# <u>Tomatis Method</u>: effective for learning, language and speech problems.

## Introduction:

This research is in the field of 'Science in Education' at the University of Groningen and is carried out by Rianne Hadderingh. The research looks at the effects of the Tomatis method on learning, language, and speech problems. 44 children of primary school age are monitored for the changes in their listening curves, following this method.

The children attended the Tomatis method in Heerenveen, Groningen, Austerlitz and IJmuiden. During the listening training, their age was between 3 and 12 years old. The children attended regular or special primary education.

The research started as an initiative of Tomatis Noord in Groningen, by Luce Olminkhof. She is a pedagogue and has worked with the Tomatis method for seven years .

# **Research questions:**

The main question in this research is: does the Tomatis method have a measurable effect on the learning, language, and speech problems of primary school pupils?

The sub questions are:

- Does the Tomatis method affect the children's hearing and listening?
- If there is a change in hearing/ listening, is it a positive change?
- Did their learning, and language improve after following the Tomatis method?
- Did their speech improve after following the Tomatis method?

The first two questions will be answered using the outcomes of the 7 listening tests. These tests were taken during the Tomatis listening sessions. The data will be analysed at a later stage. The third and fourth question will be answered using data from 39 interviews, which were held with the children's parents. In the interview, the parents were asked to compare the behaviour of their child before and when following the Tomatis method. E.g. in which area did they notice changes in their child's behaviour? If they noticed any changes, were they permanent? From 9 children the data from their Primary School school tests were gathered. The analysed results from these interviews are discussed in this article.

#### Learning, language and speech problems:

Most children participating in the Tomatis method have learning, and language problems (34 children): e.g. general learning problems or problems with reading. The cause of these learning problems is not included in the research. Some children are dyslexic, some children have concentration problems or have a lower IQ than average.

In the research 9 children with speech problems participated. The speech problems concern difficulties with pronunciation of letters, with sound-differentiation and the construction of long sentences. Often, speech problems appear at the same time as learning and language problems.

#### **Results of interviews:**

Parents of 39 children were interviewed. The group was divided into 25 boys and 14 girls. 34 of them started the Tomatis listening therapy because of learning, or language problems. 9 children followed the Tomatis listening therapy because of speech problems. Some had learning, and language problems as well as speech problems.

In the case of 35 children (90%), a general positive result in behaviour is measured. In the case of 1 child there was doubt about the result and for 3 children the parents experienced there was no positive result in their behaviour at all. From the group of 35 children, 29 parents experienced a positive result on their child's learning, language or speech.

## Learning problems

In the group of 34 children with learning or language problems, 22 children's problems decreased. In the case of 1 child there was doubt whether there was a change in learning, or language problems. According to the parents of 11 children, their child's learning problems have not improved.

The following diagram represents the permanent effect of the Tomatis method and if there were different kinds of guidance before, during or after following the Tomatis listening therapy.

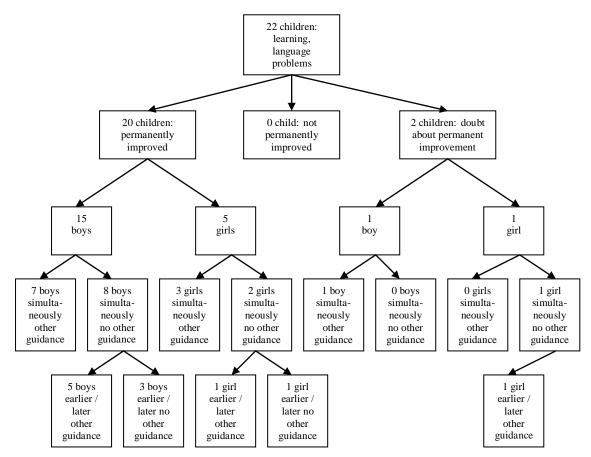


Figure 1: The partitioning of the improvement in learning and language problems.

It appeared that in 20 cases there was a permanent improvement in the children's learning and language. 4 children didn't have other guidance before, during or after the Tomatis listening therapy. The changes in learning and language problems can be entirely attributed to the Tomatis method. For 18 children, who got different guidance too during the Tomatis therapy, it is not clear what the effect of the Tomatis listening therapy or this other guidance was. Possibly the combination of guidance (e.g. Remedial Teaching or the Brain Stimulating Method- physical exercises to stimulate the brain) caused the effect. Some children have also used homeopathic medication.

#### Speech problems

In the group of 9 children with speech problems, all of them showed improvement. The scheme below is the visual representation of the research-results from the interviews with parents of children with speech problems. The permanent effect of the Tomatis method and the other types of guidance (e.g. speech therapy) before, during or after the Tomatis listening therapy is shown. It is not clear if the improvement of children, receiving other guidance, is solely caused by the Tomatis listening therapy or whether both forms of guidance stimulated the results.

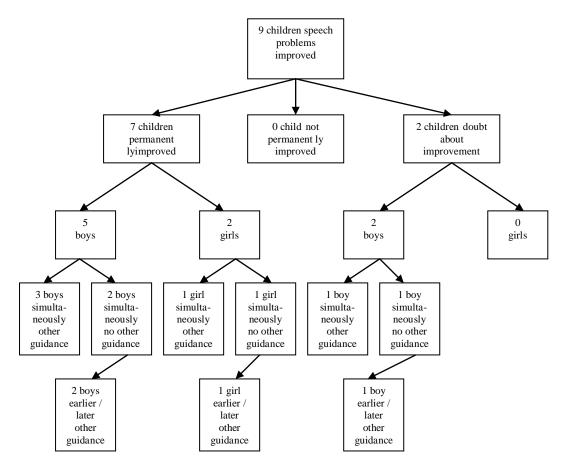


Figure 2: The partitioning of the improved speech problems.

#### Conclusion and discussion:

The parents' opinion was that the Tomatis listening therapy had a positive results in 90% of the researched cases (35 out of 39 children). Looking only at the effects of the method on learning and language problems, the improvement percentage is lower.

Starting the Tomatis listening therapy, 34 children chose for the method to improve their learning, and language skills. In 22 cases their skills were improved.

The 9 children with speech problems all showed positive results following the Tomatis listening therapy.

Because some children received other guidance before, during and after the Tomatis listening therapy, it is not clear what the effect of the Tomatis method exactly is. An improvement in learning, language and speech was obvious though.

It is important to proceed doing research on children with learning, speech and language problems following the Tomatis listening therapy without other guidance or intervention.

A different type of research would be to match children of a control and experimental group on specific characteristics of their learning, language and speech problems.

The children in the control and experimental group only differ because of the intervention done: One child follows the Tomatis listening therapy, the other child doesn't. Further results of this research will be available by October 2007. If you have any queries or would like to react to this article, please send an e-mail to <u>riannehadderingh@tiscali.nl</u>.