

Little Listeners Efficacy Study 2022 Findings

A study conducted in 2022 looked at the pre and post therapy outcomes on a sample of Little Listeners patients that were evaluated and remediated between August of 2020 and February of 2022. All students received 15-20 sessions of auditory training. Findings from the statistical analysis indicated significant improvements in auditory processing abilities for the participants who received therapy. On average, 78.5% of patients who were outside of the normal range before starting PASE (Primary Auditory Skills Exercises) therapy scored within normal limits after 6 months of intervention. Inclusion criteria included abnormal results on all 4 tests listed below on the initial assessment. A summary of the data is presented below:

Test	Percentage in the “Normal” Range after 6 months	Percentage in the “Normal” Range after 12 months
SSW (Staggered Spondaic Word)	35.3%	64.7%
SPIN (Speech in Noise)	86.0%	93.3%
PST (Phonemic Synthesis Test)	88.9%	100%
NU6 (Distorted Words)	83.4%	100%

Why is the SSW percentage so low compared to the other tests?

The SSW (Staggered Spondaic Word) test is the most challenging one administered during our evaluation for APD. The purpose of the SSW is to determine how well both sides of the brain communicate with each other. Although only 64.7% of our Little Listeners were in the normal range after 12 months, 100% of them *improved* their score when they were reevaluated at 6 and 12 months. Interactive Metronome (IM) training and the PASE Competing Words listening therapy are the most effective tools for improving the SSW score. Little Listeners are asked to complete 4-5 sessions of IMHome training between clinical therapy sessions. We see the most improvement in our Little Listeners that comply consistently with this request.

How can I make sure that my child succeeds in therapy?

Homework! Doing the IMHome and the HearBuilder programs at home will greatly benefit your Little Listeners and it will increase their chances of success in our therapy program. Developing brains must practice skills over time and often to make neural connections that can “improve cognition, attention, focus, memory, speech/language, executive functioning, comprehension, as well as motor and sensory skills” (Interactive Metronome, 2022). Since our clinical sessions occur only twice per week, it is necessary to practice IM and HearBuilder at home as “homework” to provide the necessary intensity of therapy for full remediation.

How can these tests be applied to real life situations?

- SSW- In every listening situation, we are using both of our ears. The SSW test allows us to assess a Little Listeners ability to listen effectively and synchronize what is coming in from both sides.
- SPIN- We live in a very noisy world! The Speech in Noise test allows us to assess a Little Listeners ability to extract speech from background noise and ignore background noise when necessary.
- PST- Phonological awareness is an essential fundamental skill for reading. One must first make the connection that individual sounds combine to make words. The Phonemic Synthesis Test allows us to assess this skill and investigate specific problematic speech sounds that a Little Listener may not be hearing clearly.
- NU6- Speech sounds can be distorted by speed, distance that it must travel, and accents, especially in our multi-cultural world. The NU-6 Filtered Words test simulates these complex listening conditions so we can understand a Little Listeners efficiency of listening in a variety of environments.

What is interactive metronome? Interactive Metronome. (2022, April 27). Retrieved June 16, 2022, from <https://www.interactivemetronome.com/what-is-im>