

## Low Frequency Sound Intervention: Therapeutic Impact and Applications

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**Abstract :** Since antiquity, many cultures have seemingly known the power of low frequencies, incorporating them in healing practices through drumming, singing, humming, etc. Many music therapists recognize there is something in music that is transformative enough to make a difference in people's lives. This paper summarizes the key findings of several low-frequency research with various client populations conducted by the author. Utilizing low-frequency sound (30 or 40 Hz) may have diverse therapeutic impacts: (1) Calming effect - decreased agitation (autism, brain injury, AD, dementia) (2) Muscle relaxation (CP & spasticity & pain/after surgery patients, MS, fibromyalgia) (3) Relaxation/stress release (anxiety, stress, PTSD, trauma, insomnia) (4) Muscular/motor functioning/ decrease of tremor (CP, MS, Parkinson) (5) Increase in alertness, cognitive awareness & short-term memory function (brain injury, severe global developmental delay, AD) (6) Increased focus (AD, PTSD, trauma). The paper will conclude by presenting ideas informing the clinical practice. Future studies need to investigate what frequencies are effective for particular client populations and why, what theories can explain the effect, and finally, something that has been long debated - is it auditive or kinaesthetic stimulation or the combination of both that is effective?

**Keywords :** low frequency, 40 Hz, sound, neuro disability

**Conference Title :** ICMTANIRP 2022 : International Conference on Music Therapy Advances in Neurodisability: Innovations in Research and Practice

**Conference Location :** Rome, Italy

**Conference Dates :** October 13-14, 2022