural separation, or selective auditory attention, was assessed with the **Competing Sentences** test. Response patterns within this test yield information concerning focused auditory attention and the ability to pick a primary message from a background competing messages. repeated 0% of the sentences correctly for the right ear and 80% of the sentences correctly for the left ear. These scores indicated

Diagnosis and Treatment:

Auditory processing evaluation included assessment of auditory pattern recognition, binaural integration, selective auditory attention, temporal gap detection, binaural separation, and auditory closure. demonstrated delays