

The Science of Tomatis

Research summary

The Tomatis method is the foundation for numerous offshoots of sound therapy programs based on Tomatis's discoveries. There is substantial evidence for the efficacy of the Tomatis method, with studies on a wide variety of health conditions producing a differing range of results that have been interpreted as either positive or neutral.

Tomatis reported in his autobiography on his efforts to collaborate with researchers. Though the methods used in some studies did not succeed in highlighting the positive results observed by clinical practitioners, Tomatis argued this was due to the design of the studies and individual variances.ⁱ (Tomatis Conscious Ear)

In the last few decades there have been numerous controlled studies, surveys, clinical experiments and case histories, many of which confirm the benefits of the Tomatis method for a variety of conditions. A summary of these studies follows.

Reading, behavior and learning

Sandislands (1989)ⁱⁱ Compared 32 underachieving children with a control group of 40. The treated group showed greater improvements in listening, oral reading and behaviour.

Kershner et al (1990)ⁱⁱⁱ undertook a 2 year study of 26 students with a control group using an auditory placebo. As improvements were found in both groups, researchers concluded that there was a lack of support for the educational efficacy of the Tomatis Program for learning disabled children.

Gilmor's meta analysis (1999)^{iv} covering four smaller studies of the Tomatis method, including Kershner's work, found that "Positive effects sizes were found for each of the five behavioral domains analyzed"

Voice

Weiss (1985)^v found that three theatre students after seven months of Sound Therapy showed a shift of vocal energy to the higher frequencies and better articulation.

Language disorders

Van Wyk, (1974)^{vi} compared 20 stutterers with 20 normal speakers and found that more stutterers have left ear dominance, confirming Tomatis' hypothesis of the importance of right auditory laterality.

Jaarsveld (1974)^{vii} found in a group of 43 stutterers, 82% got significant relief from the treatment and 54% retained the improvement for a year or more.

Badenhorst (1975)^{viii} found that right-eared people communicate more easily, confirming Dr Tomatis' theory of right ear dominance.

Wilson (1982)^{ix} found pre-school language disordered children showed statistically significant improvement in their ability to express thoughts and feelings in words. The study gives a strong indication that the Tomatis approach is useful when used with pre-school learning disabled children.

Swain (2007)^x studied the effects of the Tomatis Method on 41 subjects from age 4 to age 19 with auditory processing disorders. Standardized tests were used pre and post treatment. All subjects demonstrated statistically significant improvement with skills of immediate auditory memory, auditory sequencing, interpretation of directions, auditory discrimination and auditory cohesion. Researchers concluded that the Tomatis Method can be effective as an intervention strategy for auditory processing disorders. <http://www.thelisteningcenter.net/research.php>

Self Concept

Gilmor (1982)^{xi} Found improvement in children and adolescents' self concept, social and family relations and certain language and motor skills.

IQ

Rourke and Russel (1982)^{xii} compared experimental and control groups and found improvement in IQ of learning disabled children under Tomatis treatment.

Dyslexia

Roy and Roy (1980)^{xiii} examined the effect of the Tomatis method on five dyslexic boys and showed improved cognitive control and audio-vocal control in four of the subjects.

Intellectual disability

De Bruto (1983)^{xiv} found a statistically significant increase in the mental age of profoundly disabled children after Tomatis treatment.

Autism

A study was undertaken by the University of California on autistic children using the Tomatis sound therapy, its findings were published in 2007.^{xv} The method used was randomized, double-blind, placebo-controlled, crossover design. The study showed that there was improvement in the children, however it did not appear to be related to the treatment. The children that were given the placebo showed a higher percentage of improvement over those given the Tomatis treatment. The study concluded there was no improvement in language using the Tomatis Method.

Anxiety and depression

Peche (1975)^{xvi} studied a group of 10 students and found that Sound Therapy helps to alleviate anxiety and remove psychic blocks, indicating its benefits in conjunction with psychotherapy.

Botes (1979)^{xvii} found improved relationships and self-concept in an in depth study of three clients with neurotic depression.

Du Plesis (1982)^{xviii} in a long term study over 14 months with subjects carefully selected from a survey of 424 people, showed improved mental health and self actualization for both 10 anxious and 10 non anxious people as compared to a control group.

REFERENCES

ⁱ Tomatis, A.A. The Conscious Ear. Station Hill Press. New York, 1991.

-
- ii Sandislands, M. The Tomatis Listening Training Program: A Quasi-Experimental Field Evaluation, *International Journal of Special Education* 1989
- iii Kershner, J., Cummings, R. Clarke, K, Hadfield, A, Kershner, B, Two-year Evaluation of the Tomatis Listening Training Program with Learning Disabled Children, *Learning Disability Quarterly*, Volume 13, 1990.
- iv Gilmore, Tim, The Efficacy of the Tomatis Method for Children with Learning and Communication Disorders: A Meta-Analysis, *International Journal of Listening*, Vol 13, 1999.
- v Weiss, W. (1985). Long-term average spectra of continuous speech before and after Tomatis audio-vocal training. *The Journal of the Acoustical Society of America* 78 (S1) p. S56
- vi Van Wyk, S. (2003). A combined Tomatis and lifestyle enhancement programme for overweight female students. Unpublished masters thesis, North-West University, Potchefstroom, South Africa
- vii Jaarsveld, P.E. and du Plessis, W.F., Audio-psycho-phonology at Potchefstroom: A review. Potchefstroom University of Higher Education, 1988.
- viii Badenhorst, F.H. (1975). 'n Rorschachstudie van regssydige en linksluisteraars met gemengde laterale voorkeure. Ongepubliseerde M.-graad-skripsie. Potchefstroom Universiteit vir CHO: Potchefstroom.
- ix Wilson, B.C., Iacoviello, J.M., Metlay W., Risucci D., Rosati, R. & Palmaccio, T., Tomatis Project Final Report. The Listening Centre, Ontario, 1992.
- x Swain, D.R. "The Effects of The Tomatis Method of Auditory Stimulation on Auditory Processing Disorder: A Summary of Findings," *International Journal of Listening*, Vol. 21, Number 2, 2007.
- xi Gilmore, T.M. (1982). A pre-test & post-test survey of children's and adolescent's performance before & after completing the Tomatis Program. Unpublished manuscript. Tomatis Centre (Canada).
- Gilmore, T.M. (1984). Participant characteristics and follow-up evaluations of children and adolescents who have participated in the Listening Training Program (Tomatis Method), 1978-1983. Unpublished manuscript. Tomatis Centre (Canada). Cited in Stutt, Howard A. *The Tomatis Method: A Review of Current Research*. McGill University, 1983.
- xii Rourke and Russel cited in Stutt, Howard A. *The Tomatis Method: A Review of Current Research*. McGill University, 1983.
- xiii Roy, J. (1982). Cognitive control functioning and spontaneous speech: Intensive case studies of Audio-Psycho-Phonological remedial training with five dyslexic boys. Doctoral Dissertation. University of Ottawa. Unpublished manuscript.
- Roy, R. T. (1982). Perceptual processing abilities and academic skills: Intensive case studies of Audio-Psycho-Phonological remedial training with five dyslexic boys. Doctoral Dissertation. University of Ottawa. Unpublished manuscript.
- xiv De Bruto, C.M.E. (1983) Audio-psycho-phonology and mentally retarded children: an empirical investigation. Unpublished master's dissertation. Potchefstroom University (written in the Afrikaans language).
- xv Corbett, Shickman and Ferrer, " A brief report "The effects of Tomatis sound therapy on language in children with autism" <http://www.ncbi.nlm.nih.gov/pubmed/17610057> and <http://www.springerlink.com/content/y8834k4h14332625/>
- xvi Peché, A. (1975). Anxiety. Unpublished masters thesis, North-West University, Potchefstroom, South Africa (written in the Afrikaans language).
- xvii Botes, C. E. (1979). Audio-psycho-phonology with neurotic depression. Unpublished masters thesis, North-West University, Potchefstroom, South Africa (written in the Afrikaans language).
- xviii Du Plessis, W.F. & Van Jaarsveld, P.E. (1988). „Audio-psycho-phonology: A comparative outcome study on anxious primary school pupils". *South Africa Tydskr. Sielk (Journal of Psychology)*, 18:4, 144-151.