

MULTIPLE DIAGNOSES, A STRUGGLING CHILD



Ellen (Len) Craver Young

As for listening, it is a unique and all-embracing faculty that commands the nervous system and the sensory organs in order to decipher this multiform energy ... Listening is, in a way, the most elaborate manifestation of the ensemble of our perceptions working in a synergistic manner under the control of the ear. We now know, after all that we have said about it, that the ear is not only man's most essential organ but is also his "neurological body."

—Alfred Tomatis, *The Ear and Language*

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Len has been a practicing Tomatis® consultant since 1996, and is a founding member of the International Association of Registered Certified Tomatis® Consultants (IARCTC). She serves as an active member of the IARCTC International Research Committee and is on the editorial board of *Ricochet-online* journal, the network's professional peer-reviewed journal.

Len worked originally with Billie Thompson, PhD, in Phoenix, AZ, and Pasadena, CA, to expand the Tomatis® Method throughout the United States. She then started her own company, Listening Clarity, Inc., in Arizona and South Carolina in 2003, offering the first portable generation of Tomatis®—the Mini-Electronic Ear. Her Tomatis® clients range from very young children to adolescents, adults and the elderly.

Len has a doctorate in mythological studies with an emphasis in depth psychology (Jungian psychology) from Pacifica Graduate Institute in California. For the past two years, while continuing her practice, Len has led the American introduction and training for the new small digital Tomatis® device called Solisten®.

You can find out more about Listening Clarity at:

www.listeningclarity.com.

CHAPTER 4

Multiple diagnoses, a struggling child

Peter was seven years old when his adoptive mother, Fran, contacted me. She was concerned with Peter's struggle to keep up in school—she thought he was very smart, but he was unable to stay focused in class and his grades were sliding. He was disruptive, and socializing was difficult for him. She was looking for a way to help Peter learn more easily.

Fran gave me Peter's history as she knew it so we could consider how his ears were working. Peter was adopted at birth. His adoptive parents said that his mother's pregnancy had been difficult because it was unwanted and stressful and the father had not been present. Peter's birth had been critical as he was born two and a half weeks pre-term, with the umbilical cord wrapped twice around his throat. His Apgar score was low (five to six) and his skin was blue.

Peter's birth mother had taken medication for anxiety disorders and antibiotics during this, her sixth, pregnancy. She had a history of hyperactivity, mood swings and learning

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challenges, smoked three to four cigarettes a day and suffered from viruses, fevers, a number of other medical concerns and gestational diabetes in her third trimester. Peter had a tough start—he required resuscitation at birth and experienced difficulty feeding; he was also given intravenous fluids, oxygen and needed antibiotics. Yes, Peter had a very difficult beginning to life.

Peter's early life

Peter was Fran and Jim's first child, and they were excited to have him. They were a prosperous, hardworking couple who were able to give Peter opportunities to learn and grow. They took control to help their new son.

Peter was colicky in his first three months, with gastroesophageal reflux and vomiting. He did not smile until his fourth month. Over a short period of time, Fran noticed that Peter was sensitive to touch—he would scream when a washcloth came in contact with his skin. Peter could not grasp items

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easily, indicating a delay in the development of fine motor skills. As a toddler, he was hyperactive and could not settle down for sleep, nor could he sleep through the night. He was also a picky eater. The best news as far as we were concerned was that he'd had only two ear infections.

Fran was frazzled and felt that Peter's early years had been unbearable. At six years of age, Peter had been tested by private psychologists, a pediatrician and a psychiatrist, resulting in several diagnoses, including ADHD, oppositional behavior and anxiety. Central auditory processing disorder and dyslexia were also mentioned, but not diagnosed.

Following prescriptions from his doctors,

Peter was on four to five medications each day that were intended to address his behavior and sleep habits. They included a small dose of Dexedrine in the morning, a larger dose of sustained-release Dexedrine for the day; Zoloft® between three and four p.m., melatonin at six p.m. to prepare for bed; and cyproheptadine as needed.

A parent's drive to solve a situation for their child can be relentless, especially if they know that there must be a variety of possible solutions available. Fran contacted me in the process of seeking ways to solve their concerns regarding Peter's learning challenges. She and Jim were particularly concerned with Peter, as he showed clear signs of keen intelligence along with his multiple daily dysfunctions. He was a pleasant child, but unable to be a team player or blend into a group—in groups, he always took the lead and hogged it, so other children did not want to play with him.

Peter had a vivid imagination, and enjoyed designing and building things. He was partial to complex math and science projects and foreign languages. His voice was loud, and when he listened, it appeared that he was reading lips—he stared at my mouth. Generally, however, he seemed to be a happy child.

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Prior Tests

Peter was evaluated at a prominent children's hospital outpatient center where he received the main diagnoses stated above. In this evaluation, the Behavioral Assessment System for Children, the Children's Interview for Psychiatric Syndrome, Disruptive Behavior Disorders Rating Scale and the Revised Children's Manifest Anxiety Scale were completed for this purpose. The actual results were not available to me; however, the diagnoses and referral to an occupational therapist for fine motor control were shown. His oppositional behavior was a concern to the testers and it was suggested the

family return for counseling if he worsened.

Peter's eating problems continued (he refused to eat); he threw temper tantrums; told of unusual fears; was difficult to discipline; displayed intense reactions and told lies. He was left out of playgroups.

In further testing conducted by two well-respected local psychologists, the Behavior and Temperament Profiles were completed. These examiners observed that Peter seemed to be unable to focus due to his own constant thoughts. They said he might have, "difficulty interpreting directions," even though he was cooperative—as each test began, Peter jumped into questions about what he could do before he could be given instructions.

Peter was shown pictures and scored for his responses based on visual input. His testing ranged from average-to-above-average to superior range in three areas: understanding directions presented verbally with pictures, story recall for stories read aloud to him, and listening comprehension for passages and single word expressive vocabulary. Without visual input, Peter's listening was much weaker.

Additional cognitive measures were given, and found to be in the average range. The examiners felt the scores might have been an underestimate of Peter's potential due to his extreme distractibility. He ranked in some learning abilities in the 94th, 89th and 93rd percentiles for reading, mathematics and math fluency. However, his handwriting was uneven and he was unable to follow directions for writing assignments.

Peter's initial assessment for the Tomatis® Method

Peter's parents brought him to meet me for an initial assessment as their first step in considering the Tomatis® Method for their son. I put him through the Tomatis® protocol listening test: the listening test for bone and air conduction, perceptual recognition of tonal scale high/low comparisons, and the laterality test. Peter was cooperative with the listening test and we

were able to get a good picture of how he received sound. The listening test indicated to me that Peter might be having hearing problems.

Although I am not trained in audiology, I can see areas where hearing might be poor because of my training in the Tomatis® testing protocols. Peter had not had a recent hearing test with an audiologist so I asked his parents to take him to one for testing. Because Peter was unable to understand the instructions for the laterality and tonal scale high/low perceptual comparisons, I could not complete those. Peter had extensive overproduction of earwax, and quiet voices disappeared for him.

Since most of his bone and air conduction relationship showed the air above the bone, I assumed that Peter would be able to learn in a one-on-one tutoring situation. Dr. Tomatis's beliefs about the functioning of the ear are what led me to make this assumption:

Tomatis proposed (1974a, 1974b) a different view of the ear than Von Békésy (1960), who was awarded a Nobel Prize for his theory. Tomatis observed that too much distance separates the incus and stapes, and the presence of collagen there prevents the occurrence of sound with a human fidelity capability. Instead of conducting sound, Tomatis theorized that the ossicles protect the inner ear from damage by dampening the tympanic membrane vibratory energy via a feedback loop from the endolymph. The endolymph buffers the shearing potential of the vibrational force to protect the Corti cells. Bone conduction occurs even when the ossicles are removed, with a resultant flaccid contact between the tympanic membrane and tympanic sulcus causing air conduction hearing loss.

Tomatis claimed bone conduction is the major route of sound conduction to the inner ear. He observed that the endochondral capsule is the only place in the human body where primitive bone, which developed from fetal cartilage, persists unchanged (no resorption) from before birth until after death. Thus, this static medium is the ideal conductor for vibratory energy. The cells of

Corti are end organs rather than sensory cells, such that they play a role in cochlear mechanics. The stapedius muscle controls the stapes and regulates high-frequency audition and never rests; it is the only muscle of the human body to do this (Tomatis, 1974b).¹

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At the end of the initial meeting, I asked Fran to ask the ear, nose and throat specialist if the medications Peter was taking were affecting his hearing. Peter's parents asked me to work with him, and I agreed to do so after he completed a hearing test; I wanted to understand what was causing his apparent hearing difficulties.

After a full examination, Peter's doctor found his ears were full of fluid and it took several months to clear up this problem. However, when he could hear better and his ears were clear, he still displayed many of the behaviors he had when he was tested by other professionals, and we agreed to start the Tomatis® Method.

Program

I recommended to Peter's parents that he undertake 60 hours of listening to see how the program would help him. If all went well, I suggested that they consider 30 additional hours to continue stimulating Peter's ears. I also recommended that Peter move to the front of the classroom at school, and that any softly spoken teacher be made aware of Peter's needs.

Susan Andrews, PhD, and Billie Thompson, PhD, in their article "The Emerging Field of Sound Training," summarized the Tomatis® Method. It is based on a number of assumptions about how people develop, process information and learn, including the following:

Hearing is different from listening.

- Hearing is different from listening.
- Listening plays the fundamental role in processing all language information.
- The motivational and emotional need for communication begins with listening.
- One role of the auditory system is to connect or relate self to self, to others and to the environment.
- The brain needs sound energy to enable the thinking processes and the development of intelligences.
- Different professionals may use sound stimulation technology as a tool to help people of all ages improve their listening.
- Listening is a skill that can be both lost and recovered.²

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It was clear from the prior tests, and the initial Tomatis® assessment, that Peter struggled with listening. As a result, he exhibited challenging behaviors and was unable to achieve his potential. Listening is disturbed when the two muscles of the middle ear are weakened as the result of a life experience. The role of the Electronic Ear (Dr. Tomatis's device) is to strengthen these two auditory muscles to their full working ability and reactivate a full listening potential. When this is accomplished, the ear functions as it is supposed to, and provides energy to the brain. You can find out more about how the Tomatis® Method works, and the role of the Electronic Ear, at www.tomatis.com.

Fran and Jim chose to use the portable Mini-Electronic Ear (Mini-EE) for Peter's program. This device was created in 2001 and was the first product designed by Tomatis® Développement SA to provide a program outside of centers. The Mini-EE is able to give both passive and active sessions using the microphone and, if available and appropriate, the mother's voice CD. This CD contains a recording of the mother's voice with the low and medium frequencies filtered out in order to reconstruct how a child hears a

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The Tomatis® program was the only program Peter was undertaking in addition to his medications.

I decided to focus first on strengthening the lower sounds in Peter's listening. These sounds tend to strengthen balance and bodily function. This emphasis in the lower tonal scale was between zero and 1,000 hertz. Next, Peter's language and phonics needed improvement, so tones in the language range were addressed in his second week, ranging up to 3,000 hertz.

After the first few days of listening, Fran wrote the following:

The first thing that happened was that he asked to take a shower and wash his hair all by himself! He's always whined or cried from the water pressure on his head and face, but not anymore! He said he was ready, now!

Imagine that! And he's been doing it since! Hooray! Also, he appears to be "thinking" before acting more ... specifically with regard to items he needs to remember to take to school. He's been able to control areas of impulsivity such as rushing through his classwork and turning it in without checking any of it. In the past two days during tests, instead of being the first as usual to turn in his paper, he began to get up, stopped himself, sat down again and looked over everything, caught his mistakes, corrected them, and then turned in his work! This is such a HUGE DEAL! It can make such a difference in his grade average!

Behavior change

Peter began to sleep better at night, but was still taking melatonin.

Fran wrote again, about three months after Peter completed his 60-hour program:

I have many wonderful things to share with you!

As of week 4 of school, Peter's grades are as follows:

- Writing composition B+ (this involves creating complete sentences—a very big deal—previously couldn't do)
- Spelling A+
- English B
- Vocabulary A
- Geometry A
- Social Studies B+

His handwriting continues to improve and show evidence of smooth cursive lines and connections. His focus and attention appears to be very good throughout the day. We have now removed the melatonin vitamins for sleep completely from his daily regimen. His teacher is creative and passionate and very positive in her reinforcement methods. He is receiving NO special accommodations with regard to workload, NO Learning Center attendance, NO NEOSMART for handwriting ... and is the only student in his computer class who can type perfectly on the keyboard with eyes closed and have 0 mistakes! He continues to have improved short-term memory with regard to homework assignments and due dates.

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Conclusion

Peter came to me with a critical listening issue. From the standpoint of the Tomatis® Method, birth trauma, adoption and health issues can challenge

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the development of the ear and human biology involved in listening. Once Peter's hearing issues were assessed by an audiologist and treated by his pediatrician, Peter completed the Tomatis® Method. His ability to listen improved and he was able to learn, remember, and make friends more easily than before he did the program. Peter became a leader. The Tomatis® Method helped improve Peter's ability to listen by strengthening his middle ear muscles, allowing his ears to receive sounds, which translated to energy in Peter's brain. Happily, after completing the program, learning *did* become easier for Peter.

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2. Susan Andrews PhD and Billie Thompson PhD, “The Emerging Field of Sound Training: Technologies and Methods for Impacting Human Development Through Sound Stimulation,” *IEEE Engineering in Medicine and Biology* (March/April 1999): 89-92.

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