

The effect of sound healing by Tibetan singing bowls on human wellbeing

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Abstract

This literature review explores the effect of sound healing by Tibetan singing bowls on human wellbeing. The methods of research include databases such as PubMed, GoogleScholar and OVID. This paper critically evaluates previous studies examining the effect of Tibetan singing bowls, as well as the theories behind the concept of sound healing. The paper concludes that sound healing is an area of complementary and alternative therapy that has been linked to beneficial effects on human health and well-being, especially in the reduction of anxiety and tension.

Abbreviations

FACIT – Functional Assessment of Chronic Illness Therapy Scale
FACIT-SP – Functional Assessment of Chronic Illness Therapy-Spiritual WellBeing Scale
HADS – Hospital Anxiety and Depression Scale
PANAS – Positive and Negative Affect Scale
POMS – Profile of Mood States

Introduction

The history of Tibetan singing bowls dates to the traditions of the Himalayan fire cults of the 5th century BC. The Tibetan singing bowl is a metal bell that is bowl shaped and is excited by striking with a mallet, which causes the bowl to vibrate and produce a melodious sound. The composition of the bowls varies by creator, but usually consist of bronze used in conjunction with copper, zinc, and iron.¹ The use of Tibetan singing bowls in medicine stems from Eastern

ceremonial and meditation practices.² As opposed to Western ideas, there is a belief that afflictions occur when the body is imbalanced, when there is disunity within oneself. The vibrations released by Tibetan singing bowls are believed to realign the body and mind.³

The International Journal of Healing and Caring describes sound healing as “the therapeutic application of sound frequencies to the body/mind of people with the intention of bringing them into a state of harmony and health”. There are different techniques of sound healing, including the use of sonorous instruments, such as the Tibetan singing bowl, voices and music.⁴

A study conducted by Dykxhoorn et al, who are affiliated with the Division of Psychiatry at University College London, estimated the temporal trends of common mental disorders (CMDs) including depression, anxiety, and stress between 2000–2019. The findings from this study estimate that the incidence of recorded CMD in the UK increased between 2000-2019.⁵ Furthermore, a meta-analysis by the Department of Psychiatry from the University of New South Wales, found that, each year, nearly 20% of individuals meet the criteria for CMD and 25% during their lifetime. The findings from these studies emphasise the importance of further exploration into new management strategies, an example of which, is sound healing with Tibetan singing bowls.⁶

This short literature review explores the concept of sound healing as provided with Tibetan singing bowls, and the effect upon human wellbeing. In addition, this paper seeks to raise awareness about alternative therapies for conditions, such as stress and anxiety, in a population where these disorders are increasing in incidence.

Methodology

This literature review focuses on studies published between 2015 to 2024 that evaluate the effect of Tibetan singing bowls upon health and wellbeing. To begin, databases such as PubMed, Google Scholar and OVID were examined for relevant publications. The following Medical Subject Terms (MeSH) terms were created and used in various combinations: 'Tibetan singing bowls', 'sound healing', 'sound bath' and 'mental health outcomes.' Only peer-reviewed journal articles published in English were included. Studies were excluded if they did not specifically measure 'sound baths' or 'sound meditation.' Studies were assessed using the Critical Appraisal Skills Programme (CASP) checklist, focusing on the design of the study, the strengths and limitations of the study, and the overall reliability of the analysis. There was limited literature available surrounding research into Tibetan singing bowls, which creates a limitation of the literature review itself.

Discussion

Sound baths and sound meditations

Tibetan singing bowls can be used in many settings, including personal or group meditations. Sessions involving singing bowls are often referred to as sound meditations or sound baths. Medical News Today describes a sound bath as "a meditative experience, immersing a person in sound. In most cases, the bath involves singing bowls, that create highly resonant, immersive music"⁷ Bowls are either applied directly to the body or placed in proximity, to ensure a fully surrounded experience for the individual.⁸ Various studies have been conducted, investigating the effects of Tibetan singing bowls during sound baths or sound meditation upon human wellbeing.

Previous studies of Tibetan singing bowls

A study published in the European Journal of Integrative Medicine evaluated the effect of Tibetan singing bowls on metastatic cancer patients. Bidin et al underlined that it was a pilot study, specifically designed to evaluate the feasibility of a large-scale study. Consequently, the results were clinically insignificant; however, the researchers also undertook some qualitative research. Observations of the participants included profound relaxation and a reduction in anxiety, expressed both metaphorically and explicitly. Responses included phrases such as "I sensed a breeze that wiped out anxiety and pain"; "I felt that I could again trust in my self-defence ability"; "I had the perception of my body, and this helped me not be afraid."⁹ These expressions convey a sense of increased wellbeing and mood, suggesting that the effect of Tibetan singing bowls on the mental health of cancer patients is an area for more in-depth research, with the potential to improve the wellbeing of these individuals.

Using qualitative data is a strength of this study design, as it decreases the response bias, allowing for individuals to respond in a more honest manner, using their own phrases to do so. In contrast, the pilot study design is more appropriate for an exploratory purpose, rather than an investigation into the statistical significance of the findings from the study. The relative success of the pilot study is promising, and it suggests that a more large-scale study would be beneficial to explore the clinical significance of Tibetan singing bowls for cancer patients.

Secondly, a study conducted by Panchal et al, published in the International Journal of Psychotherapy Practice and Research, explored the changes in mood and heart rate after a sound bath meditation. The changes in mood were measured via the Positive and Negative Affect Scale (PANAS) and the Profile of Mood States (POMS) survey (see **Appendix**). Psychologists Watson, Clark and Tellegen designed the PANAS scale as a self-report measure to assess an individual's positive and negative emotions, through a set of adjectives, offering a reflective way to gauge affective

states.¹⁰ McNair, Lorr and Droppleman, the psychologists behind the design on the POMS scale, describe it as such: "Brief, easy to administer and score, the POMS is a set of 65 five-point adjective rating scales with a six oblique unipolar factor structure: tension-anxiety, depression-dejection, anger-hostility, fatigue, vigour, and confusion-bewilderment."¹¹ In 2012, the POMS-2 score was released. This updated version of the original POMS score provides more robust normative data, refined item wording, and offers both adult and youth versions, along with short and long forms for increased flexibility.¹² A potential limitation of the study by Panchal et al, is that it used the original POMS scale instead of the updated POMS 2 which may lead to outdated conclusions due to the lack of more recent normative data and refined measurement.

Upon critical analysis of the study, there are many strengths to the quality of the study design. It investigates the effects of Himalayan singing bowl meditation on mood and heart rate variability (HRV), two important psychological and physiological indicators of wellbeing. Combining mood assessment with HRV provides a holistic perspective, integrating both qualitative and quantitative data. Conversely, a weakness of the study is the lack of a control group. Therefore, there is a limited range of conclusions that can be drawn from the results. It is more difficult to directly attribute parameter changes to the sound meditation, without considering placebo effects.

Looking at the results of the study, all participants showed significant reductions in heart rate and improvement in mood post sound bath. This study demonstrates both a psychological and physiological response to a sound bath, of which the physiological response is particularly interesting.¹³ Heart rate is slowed by the increased activity of the parasympathetic nervous system in conjunction with decreased activity of the sympathetic nervous system.¹⁴ It could be concluded from this study that Tibetan singing bowls can influence the autonomic nervous system, promoting relaxation and bradycardia.

In addition, an observational study published in the Journal of Evidence-Based Complementary and Alternative Medicine investigated the effect of Tibetan singing bowl sound meditations on mood, tension and wellbeing. These variables were measured using the POMS, Hospital Anxiety and Depression Scale (HADS) and the Functional Assessment of Chronic Illness Therapy Scale (FACIT) surveys (see **Appendix**), and further analysed by age groups (see **Table 1**).

This use of these validated scales adds increased credibility to the self-reported data, which adds an objective dimension to a subjective data collection. In addition, the observational study design allows for direct comparison of the parameters, clearly indicating the effects of the intervention, in this case, the Tibetan singing bowl sound meditation.

The HADS self-report questionnaire is designed to assess anxiety and depression levels in patients. It includes 14 items, focusing on the emotional symptoms of anxiety and depression, avoiding the physical manifestations such as fatigue. Each item is scored on a sub-scale, with higher scores suggesting a more severe disorder.¹⁵ The FACIT tool encompasses a collection of health-related quality of life questions, designed to assess the wellbeing of patients with chronic illnesses. It measures various domains such as physical, social, emotional, and functional wellbeing, along with disease-specific concerns.¹⁶ Despite it being an informative questionnaire, it could be argued that the FACIT scale is only appropriate for chronic health conditions and their management, which could be a potential limitation to the interpretation of the results of the study.

Upon exploration of the results of the study conducted by Goldsby et al, a significant difference was found in all variables examined in response to the meditation, in particular the tension subscale, suggesting that the sound meditation increased feelings of relaxation

and peace, and decreased the prevalence of stress and agitation. Thus, it could be concluded from both studies that Tibetan singing bowls have a positive impact upon human wellbeing.¹⁷ The reasons for the beneficial results of sound meditation are unclear, however, there are various theories attempting to explain their effect.

Theories of sound healing

One theory proposes the concept of brain entrainment. Brain entrainment suggests that certain frequencies can alter and synchronise one's brainwaves via the mechanism of binaural beats.¹⁸ Brainwaves are the oscillating electrical voltages in the brain, of which there are five characteristically recognised types: gamma (25 to 60 Hz), beta (13 to 25 Hz), alpha (8 to 13 Hz), theta (4 to 8 Hz), and delta (1 to 4 Hz).¹⁹ Each type of brain wave is characterised by their frequency and is related to a state of mind. Higher frequencies, such as gamma waves, are associated with high levels of concentration, when the brain is active and busy. In contrast, lower frequencies including theta and delta waves, are associated with states of relaxation and sleep.²⁰ Beauchene et al, who are affiliated with the Virginia Polytechnic Institute and State University, describe binaural beats as a "phenomenon that occur within the brain when two different frequencies are presented separately to each ear, producing a brainwave whose frequency is equal to the difference of the two presented tones".²¹ For example, if a frequency of 210 Hz is played through one earphone, and 200 Hz through the other, the brainwave that occurs is determined by the difference of the two frequencies, i.e. 10 Hz. Sound healers may manipulate this phenomenon, using instruments such as the Tibetan singing bowl to entrain the brain to produce theta waves, inducing a deep meditative and peaceful state of mind, encouraging clarity and relaxation.²²

An alternative theory draws upon the hypothesis that the human body has its own energy field: a 'biofield'. Within a paper titled, "The scientific hypothesis of an "energy system" in the human body", published by The Journal of Traditional Chinese Medical Sciences, the idea is proposed that the human body includes both visible and invisible parts, with the invisible part relating to the thought of an energy system.²³ The concept of 'qi' is often referred to in Traditional Chinese medicine, which refers to energy of the body, the biofield. Miles and True propose that sound healing may interact with the body's energy field, causing vibrational attuning which relate to the observed beneficial effects, such as decreased stress and tension due to sound meditation.^{24, 25}

Conclusion

Sound healing is an area of alternative and complementary medicine with roots in Eastern traditional medicine, and is delivered in various forms, including the use of Tibetan singing bowls at sound baths and sound meditations.

Tibetan singing bowl therapy has been linked to beneficial effects on human health and wellbeing, especially in the reduction of anxiety and tension, and increased feelings of relaxation and peace. There is also evidence to suggest that sound baths can have a physiological effect on human health, particularly, influencing the autonomic nervous system. The reasoning behind sound healing is unclear with various theories proposed to explain these beneficial outcomes; further investigation into the biochemistry and physiology of Tibetan singing bowls would be of interest.

Current literature mostly assesses the use of Tibetan singing bowls in scenarios such as meditations and sound baths, generally areas of relaxation. Future research could explore the potential use of Tibetan singing bowls to decrease tension and improve mood in potentially stressful situations, such as the workplace or before exams. In addition, it would be interesting to research the united use of Tibetan singing bowls with mainstream treatment options, exploring the effect of a combined therapy on human health and well-being.

Appendix

FACIT:

Zeeshan Butt, Jin-shei Lai, Deepa Rao, Allen W. Heinemann, Alex Bill, David Cella. Measurement of fatigue in cancer, stroke, and HIV using the Functional Assessment of Chronic Illness Therapy — Fatigue (FACIT-F) scale, *Journal of Psychosomatic Research*, Volume 74, Issue 1, 2013, Pages 64-68.

<https://doi.org/10.1016/j.jpsychores.2012.10.011>

<https://www.facit.org/measures/facit-fatigue>

PANAS:

Watson, D., Clark, L.A., Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, (54), 1063-1070.

http://homepages.se.edu/cvonbergen/files/2013/01/Development-and-Validation-of-Brief-Measures-of-Positive-and-Negative-Affect_The-PANAS-Scales.pdf

HADS:

Anna F. Stern, The Hospital Anxiety and Depression Scale, *Occupational Medicine*, Volume 64, Issue 5, July 2014, Pages 393–394, <https://doi.org/10.1093/occmed/kqu024>

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Serena Deekollu is a third-year medical student at the University of Bristol, passionate about both conventional medicine and alternative health remedies. Serena is particularly interested in pursuing a career in surgery, working in a high-stakes environment using creativity and compassion to care for patients.

Serena is also excited about complementary therapies, and the integration of these into patient care, to promote better health outcomes. With a commitment to healing, Serena is dedicated to becoming a well-rounded healthcare professional, focusing on the core value of whole-person, patient-centred care.

| Age Group (Years) | n | Premeditation | | Postmeditation | | Change | P | η |
|------------------------------|----|---------------|------|----------------|------|--------|------|-----|
| | | Mean | SD | Mean | SD | | | |
| Tension (POMS) | | | | | | | | |
| 20-39 | 15 | 1.56 | 0.88 | 0.21 | 0.31 | 1.35 | .000 | .71 |
| 40-59 | 33 | 1.29 | 1.15 | 0.20 | 0.68 | 1.09 | .000 | .47 |
| 60-79 | 14 | 0.88 | 0.78 | 0.26 | 0.43 | 0.62 | .038 | .29 |
| Anxiety (HADS) | | | | | | | | |
| 20-39 | 15 | 1.43 | 0.61 | 0.67 | 0.62 | 0.76 | .000 | .70 |
| 40-59 | 33 | 1.03 | 0.70 | 0.27 | 0.52 | 0.76 | .000 | .54 |
| 60-79 | 14 | 0.74 | 0.46 | 0.29 | 0.47 | 0.45 | .019 | .35 |
| Depressed mood (HADS) | | | | | | | | |
| 20-39 | 15 | 0.63 | 0.37 | 0.48 | 0.32 | 0.15 | .207 | .11 |
| 40-59 | 33 | 0.66 | 0.66 | 0.38 | 0.39 | 0.27 | .012 | .18 |
| 60-79 | 14 | 0.55 | 0.43 | 0.35 | 0.32 | 0.20 | .051 | .26 |

Table 1. Mean change in tension, anxiety, and depressed mood by age from pre- meditation to post-meditation from the observational study by Goldsby et al.¹⁷ Table reproduced, with thanks.