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PRELIMINARY EXPERIMENTAL DATA ON BIOELECTRICAL SUBSTRATE FOR MUSIC THERAPY EFFECTS

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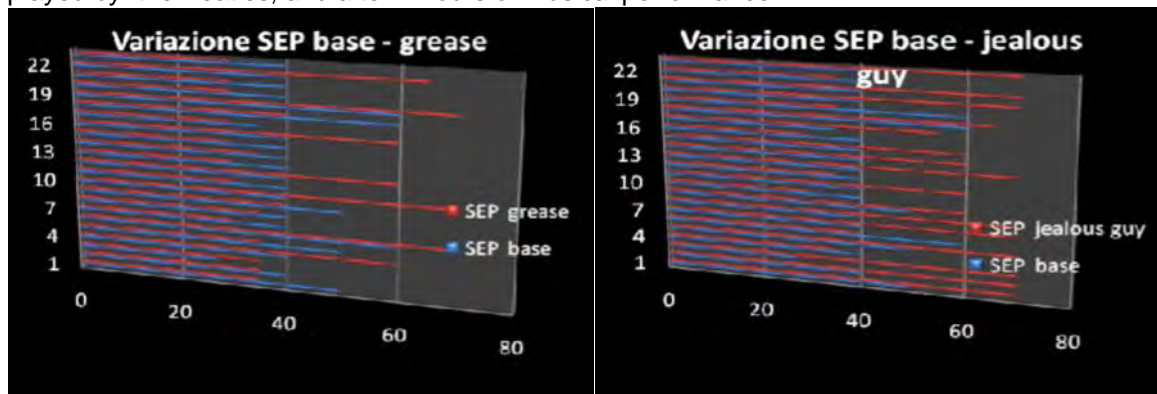
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In these last years many researches has shown the profound effect of music on body and psyche (see references 1,2). As a matter of fact there's a growing field of health care known as music therapy, which uses music to heal also in critical situations as Ventilated Patients (3). Those

who practice music therapy are finding a benefit in using music even to help cancer patients or children with ADD, and others, even hospitals are beginning to use music and music therapy to help with pain management, to help ward off depression, to promote movement, to calm patients, to ease muscle tension and for many other benefits that music and music therapy can bring. This is not surprising, as music affects the body and mind in many powerful ways. A very interesting study was conducted at the University of Maryland Medical Center (4) where some healthy people, listening to their favorite music, increased the health of cardiovascular system. Researchers in Baltimore have shown for the first time that the emotions aroused by joyful music had a healthy effect on blood vessel function. Music, selected by study participants because it made them feel good and brought them a sense of joy, caused tissue in the inner lining of blood vessels to dilate (or expand) in order to increase blood flow. This healthy response matches what the same researchers found in a 2005 study of laughter. On the other hand, when study volunteers listened to music they perceived as stressful, their blood vessels narrowed, producing a potentially unhealthy response reducing blood flow.

Compared to baseline, the average upper arm blood vessel diameter **increased 26 percent after the joyful music phase, while listening to music that caused anxiety narrowed blood vessels by six percent.** During the laughter phase of the study, a 19 percent increase in dilation showed a significant trend. These data could explain also the possible role of theatre therapy observed in the ARTEC/LIUM Group in Lugano lead by Yor Milano and Drago Stevanovic (5). The physiological reaction to the type of music is behind the formation of positive and negative blood vessel reaction. It is not clear why somebody may be drawn to certain classical music, for example. There are no words in that, and yet the rhythm, the melody and harmony, may all play a role in the emotional and cardiovascular response. In the conclusion of work the group of Maryland University (4) suggest: That physiological impact may also affect the activity of brain chemicals called endorphins. The active listening to music evokes such raw positive emotions likely in part due to the release of endorphins, part of that mind-heart connection that we yearn to learn so much more about. Needless to say, these results were music to my ears because they signal another preventive strategy that we may incorporate in our daily lives to promote heart health. In the last year, in the frame of new development of activity in arts and therapy, we have discussed with Teresa Mariano about the role of specific frequency of sound for brain and health. This discussion was carried on with the medical doctor and musician Umberto Grieco, and brought us to explore the possibility that SEP (Skin Electric Parameters) that already showed us in other researches (6,7,8,9,10) to be sensitive at meteorological factors, electromagnetic and quantum field, SPA treatment, drug, etc., could be sensitive also to music. Music that could be useful also in sports as discussed with dr Stefano Pelladoni in the frame of Sport Project carried with the Interuniversity Center of Psicoenergetics <http://interuniversity.blogspot.com>

For this reason was organized a study in the JAM School of Lucca on a group of 24 student teacher and professional artists in order to measure the effect of some songs on their performance status, cenesthesia and SEP measuring the meridians studied as electrical circuit to variable resistance ("normal" value 95.000 Ohm correspondent to 50 us of Voll's Device). Each volunteer was measured in basal condition, after the listening of John Travolta "Grease", after "Jealous guy" played by the Beatles, and after 2 hours of musical performance.



As we can see by graphics, 8 subjects improved their bioelectrical status in the listening of "Grease". This group had an increase of resistance in the listening of "Jealousy guy". To the

opposite 16 subjects increased the SEP hearing Jealous guy and they felt worst listening to "Grease" with correlate fall of SEP from 60 to 40 (from 70.000 Ohm to 130.000 Ohm). We have two particularly case with an increase of headache after the music performance in ensemble correlate to fall of SEP (40) treated with the favorite music that improved the SEP to 60 us and removed the headache. Another case of cervical muscular tension was treated in the same way.

The data revealed that SEP could be very useful to study music effects on people. We will continue the research to evaluate specific effects of music on performance status, wellness and in other conditions where music could help people in their rehabilitation from disease.

References

1. How and Why Is Music A Good Tool For Health? By Elizabeth Scott, M.S., About.com Guide reviewed by the Medical Review Board .
 2. Music & Health: Latest research and future direction, IWA, 24th November 2010 November 29, 2010 communitymusicireland Leave a comment Go to comments .
 3. Link Between Music and Health Benefits For Ventilated Patients Revealed by Drexel University Music Therapy Professor and Research Team Learn more about Dr. Bradt's research. >> .
 4. "Positive Emotions and the Endothelium: Does Joyful Music Improve Vascular Health?" Miller M, Beach V, Mangano C, Vogel RA. Oral Presentation. American Heart Association Scientific Sessions, 11/11/2008.
 5. V. I. Valenzi, U. Grieco, A. Garcia, F. Marinelli, A. Lozito, B. Messina: Cutaneous electrical phenomena in the evaluation of the curative properties of sand and marine environment: preliminary observation. C.I.R.M. Recherche, 1999 Vol. 3/1.
 6. Vincenzo I. Valenzi, Maria Luisa Roseghini: From Drug intolerance to a SEP (Skin electric Parameters) driven therapy. Some preliminar observation. Rivista di Biologia/Biology Forum 93 (2000) pp. 306-312.
 7. V.I.Valenzi, G.Monaco, S. Spada, P. Cimaglia, L.Petraccia, S.Palmieri, B. Messina M.Grassi: Ruolo dei SEP (Skin electric Parameters) nello studio delle meteoropatie, Annali di Medicina Interna, 2003: 18, 164S - Proceedings Congresso SIMI.
 8. Pisani V. I. Valenzi , M.C. Lucchetta, M. Grassi, A. Serio P. Avino, M. Russo, A. Fraioli SEP variations on subjects with chronic constipation in idropinic treatment.VII Intern. Conference "COSMOS AND BIOSPHERE":1-6/X 2007Sudak Crimea.
 9. Vincenzo Valenzi About new development on Pharmacoelectrodynamics and Bio resonance proceedings International Conference on Integrative Medicine Kiev 28 May 2011
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