



I. Introduction

Speech delay is a developmental issue on the mechanisms of the faculties involved in producing speech. Speech requires a complex coordination of the sensory information (what your senses acquire), language processing (i.e. memory of linguistic patterns), and oral-motor skills (movement and coordination of the vocal cords, mouth, lungs, etc.).

By working at first with singers and aeronautic arsenals, Dr. Alfred A. Tomatis, a French ENT and a voice specialist established the relationship between hearing and phonation, by extension, between listening and communication. Later on, he discovered that the ear does more than just hearing when people were reporting secondary benefits to the programs he designed.

II. Case presentation

Kyle was diagnosed with Autism in August 2016. His parents moved from Africa to Australia in 2009. His dad is an IT manager and his mother is a health professional.

Kyle could only say a few words and short sentences like “Mum, Dad, let’s go shop to buy milk” or “Hello Dad, I need you so much”. He was very difficult to have a proper conversation with. He also had *echolalia* (repetition of what was just heard). He understood very short instructions and always had a nanny at home.

By the age of 3, his parents realised that Kyle was not communicating. They enrolled him at a preschool, 5 days a week but it was a big disaster. After 3 months, they had to stop preschool and also hired a nanny with experience in autism since they saw that he improved significantly on a one-on-one interaction.

Kyle could count to 100 and knew content language like the alphabet, colours, and animals. He was not allowed to watch TV during the day with the nanny. He could sleep well for 11 hours straight. In terms of eating, he was a very picky eater and was not on a specific diet. He attended 2 days a week in a new preschool.

He had no major health concerns. He only gets a cold once a year and had no ear infection.



His mother's pregnancy was natural and very healthy. She was working full-time and delivered naturally with epidural in 2 hours and 15 minutes. Kyle was breastfed for 16 months. Most of his milestones were met on time except for language.

III. Management and Outcome

After the first Tomatis® Program, his parents reported that Kyle enjoyed listening to the music with Mum and nanny. He moved his head and hands to the rhythm of the music.

In terms of language, his echolalia vanished. His pronunciation and articulation was better and became more confident in using more words or constructing longer sentences.

He was quicker when responding to questions with no need to repeat as much as before. He could easily follow instructions as well and wanted to be independent when carrying them out (says "No help").

He could already dress and dry himself after shower. He became more assertive when he wanted someone to do something for him.

His eye contact improved a lot. At interim consultation, I observed that he communicated a lot more with me too (i.e. uses a lot "I").

After the second Tomatis® Program, his parents reported that he used a lot more language as he talked much more than before. He answered in sentences now such as "I am playing with blocks". He asked questions like "Mum, are you happy? I love you Mum" and "Dad, what are you waiting for?" with good eye contact.

He was now starting to learn to write his name, Mum's and Dad's. He could cut, play with beads, and build with legos.

He was also trying new food and whenever he wanted to eat something, he would immediately tell his parents about it when they go shopping, like one time, he took his own basket and did his own shopping with fruits, sausages, and a lolly.



He was now able to regulate his emotions for example: when frustrated, he extracted himself from the situation for a few minutes and came back and said “I am sad” or sometimes he would say “I am sorry! Are you happy Mum?”

He was more focused, more attentive, and more cooperative. He showed his sense of humour and expressed his needs already with the tone of command in the voice. Everyone around Kyle noticed all these significant improvements that also made it easy for them to be with him.

The Science Behind It!

The Tomatis® Method takes a neurosensory-integrative approach to speech and language processing. It relies on its Gating® installed in the TalksUp® device (Tomatis® player). It produces high- and low-frequency filters creating sound contrasts in the classical music (usually Mozart and Gregorian Chant).

These sound contrasts are then transmitted via air and bone conduction with the use of specialised headphones. Bone conduction sends information through the skull directly to the inner ear.

The inner ear houses the vestibule system which is obligated to related the information from the ear to the brain and body (back-and-forth). This network is also responsible for body movement and coordination, sense of localisation and spatialisation, body-image, and body-balance.

One of the phases in this program is the Active Work where qualified professionals implement participatory activities such as verbal repetition using a specialized microphone. The voice will instantly be modified and re-transmitted in the earphones within the specific parameters of the Tomatis® effect.

Kyle was once a child with a language difficulty. However, the Tomatis® Method made it possible for him to become a student and a son who can connect and relate to others through language.

Kyle’s story is a great example of how the Tomatis® listening program can transform individuals with difficulties into people who can connect and relate with one another. For more information, visit at www.tomatis.com.au!



Let Your Voice Be Heard Speech Delay and the Tomatis® Method: A Case Study

Françoise Nicoloff is a registered psychologist and an International Tomatis® Consultant and Trainer. Françoise has worked for nearly four decades around the world with children and adults suffering from anxiety, depression, learning and communication difficulties. She is passionate about helping those people especially when their difficulties are linked to auditory processing which means that their brains do not hear what their ears are hearing. Françoise is often invited to speak at conferences. She has chosen to be based in Sydney and she travels within Australia and around the world. Recently, she has been asked to support families and professionals in China too. She can be contacted on 1800 677 010 or by email at info@tomatis.com.au.

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