

## Case Study – The Listening Program®

### Robert, Age 6, Autistic Spectrum Disorder

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Diagnosis of Autistic Spectrum Disorder

#### BACKGROUND

Robert was initially seen by Occupational Therapy in November 2000. He was six years old, attending regular kindergarten, and had recently been diagnosed with autistic spectrum disorder. Language delays, behavioral problems, and abnormal social skills had been noted by his parents from around age two. Familial history is significant for a paternal uncle with a Ph.D. in computer science who was diagnosed with severe autistic tendencies later in life and a four year-old brother with similar, albeit milder, tendencies. Personal medical history is remarkable for chronic ear infections.

At the time of our evaluation he was receiving speech therapy services three times a week in school, but had never been seen for sensory integration approaches. He presented with low tone, decreased motor planning, a marked preference for sedentary activity, and poor vestibular processing. He had auditory hypersensitivities, and severe receptive and expressive language delays, coupled with echolalia and topic fixations. He was fixated on "Toy Story". He also had poor frustration tolerance. It was felt he would benefit from a sensory integration treatment approach that would include an auditory component. He would attend therapy sessions 2-4 times per month for 6 months. A recommendation was also made that his visual perceptual and fine motor skills be evaluated by the school district. Robert has above average reading skills, but was reading with little comprehension.

On November 16 he was started on "Mozart for Modulation", modified version, on Sennheiser 500 headphones. This was tolerated well. His home program was to be 30 minutes twice a day. The family was also instructed in the Willbarger protocol for brushing and joint compression to improve body schema and awareness and decrease defensive behaviors. On December 5th Robert's father, a physician, reported "increased attentiveness at school, increased cooperation, increased ability to say 'No' versus striking out, and an increased tolerance for the sound of hand driers found in public restrooms" (a sound which previously caused Robert to cover his ears and run from the room).

#### TREATMENT

On Dec. 5 Robert was introduced to The Listening Program Extension Sensory Integration CD. Within the first two minutes of listening Robert clenched his left hand in a cortical thumbing pattern. He did not release his rigidly clenched fist for forty-five minutes, despite participating in bilateral reciprocal ball play, swinging, and crawling. He finally opened his fist in response to brushing and joint compression. Robert's father noted that between the ages of two and four he would awaken with both hands clenched and scream inconsolably. I was very concerned about Robert's response but his father left a note later stating he thought Robert was controlling his emotions by keeping his hand fist and that he did not escalate to panic or crying. His father was surprised and excited that his behavior did not escalate. Robert continued Mozart for Modulation at home until December 13. On December 13th at the next treatment session, he tolerated the TLP Sensory Integration CD without problem: no outbursts, no clenching of his hand. He continued to be very sedentary, preferring play with blocks or books over gross motor activities, but he was beginning to engage in reciprocal play behaviors with me. His family felt he was more attentive and was better able to control his emotions.

## PROGRAM IMPLEMENTATION

He was started on a home program of the TLP Sensory Integration CD on the condensed schedule of 1/2 hour per day, five days per week that he continued through January 5. He would use Sennheiser headphones since they had already been purchased.

On Jan. 3 his mother reported, "I feel like I am talking to someone, not to a wall". She was crying. Robert began using The Listening Program on January 3 listening for 15 minutes, twice a day, for five days per week.

Treatment sessions included multisensory experiences and activities to promote midline crossing, gross motor skill acquisition, and social skills, etc. On Jan 10, Robert's father reported increased physical play behaviors and increased reciprocal interaction. Robert's language skills continued to lag behind his cognitive development.

Around the start of week 5 (Feb. 7), Robert was very restless at night, falling out of bed repeatedly, which would awaken him. Since he wasn't sleeping well he was giggling a lot at school and disrupting his class. The CD "De-Stress" from the ABT Sound Health series was added into his home program to be played at bedtime. His father took this further and played the CD continuously throughout the night. The family was also to move the second listening session up from after dinner to immediately after school. One week later Robert was sleeping through the night and there were no more complaints of inappropriate giggling at school. Robert was also able to attend school assemblies. Previously the noise and confusion had been too much for him, so much so that it had been written into his IEP (Individualized Education Program) that he did not have to participate in any assemblies. His reading comprehension was improving and his voice had more inflection.

Early in March, because of the family's concern about his language delays, we decided to start Robert on the TLP Extension Speech and Language CD for fifteen minutes per day and decrease TLP to one fifteen minute session per day (an extended schedule). He was to use each CD for two weeks. By the end of March he was no longer requiring the "De-Stress" CD to sleep well through the night. The family and school continued to report improvements in terms of increased spontaneous speech, improved comprehension, and improving social skills. He was also starting to develop a sense of humor!

Robert continued his listening programs during April but was not seen in the OT clinic. On May 2nd, Robert's mother reported that he had gone from being a sedentary child to being "hyper". We reviewed the concept of "heavy work" and other calming techniques. She was advised to play ABT's "De-Stress" CD whenever the activity levels were out of control. She was unable to report what his current listening program was, as his father is in charge of it. On May 16, Robert's dad reported he had been listening to TLP CD #9 for two weeks. TLP only has eight CD's. He was listening to the sampler for Sound Health!!! Families don't always do the reading they are supplied with! We then started him on the TLP Extension High Spectrum CD for 1/2 hour per day.

## SUMMARY OF CHANGES

On May 30, Robert's father completed a "Changes to Look For" Form (finally). Almost everything was checked. He also wrote: "Much improved social interactions, Talks better, Quicker responses to verbal commands, Follows directions better." His family is thrilled with his progress.

## DISCUSSION

I am thrilled with his progress, too. I have been an OT for fifteen years and have not seen a child progress so rapidly. He continues to need supportive services and will start TLP over again, but Robert now rides through our adult treatment areas on a scooter board greeting people. The bottom line is that Robert has progressed so well he is now observing his peers closely enough to pick up some of their "bad behaviors," e.g. kicking the back of the driver's seat, then pretending it wasn't him. He is starting to develop friendships. He is more adventuresome. Great accomplishments for six months.

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End of Case Study

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