

Vibroacoustic Therapy: A Peer-Reviewed Research Review of Physical and Mental Health Impacts

Executive Summary

Vibroacoustic therapy (VAT) is a clinically studied, non-invasive modality that delivers low-frequency sound vibrations (typically 30–120 Hz) directly into the body through transducers embedded in specially designed mats, chairs, tables, or beds. Unlike passive music listening, VAT engages the body's mechanoreceptors — particularly Pacinian corpuscles — producing measurable physiological and neurological changes documented by ECG, EEG, fMRI, and HRV instruments. The field was formally defined in 1982 by Norwegian therapist Olav Skille, who identified that low-frequency sound "massage" could reduce pain and stress-related symptoms in clinical populations. Subsequent decades of peer-reviewed research have established supportive evidence for VAT across pain management, neurological conditions, mental health, sleep disorders, cancer care, and autism spectrum disorder — with one frequency, 40 Hz, emerging as the most extensively investigated and clinically promising.^{[1][2][3][4][5][6]}

Background and Mechanisms of Action

How VAT Works in the Body

VAT operates through at least three primary physiological mechanisms identified in peer-reviewed research:^[^3]

- 1. Hemodynamic effects:** Vibratory stimulation activates mechanosensory proteins in endothelial cells (Syndecan-4, VEGF, KLF2), triggering the release of nitric oxide (NO) and adrenomedullin. NO relaxes vascular smooth muscle and increases blood flow — effects observed at a range of frequencies from 2 Hz to 250 Hz.^[^3]
- 2. Neurological effects:** Vibration activates protein kinases (particularly p38 MAPK), stimulates the vagus nerve, promotes oscillatory coherence in the thalamocortical loop, and drives neural entrainment. One in-vitro study found that vibratory sound in the 10–100 Hz range promoted neurite outgrowth, with 40 Hz producing the strongest effect via the p38 MAPK pathway.^[^3]
- 3. Musculoskeletal effects:** Vibration activates the muscle stretch reflex, influences bone cell progenitor fate, and stimulates bone ossification — effects particularly relevant at 25–50 Hz.^{[7][3]}

Mechanoreceptor Sensitivity by Frequency Range

The body's mechanoreceptors respond differentially to frequency:

- **Merkel disks** (outer skin): respond most to 5–15 Hz
- **Meissner corpuscles** (inner skin): respond most to 20–50 Hz
- **Pacinian corpuscles** (deep tissue): respond most to 60–400 Hz^[3]

This differential sensitivity helps explain why specific frequency ranges produce different therapeutic effects and why matching frequency to therapeutic goal is clinically meaningful.

Specific Frequencies and Their Documented Effects

The following section summarizes peer-reviewed findings organized by frequency ranges. The absence of a tightly uniform protocol across studies remains a recognized limitation in the field, and findings should be interpreted accordingly.

30–40 Hz: Neuromotor and Relaxation Effects

Parkinson's Disease — 30 Hz: Researchers at the University of Toronto's Music and Health Research Collaboratory (MaHRC) treated two groups of Parkinson's patients (20 with tremor-dominant symptoms, 20 with rigidity-dominant symptoms) with five minutes of 30 Hz vibration. Both groups showed improvements across all motor symptoms, including less rigidity, better walking speed with larger steps, and reduced tremor. Published in *NeuroRehabilitation* (2009), this study was among the first to document acute motor improvements from short-duration VAT in Parkinson's patients.^{[8][9]}

Parkinson's Disease — 40 Hz (RCT): A double-blinded, randomized, placebo-controlled trial published in *Healthcare* (2020) administered 40 Hz physioacoustic vibrations over 12 weeks to 21 Parkinson's patients. Overall motor symptom severity measured by the Unified Parkinson's Disease Rating Scale (UPDRS-III) showed significant improvements in the treatment group. All aspects of PD motor symptoms improved: tremor, rigidity, bradykinesia, and posture/gait measures. This is the first study to quantitatively assess long-term benefits of 40 Hz VAT in Parkinson's disease.^{[10][11]}

Binaural Acoustic Stimulation at Gamma Frequency — Parkinson's: A 2023 study in *Frontiers in Neurology* found that binaural beat stimulation (BBS) in the gamma frequency range (creating entrainment near 40 Hz) significantly improved resting tremor in PD patients OFF medication compared to sham and no-stimulation conditions. The authors noted that prior studies showed reduction in tremor using low-frequency sound and vibrations in the 20–100 Hz range.^[12]

40 Hz — Fibromyalgia: A peer-reviewed clinical study published in *Pain Research and Management* (2015) from the University of Toronto assessed 19 female fibromyalgia patients who received 10 sessions of 40 Hz low-frequency sound stimulation (23 minutes per session, twice weekly for 5 weeks). Results were statistically significant ($p < 0.0001$) across multiple dimensions:

- **Fibromyalgia Impact Questionnaire (FIQ):** 81% reduction in impact

- **Jenkins Sleep Scale:** 90% improvement in sleep
- **Pain Disability Index:** 49.1% reduction
- **Medication use:** Reduced in 73.68% of patients; completely discontinued in 26.32%
- **Cervical range of motion:** Improved from 25% to 75% ($p = 0.001$)
- **Muscle tone:** Changed from hypertonic to normal ($p = 0.0002$)

The authors proposed that 40 Hz may work by addressing thalamocortical dysrhythmia (TCD), a neural rhythm disruption implicated in chronic pain and fibromyalgia.^{[13][3]}

40 Hz — Stress (VSM): A 2024 study published in *Sensors* used ECG and EEG biosignals to measure the effects of a Vibroacoustic Sound Massage (VSM) on stress. ECG results showed VSM increased parasympathetic activity in all participants. EEG results indicated increased concentration, reduced arousal, and increased relaxation.^{[14][15]}

30–80 Hz: Autism Spectrum Disorder

ASD — 30–80 Hz: A randomized controlled trial published in *Research in Autism Spectrum Disorders* (2009) tested vibroacoustic music (generating 30–80 Hz vibrations via an embedded chair) on 20 individuals with ASD and developmental disabilities over 5 weeks. Results showed statistically significant reductions in self-injurious behavior ($p = 0.021$), stereotypical behavior, and aggressive-destructive behavior. Accompanying assistants also rated an increased "sense of security" over the sessions.^{[16][17][18]}

A 2024 mixed-methods study from the University of Pretoria investigated VAT specifically for its effects on attention and emotional regulation in children with ASD, indicating significant positive findings for attention outcomes.^[19]

16–160 Hz: Chronic Back Pain

Back and Shoulder Pain — 16–160 Hz: A 12-week pilot study published in the *Journal of Back and Musculoskeletal Rehabilitation* (2018) applied low-frequency sound vibrations (16–160 Hz) via piezoelectric transducers to 23 patients with chronic shoulder or low back pain (3 sessions/week). At week 12:

- Mean reduction in pain (VAS scale): 3.5 points
- Mean reduction in Pain Disability Index: 13.5 points
- 65% of participants had ≥ 3 point reduction in pain
- Significant improvement in physical quality of life (SF-12)^[20]

8–10 Hz (Theta) and Delta Range: Insomnia

Insomnia — Theta/Delta Frequencies: A study published in *Sleep Disorders* (2020) from Thomas Jefferson University randomly assigned 30 insomnia patients to either a vibroacoustic stimulation program (using theta brainwave frequencies of 8–10 Hz for in-clinic sessions and delta frequencies of 1–4 Hz for at-home audio sessions) or a waitlist control. The vibroacoustic group showed:

- Significant improvement in Insomnia Severity Index (ISI) scores ($p < 0.001$)
- Increased average sleep duration by 30.6 minutes per night ($p = 0.001$)

Resting state fMRI showed significant changes in brain functional connectivity in areas including the thalamus, cerebellar hemispheres, sensorimotor cortex, nucleus accumbens, and prefrontal cortex — regions known to be involved in sleep regulation.^{[21][22]}

Broad-Spectrum Low Frequencies (30–120 Hz): General Applications

Cancer Patients — Sound Bed Frequencies: A randomized controlled trial published in *Complementary Therapies in Medicine* (2018) tested a 10-minute vibroacoustic sound-bed intervention in 48 cancer patients using a crossover design. Compared to the control condition (same bed without music/vibration), the vibroacoustic session produced significant improvements in:

- Mood and satisfaction ($p < 0.001$)
- Vitality and inner balance ($p < 0.001$)
- Body awareness and perceived warmth
- No change in pain levels^{[23][24]}

A palliative care feasibility study published in *BMC Complementary and Alternative Medicine* (2015) also investigated vibroacoustic stimulation in music therapy with advanced cancer patients, informing future protocol design.^[25]

Physical Health Outcomes: Summary of Evidence

Pain Management

The most extensive body of peer-reviewed VAT research involves pain. A scoping review published in *BMJ Open* (2022) reviewed 430 records across major medical databases, ultimately including 20 studies for narrative synthesis. Key findings:

- 40 Hz was the **predominantly used frequency** across pain studies
- Sessions typically ranged 20–45 minutes
- Multiple studies reported reductions in **perceived pain**
- Acute pain protocols used daily sessions; chronic pain protocols ranged from daily to once weekly
- Conclusion: evidence is promising but more RCTs are needed^{[26][6]}

Prior to this review, specific pain conditions studied with VAT and associated frequencies in the literature include:

- Rheumatoid arthritis: 40 Hz
- Polyarthrititis of hands and chest: 40 Hz
- Low back pain: 52 Hz

- Menstrual pain/dysmenorrhea: 52 Hz
- Knee replacement pain: unspecified low frequency
- Fibromyalgia: 40 Hz (primary) and 60–300 Hz (musicovibration, less effective)^{[13][3]}

Circulation and Cardiovascular Effects

A 2021 narrative review published in *Healthcare* (Bartel & Mosabbir, University of Toronto) summarized peer-reviewed evidence for hemodynamic effects of sound vibration. Key findings include:

- At 50 Hz, direct-to-skin vibration increased nitric oxide production by 374% in healthy controls and 236% in diabetic patients (Maloney-Hinds study), with significant increase in skin blood flow ($p = 0.0001$)^[^3]
- Periodic acceleration at 2–3 Hz produced cardioprotective effects via endothelial shear stress and NO release
- Vibration stimulation at 47 Hz improved microcirculation in skin^[^3]

The FDA cleared the Lehtikainen-developed NextWave Physioacoustic Chair in 1996 for three claims: increased blood and lymphatic circulation, decreased pain and stress, and increased muscle relaxation and mobility.^{[5][3]}

Neurological Conditions

Parkinson's Disease: Multiple peer-reviewed studies support short- and long-term motor improvements from VAT at both 30 Hz and 40 Hz. A 2023 *Frontiers in Neurology* study using acoustic stimulation confirmed gamma-frequency (40 Hz zone) benefits for tremor OFF medication. A 2023 study in *Physical Medicine and Rehabilitation International* found that VAT using the "Magic Music" method combined with conventional training improved postural control (Berg Balance Scale), gait speed, and Timed-Up-and-Go performance compared to conventional training alone.^{[27][12]}

Alzheimer's Disease — 40 Hz: A 2023 MIT study published in *Frontiers in Aging Neuroscience* showed that Alzheimer's model mice exposed to 40 Hz whole-body vibration for 1 hour/day over several weeks showed:

- Significant preservation of neurons in the somatosensory cortex and motor cortex
- Significant reductions in phosphorylated tau (a hallmark Alzheimer's protein)
- Reduced neural DNA damage
- Improved motor abilities on rotating rod and wire-mesh tests

This builds on MIT's earlier GENUS research showing that 40 Hz light and sound reduced amyloid-beta and tau in mice, preserved synapses, and in early human pilot studies produced reduced brain atrophy, improved sleep, and improved face-name association memory after three months. A 2024 *Nature* study from the same group confirmed that multisensory gamma stimulation (40 Hz) promotes glymphatic clearance of amyloid.^{[28][29]}

Bone, Muscle, and Connective Tissue

The 2021 *Healthcare* review confirmed that vibration at 25–50 Hz stimulates bone density and promotes healing — a range corresponding to the purring frequency of cats, which has long been associated with bone repair. The review also identifies that WBV in this range produces anabolic effects on the spine and intervertebral discs, promotes bone cell progenitor fate, and stimulates osteoblast activity.^{[7][3]}

Mental Health Outcomes: Summary of Evidence

Stress and Autonomic Nervous System Regulation

The 2024 *Sensors* study used ECG and EEG to objectively measure VAT's effects on stress. ECG results confirmed increased parasympathetic (vagal) activity in both low- and high-stress participant groups. EEG results showed increased concentration, reduced cortical arousal, and increased relaxation. The authors concluded that VAT is a valid support tool for stress management, while calling for further research.^{[30][14]}

Anxiety and Mood

A single-case mixed-methods study published in *Voices: A World Forum for Music Therapy* (2019) followed a patient with chronic pain and comorbid mood disorders through eight VAT sessions (four with music, four without). Quantitative outcomes showed the client was more relaxed, less anxious, and reported less pain following music-inclusive sessions.^{[31][32]}

Depression

A 2024 study published in the *International Journal of Mental Health Promotion* (Xuchang University, China) applied somatosensory vibroacoustic music therapy to patients with depressive disorders over four weeks. Results showed statistically significant reductions in Hamilton Depression Rating Scale (HAMD) scores compared to controls ($p < 0.05$), along with increased positive emotions and improved autonomic nervous function.^[^33]

Insomnia and Sleep

As described above, the 2020 fMRI study from Thomas Jefferson University (published in *Sleep Disorders*) demonstrated measurable brain connectivity changes alongside improved sleep quantity and quality in insomnia patients. Prior studies cited in the same article reported that VAT over 30 days in patients with addiction disorders produced improvements not only in sleep but also in stress levels, cravings, anxiety, fear, and anger.^[^22]

PTSD and Addiction

A 2007 study published in the *American Journal of Hospice and Palliative Medicine* (Wahbeh et al.) is cited in the literature as showing VAT brought relief to those with severe illness, and related studies report improvements in PTSD-related symptoms including anxiety and mood disruption when VAT was used in comprehensive rehabilitation settings.^[^34]

Key Peer-Reviewed Studies at a Glance

Study / Authors	Year	Journal	Condition	Frequency Used	Key Findings
Naghdi, Ahonen, Macario, Bartel	2015	<i>Pain Research & Management</i>	Fibromyalgia	40 Hz	81% FIQ improvement, 90% sleep improvement, medication reduced/stopped
Mosabbir et al.	2020	<i>Healthcare</i>	Parkinson's Disease (RCT)	40 Hz	Significant UPDRS-III improvement over 12 weeks; all motor domains improved
King, Almeida, Ahonen	2009	<i>NeuroRehabilitation</i>	Parkinson's Disease	30 Hz	Acute improvements in tremor, rigidity, walking speed, gait in both tremor/rigid groups
Zabrecky et al.	2020	<i>Sleep Disorders</i>	Insomnia (RCT)	8–10 Hz / 1–4 Hz	+30.6 min sleep/night, improved ISI, fMRI connectivity changes in thalamus/cerebellum/PFC
Lundqvist, Andersson, Viding	2009	<i>Research in Autism Spectrum Disorders</i> (RCT)	ASD	30–80 Hz	Significant reduction in self-injurious, stereotypical, aggressive behaviors
Warth et al.	2015	<i>BMC Complementary and Alternative Medicine</i>	Palliative Care (Cancer)	Not specified (low freq)	Feasibility confirmed; psychological and physiological outcomes assessed
Warth et al. / Staud et al.	2018	<i>Complementary Therapies in Medicine</i> (RCT)	Cancer	Sound bed	Improved mood, vitality, inner balance ($p < 0.001$); no change in pain
Suk, Buie et al. (MIT)	2023	<i>Frontiers in Aging Neuroscience</i>	Alzheimer's (animal model)	40 Hz	Reduced tau, preserved neurons and synapses, reduced DNA damage, improved motor function
Tsai lab / MIT	2019–2024	<i>Cell, Neuron, Nature, PLOS ONE</i>	Alzheimer's	40 Hz	Reduced amyloid-beta and tau, glymphatic clearance, preserved synapses; pilot human trials positive
Kantor et al.	2022	<i>BMJ Open</i>	Chronic Pain (Scoping Review)	40 Hz (predominant)	Pain reduction across 20 studies; recommends minimum 4-parameter reporting for future RCTs
Babaei et al. / Back Pain	2018	<i>J Back & Musculoskeletal Rehab</i>	Chronic Back/Shoulder Pain	16–160 Hz	3.5-pt VAS pain reduction, 13.5-pt PDI reduction over 12 weeks

Study / Authors	Year	Journal	Condition	Frequency Used	Key Findings
Fooks (2024)	2024	<i>Sensors</i>	Stress	Not specified (VAT device)	Increased parasympathetic activity (ECG), reduced arousal, increased relaxation (EEG)
Depression Study (Xuchang U.)	2024	<i>Int. J. Mental Health Promotion</i>	Depressive Disorder	Not specified	Significant HAMD reduction (p < 0.05); improved positive emotions, autonomic function
Bartel & Mosabbir	2021	<i>Healthcare</i>	Narrative Review (Mechanisms)	Various	Mapped hemodynamic, neurological, musculoskeletal mechanisms of sound vibration

Frequency Guide: What Research Says About Specific Ranges

Frequency Range	Documented Research Effects	Primary Conditions Studied
1–4 Hz (Delta)	Brain entrainment to sleep-associated delta waves; promotes slow-wave sleep	Insomnia
8–10 Hz (Theta)	Promotes relaxation; in-clinic VAT protocol for sleep entrainment	Insomnia
25–50 Hz	Bone healing stimulation; corresponds to cat purring range; bone cell progenitor effects	Bone density; orthopedic recovery
30 Hz	Acute Parkinson's motor improvement (tremor, rigidity, gait); general muscle relaxation	Parkinson's Disease
40 Hz (Gamma)	Most extensively studied; thalamocortical oscillation regulation; glymphatic clearance; tau/amyloid reduction; pain gating; muscle normalization; autonomic regulation	Fibromyalgia, Parkinson's, Alzheimer's, chronic pain, stress
47–50 Hz	Endothelial nitric oxide release; significant blood flow increase	Vascular/circulatory health, diabetes
52 Hz	Skille's protocols for low back pain and menstrual pain/dysmenorrhea	Back pain, pelvic pain
60–80 Hz	Myofascial and connective tissue effects; Pacinian corpuscle stimulation	Pain, ASD (30–80 Hz range)
68 Hz	Olav Skille's empirical protocol; relaxation	General clinical use
86 Hz	Skille's original amplitude-modulated single-frequency protocols	General clinical use
16–160 Hz	Broad-spectrum pain reduction for musculoskeletal conditions	Chronic back/shoulder pain

Limitations and Research Gaps

The overall evidence base, while growing and promising, carries recognized limitations that responsible practitioners should understand:

1. **Protocol heterogeneity:** Studies use widely varying frequencies, amplitudes, session durations, delivery devices, and pulsation patterns, making direct comparisons difficult. The 2022 *BMJ Open* scoping review recommended that all future VAT researchers report a minimum of four parameters: frequency, amplitude, pulsation, and loudness.^[^6]
2. **Small sample sizes:** Many studies are pilot or feasibility designs without blinded controls. The fibromyalgia study (n=19) explicitly noted it was open-label with no control group. Large, multi-site RCTs are needed across most conditions.^[^13]
3. **Short follow-up:** Many studies measure immediate or short-term effects. The fibromyalgia study noted that 84.2% of patients experienced symptom recurrence within 14 days of treatment cessation, raising questions about maintenance protocols.^[^13]
4. **Animal-to-human translation:** Much of the Alzheimer's and neuroprotection research is conducted in rodent models. The promising 40 Hz results from MIT are compelling but await full Phase 3 human trial confirmation.^{[29][28]}
5. **Mechanism complexity:** Bartel & Mosabbir's 2021 review emphasizes that the field of vibrational medicine is complex and requires specific comparative research on vibration delivery type, body surface area stimulated, and frequency-to-mechanism specificity.^[^3]

Conclusion

The peer-reviewed literature supports vibroacoustic therapy as a clinically promising, non-invasive modality with documented effects on pain, neurological function, sleep, mood, stress, and autonomic nervous system regulation. The 40 Hz frequency is the most researched and shows the broadest range of documented benefits, particularly for fibromyalgia, Parkinson's disease, chronic pain, and Alzheimer's-related pathology. Lower frequencies (1–15 Hz) are associated with sleep entrainment and CNS regulation, while mid-range frequencies (30–80 Hz) address musculoskeletal and neuromotor conditions. Broader spectrum applications (16–160 Hz) show benefit for chronic back pain.

The field requires more large-scale randomized controlled trials with standardized protocols, but the existing evidence is sufficient to support the use of VAT as a complementary intervention in integrative health contexts. Practitioners and researchers in energy healing, somatic work, and body-based therapeutic modalities will find the mechanism research — especially around thalamocortical oscillation, vagal stimulation, and endothelial nitric oxide pathways — particularly relevant to understanding why vibrational therapies produce the effects they do at the nervous system level.

References

1. [Vibroacoustic therapy - Wikipedia](#) - Vibroacoustic therapy (VAT) is a type of sound therapy that involves passing low frequency sine wave...
2. [40 Hz Vibroacoustic Therapy \(VAT\): Evidence Based Research](#) - This article presents only peer-reviewed clinical studies in which 40 Hz was the primary therapeutic...
3. [Possible Mechanisms for the Effects of Sound Vibration on Human ...](#) - This paper presents a narrative review of research literature to “map the landscape” of the mechanis...
4. [VibroAcoustic Therapy Overview by Olav Skille | PDF | Pitch \(Music\)](#) - The low tone frequencies (Vibro- Acoustical frequency range is from 30 to 120 Hz) can be calibrated ...
5. [What is Vibroacoustic Therapy? - Low-frequency sound vibration](#) - In 1982, Olav Skille defined vibroacoustic therapy (VAT) as the use of sinusoidal, low-frequency (30...
6. [Exploring vibroacoustic therapy in adults experiencing pain](#) - There was high heterogeneity in study protocols, however, 40 Hz was predominantly used, most session...
7. [Vibroacoustic Therapy: Healing Through Sound and Low-Frequency ...](#) - Vibroacoustic therapy (VAT) is a form of sound therapy that combines low-frequency sound waves with ...
8. [Good vibrations: using sound to treat disease | University of Toronto](#) - five minutes of 30 Hz vibration. Both groups showed improvements in all symptoms, including less rig...
9. [\(PDF\) Short-term effects of vibration therapy on motor impairments in ...](#) - Recent studies have suggested that vibration therapy may have a positive influence on motor symptoms...
10. [The Effects of Long-Term 40-Hz Physioacoustic Vibrations on Motor ...](#) - Recent studies have suggested that vibration therapy may have a positive influence in treating motor...
11. [How 40 Hz vibration modifies PD symptoms | Francis Y. posted on ...](#) - The Effects of Long-Term 40-Hz Physioacoustic Vibrations on Motor Impairments in Parkinson's Disease...
12. [Binaural acoustic stimulation in patients with Parkinson's disease](#) - The effects of long-term 40-Hz physioacoustic vibrations on motor impairments in Parkinson's disease...
13. [The effect of low-frequency sound stimulation on patients with ...](#) - PMC - The authors of this study aimed to assess the effects of treatment with low-frequency sound stimulat...
14. [Effects of Vibroacoustic Stimulation on Psychological, Physiological ...](#) - This research assessed if the vibroacoustic technology of a Vibroacoustic Sound Massage (VSM) can re...
15. [Effects of vibroacoustic stimulation on psychological, physiological ...](#) - The ECG results show VSM increased parasympathetic activity for all participants, with the Low-Stres...
16. [\(PDF\) Effects of vibroacoustic music on challenging behaviors in ...](#) - Vibroacousticmusic has been proposed to be an effective treatment for individuals with developmental...
17. [Effect of Vibroacoustic Music on Behaviors in ASD](#) - A new study investigated the effect of music vibrations on the challenging behaviors of persons with...
18. [Effects of Vibroacoustic Music on Challenging Behaviors in ...](#) - ERIC - The present study experimentally tested the effects of vibroacoustic music on self-injurious, stereo...
19. [Vibroacoustic therapy and its effects on the attention of children with ...](#) - This mixed methods study investigates Vibroacoustic Therapy (VAT) as a potential intervention for ch...

20. Treatment of chronic back pain using indirect vibroacoustic therapy - This 12-week pilot study examines the efficacy of applying low frequency sound wave stimulation (bet...
21. Vibratory and Auditory Stimulation Improves Sleep in Patients with ... - A vibroacoustic therapeutic intervention shows brain and sleep quality benefits in a clinical trial ...
22. An fMRI Study of the Effects of Vibroacoustic Stimulation on ... - The results of this study show that vibroacoustic stimulation alters the brain's functional connecti...
23. Sound Waves of Relief: How Vibroacoustic Music May Enhance ... - This study highlights how vibroacoustic music therapy may help create moments of calm, vitality, and...
24. short-term effect of a vibroacoustic music intervention on well-being ... - The goal of this study was to evaluate the immediate effects of a sound-bed music intervention with ...
25. Effects of vibroacoustic stimulation in music therapy for palliative ... - The present study aimed at examining whether methodological strategies from a previously implemented...
26. Exploring vibroacoustic therapy in adults experiencing pain - PMC - To explore the characteristics and outcomes of vibroacoustic therapy (VAT) in adults experiencing pa...
27. Vibroacoustic Therapy in Parkinsonian Patients. A Complementary ... - Conclusions: Our study demonstrated the effectiveness of VAT as complementary treatment with convent...
28. 40 Hz vibrations reduce Alzheimer's pathology, symptoms in mouse ... - A new study by MIT scientists shows that Alzheimer's model mice exposed to 40 Hz vibration an hour a...
29. 40Hz Light and Sound (Flat 10kHz) Gamma Brainwave Used in MIT ... - Gamma frequency sensory stimulation in mild probable Alzheimer's dementia patients: Results of feasi...
30. Effects of Vibroacoustic Stimulation on Psychological, Physiological ... - This research assessed if the vibroacoustic technology of a Vibroacoustic Sound Massage (VSM) can re...
31. A Single-Case, Mixed Methods Study Investigating the Role of Music ... - Results of studies presented here seem to generally suggest consistently positive and significant re...
32. A Single-Case, Mixed Methods Study Exploring the Role of Music ... - The effects of vibroacoustic therapy on clinical and non-clinical subjects (PhD Thesis). London: St....
33. Research on the Intervention Effect of Vibroacoustic Therapy in the ... - Research conclusion: assisting somatosensory music therapy for patients with depressive disorders ca...
34. Supporting Cancer Care With vibroacoustic therapy - rooted in sound - The American Journal of Hospice and Palliative Medicine (Wahbeh et al., 2007) published a study that...