

## Audio-Psycho-Phonology and the Management of Stress

Stress is a part of every day life and has been since time immemorial. Amongst the causes of stress are bacterial infections, perception of real or perceived danger, inner conflict or major changes in our lives such as the loss of a job or divorce. We live our lives in continual low level stress. This stress is designed to protect us and help us accomplish goals but it can also work against us. It depends on how we think and how we perceive the world around us. Too much stress can suppress our immune system. Stress produces electrical impulses, which can be measured in both amplitude and frequency. Strong emotional thoughts can contribute much greater amplitude to the electrical energy produced by our brain. The more powerful the thought, the greater the electrical stimulation of the body's muscular system. In general stress is caused when we perceive a threat to our needs.

In an ideal world, maybe we could get away from stressful situations. But most of us will be exposed to any number of the following stressors:

- Death: of spouse, family, and friends
- Money: lack of it, owing it, stock market declines
- New responsibilities, new job
- Health: illness, pregnancy
- Addiction: drug abuse, alcoholism
- Family changes: moving home, divorce, new baby
- Arguments: with co-workers, bosses, and family
- Not enough time for sleep and relaxation

Work, especially in times of economic recession, can contribute specific factors:

- Less people, doing more
- Lack of control over work environment
- Lack of support from superiors and colleagues
- Interpersonal relationships
- Unclear expectations, unclear responsibilities
- Layoffs and lack of information about workplace changes.
- Lack of feedback on performance
- New software and technology
- Dissatisfaction with compensation and benefits

What can we do to alleviate stress? How can we help our clients in these trying times?

## The Effect of Music on Anxiety

We know that music can lift our spirits, energize our bodies, and help cope with stress. In fact, you may already be using music and sound to enrich your own – and your clients - lives. Psychologists, Therapists (Occupational, Physical, and Speech), Life & Executive Coaches, Teachers, and others – are using the power of sound training to manage stress and add value to their practices.

### **Audio-Psycho-Phonology: A comparative outcome study on anxious primary school pupils.**

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.

In thirteen evaluation studies of Audio-Psycho-Phonology (APP) mainly positive findings were reported. However, the intrinsic contribution of APP to these favorable outcomes is questioned, in view of underlying methodological problems. This investigation was planned to eliminate such design deficits and to effect a more rigorous evaluation of the APP approach on a group of anxious primary school pupils. Forty subjects from the primary school population of Potchefstroom were identified as anxious by the teaching staff. From this target group pupils were assigned to three groups: 10 pupils who completed an APP program; 9 pupils who were subjected to an alternative therapy program; and a non-intervention control group of 10 pupils. Control measures included determining pre-treatment group equivalence, controlling the integrity of both treatment programs, and controlling the effect of therapist competence. The results confirmed significant positive changes following both programs, but no change in the control group. On a number of variables the APP group achieved significantly better results than the alternative therapy group, especially with regard to hearing and listening. [In the APP group, anxiety as measured on two separate anxiety scales, was reduced statistically significantly, while it was only reduced on one scale in case of the alternative therapy group and no reduction was noted in the non-intervention group]

A follow-up study confirmed the long-term effect of the intervention.

Audio-Psycho-Phonology obtains positive results, especially with regard to high levels of anxiety. We may ask, how does music help?

## The Act of Listening

Listening is more than a mechanical function provided by our ears; many believe it is our most basic skill. While hearing is the passive reception of sound, listening is active.

Listening involves the active acknowledgement, distinction, and organization of sound information. You can have excellent hearing, but very poor listening. Also, no two people listen the same. Our personal history of health—physical and mental—influences us from growth *in utero* through early childhood development and adolescence and even into advanced age. How we listen to ourselves and others profoundly affects how we learn, communicate, think, and feel. Why?

An effective “listener” is actually differentiating between distracting sounds and the essential information that needs processing. That is why it our listening skills affect how we manage our relationships! By improving listening skills, it is possible to achieve lasting physical and psychological results. And one of the most obvious benefits relates to stress management. Think about the music that you listen to. How do you feel when you hear a lullaby or hard-rock? What kinds of music do you listen to when you need to feel relaxed or motivated?

## The Magic of Mozart and the Tomatis Method

Let’s look at what listening trainers from around the world have learned from working with and researching the prestigious Tomatis Method of auditory processing training. A lot depends on personal taste and one’s mood at any given moment, but the music of Mozart has been shown to be extremely powerful and healing. We now understand that the music of Mozart is especially beneficial because it allows listeners to reestablish their own inner “equilibrium” or “balance.”

## The Healing Aspect of Music

In the last century more attention has been given to the healing aspects of music. Dr. Tomatis, the son of a French opera singer became a renowned Ear, Nose and Throat physician. His work with music and listening has achieved worldwide recognition.

Tomatis recognized the possibility that music—specifically classical music (Mozart and Strauss, for example) and Gregorian chant—could work with the ear to energize the mind. He and other colleagues paid close attention to the healing aspects of music. He observed that our ability to listen relies about 90% on air conduction (sound that is transmitted through the air) and about 10% on bone conduction (sound that is transmitted through the vibration of our bones). The relationship of these two conductors contributes to the relative clarity a person perceives while processing sound. Bone and air conduction, in turn, affect harmonic balance.

Dr. Tomatis found that music could change emotions and lift spirits, depending on how effectively we listen. He theorized that music could organize the brain to function in a more efficient and effective manner. Ultimately, Tomatis was inspired to find a way to stimulate the ear in order to activate the integration of the brain, nervous system, physiology and emotions and create long-term change for individuals. Indeed, the ability to obtain lasting, durable change is what distinguishes the Tomatis Method from other listening program.

Tomatis' work indicated that while music alone can be healing in the short term, music programmed specifically with a proprietary device called the Electronic Ear initiates long-term change or improvements. His many scientific discoveries resulted in the emergence of a new multi-disciplinary science called Audio-Psycho-Phonology (APP), which he pioneered over 50 years ago. Many studies have been done that demonstrate the link between music and healing. Today, music is now used in hospices, in psychiatric wards, in pain management programs, in neonatal care units, and generally, throughout hospitals.

### **Can You Add the Benefits of the Tomatis Effect to Your Professional Practice?**

To be of any use, effective stress relaxation techniques must be cost and time-effective. The developers at TDSA – the owners of the Tomatis Method - were initially skeptical that the genuine Tomatis Effect could be obtained without the use of sophisticated equipment and rigorous professional training. However, after much research they have delivered a portable solution that so many colleagues and friends have been asking for. It is called Solisten: an extremely high quality, portable digital device and headphones designed to extend the benefits of the Tomatis Effect to a much larger audience.

### **Music Therapy is Effective**

Consider the following study: (*Heart Lung. 1989 Nov; 18(6):609-16*) by CE Guzzetta of *Holistic Nursing Consultants, Washington, D.C.*)

The purpose of the study was to determine whether relaxation and music therapy were effective in reducing stress in patients in a coronary care unit admitted with the presumptive diagnosis of acute myocardial infarction. In this experimental study, 80 patients were randomly assigned to a relaxation, music therapy, or control group. The relaxation and music therapy groups participated in three sessions over a two-day period. Stress was evaluated by apical heart rates, peripheral temperatures, cardiac complications, and qualitative patient evaluative data. Data analysis revealed that lowering apical heart rates and raising peripheral temperatures were more successful in the relaxation and music therapy groups than in the control group. The incidence of cardiac complications was found to be lower in the intervention groups, and most intervention subjects believed that such therapy was helpful. Both relaxation and music therapy are effective modalities to reduce stress in these patients.



## How Will Your Clients Benefit?

Dr. Tomatis's discoveries - integrated into a portable system - will allow you to deliver extraordinary stress management support to your clients. Listening Training helps because the ear is rich in neural connections with the brain stem, the cerebellum, the higher cortical centers, and the vestibular connections, the body and musculature. Coaches, psychologists, clinicians, therapists, teachers and other professionals are using this drug-free, non-invasive system to manage stress by connecting the "function of the ear" with the healthy "function of the brain" and nervous systems. Their clients benefit from this profound listening training, delivered in the comfort of their own homes.

Music can be one of the most soothing or nerve wracking experiences available. Choosing what will work for any individual is difficult, most will choose something they 'like' instead of what might be beneficial. In the extensive research on what any given piece of music produces in the physiological response system many unexpected things were found. Many of the so-called Meditation and Relaxation recordings actually produced adverse EEG patterns. Live music - even at moderately loud volumes - has very a beneficial response. Whenever we use the proper sounds in Listening Programs, we experience amazing right/left brain hemisphere synchronization. The normal voltage spiking pattern changes to a smooth sinusoidal waveform and the usual voltage differential equalizes.

The entire human energetic system is extremely influenced by sounds, the physical body and chakra centers respond specifically to certain tones and frequencies. Listening training is an alternative method that can be used to correct many health and stress related problems. When you, and your clients, are feeling overwhelmed by stress and anxiety, or you just need to relax or escape the world around you, think about using Listening Training. It will do your body good!

Don't hesitate to contact us at [www.SolistenTraining.com](http://www.SolistenTraining.com) with any questions or suggestions you may have. We are passionate about the amazing benefits of the Tomatis Method and the new portable applications.