

Sound Affects: Sound Therapy, Altered States of Consciousness and Improved Health and Wellbeing

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Abstract

A study using a specific method of sound therapy (Himalayan singing bowls, transitioning to Gongs, transitioning to crystal singing bowls, transitioning to therapeutic percussion) was delivered in two ways – by a live soundbath, where subjects lay on the floor and received around 35 minutes of sound, and by a recording of the same which was available online. The focus of this research was to answer the following questions.

1. Is live sound more or less effective than digitally recorded and delivered sound and across what domains?
2. What are the consciousness altering effects of this method and to what degree are the domains effected?
3. What are the therapeutic benefits of sound induced ASC?

Data was analysed by a test known as a Chi Square analysis to gauge significance. Statistically significant, highly significant and extremely significant data was produced in the domains of Physical Relaxation, Imagery, Ineffability, Transcendence of Time and Space, Positive Mood, Insightfulness, Disembodiment and Unity across both live and recorded studies. These findings have far-reaching implications for the use of sound therapy, specifically sound induced altered states of consciousness (ASC) going forward.

Introduction and Context

Over a 20 year period of working with therapeutic sound using techniques developed by myself, many people receiving sound therapy treatments have received benefit from life-limiting health issues such as anxiety dis-orders, chronic pain, arthritis, irritable bowel syndrome to name a few. The thousands of case studies undertaken by our students and the team at The British Academy of Sound Therapy (BAST) have highlighted common experiences that individuals receiving treatments and relaxation sessions share. These include seeing colours pulsing behind closed eyes, floaty feelings and feeling deeply relaxed, reduced anxiety and muscle tension, losing a sense of time and/or having spiritual or mystical experiences, to name a few. Some of the above effects indicate that these individuals were entering an altered state of consciousness (ASC). An ASC is a natural everyday occurrence that happens when the brainwaves go into a lower frequency across many areas of the brain, resulting in day-dreamy sensations. These 'screen-saver' modes that we go into during the day enable the system to rebalance and result in chemical balance and mental refreshment if we allow them to continue for long enough, however because normal everyday life does not give us opportunity to remain in this state for long enough our brain and body do not have enough time to balance.

On looking at previous studies it was shown that different relaxation methods result in different depths of ASC. A study undertaken by Dietrich (2013) showed that the depth of ASC was greater in meditation than hypnosis, p.238. Travis & Shear (2008) conducted a study using EEG which showed three different styles of meditation produced different effects. (Travis & Shear, 2008). Another study, this time focusing on Transcendental Meditation conducted by Wallace, (1970) led him to

suggest that meditation induced a fourth state of consciousness that was different from waking, dreaming and non-dreaming sleep. (Wallace, 1970; Banquet, 1973, in Deane & Shapiro p.228-231). There was very little research on sound-induced ASC and nothing which measured the depth at which an ASC is experienced and little that suggested the benefits of sound-induced ASC.

A study by MacLean et al., (2011) in McGlothlin et al., (1967, et al., 2011, p.1453) suggested that altering consciousness may help nurture a positive culture, encourage openness and result in an increased appreciation of music, the arts and nature. This was suggesting that a greater level of wellbeing was noticed in those that had altered their consciousness – they had ‘opened their minds’.

The researchers in the above named research used a questionnaire which gave me the basis upon which I could create an effective way of measuring responses to the sound. I began a study which asked the following questions.

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Methodology

To first identify whether there was a difference between live and recorded therapeutic sound two studies were undertaken - a live study comprising 15 people who received a soundbath relaxation session lasting approximately 35 minutes (I would have liked to have worked with more people but time was short). The sounds played during the soundbath session were recorded and made available online for 64 participants that volunteered to take part. Participants of the recorded study were asked to listen through headphones.

Information was gathered using a 6 point Likert scale questionnaire which asked people to score their experience from 1 (not at all) to 6 (extremely - more than at any time). This questionnaire was an amalgamation of several questionnaires used in previous studies to measure ASC (mostly using hallucinogens). The questionnaires were a version of the OAV by Dittrich et al., (1998-2010) adapted from the original by Studerus et al (2010), the Mystical Experience Questionnaire (MEQ) Hood, (2003) Revised by MacLean et al (2012) and additional questions relating to health and wellbeing were added by myself. The 65 questions asked were grouped within the following domains. Anxiety, Positive Mood, Experience of Unity, Spiritual Experience, Insightfulness, Disembodiment, Impaired Control and Cognition, Imagery, Ineffability, Transcendence of Time and Space, Emotional Observations and Physical Relaxation.

Findings

These findings provide further understanding of the depth at which live therapeutic sound compared to a recording is experienced. On the whole the experience in a live study seemed to be more emotionally moving, with participants being able to put their experience into words and experiencing joy. This may be due to the presence of the instruments and that vibrations can be felt travelling through the body, whereas the recorded sound seemed to create deeper introspection and a deeper ASC. This is rather like comparing being at a live concert to listening to an MP3 recording – the former is more rousing, and the latter more immersive. Both groups seemed to benefit from the relaxing effect of the sound and lost their usual sense of time and space.

Domain	Question Asked	Live Study	Significance	Online Study	Significance
Experience of Unity	Everything seemed to unify into a oneness	0.1676		0.0335	*POS
Positive Mood	I experienced profound peace and tranquillity within	0.4666		0.0229	*POS
	I had feelings of joy	0.0199	**POS	0.0514	NS
Insightfulness	I gained insightful knowledge that was experienced at an intuitive level	0.0514	BORDER	0.0008	***POS
Disembodiment	I felt as though I were floating	0.2206	NS	0.0069	**POS
Complex Imagery	I saw scenes rolling by behind my closed eyes	0.7029	NS	0.0001	***POS
Audio-Visual synesthesiae	Noises and sounds seemed to influence what I saw	0.0474	*	0.0121	*
Elemental Imagery	I saw regular patterns behind closed eyes	0.5786	NS	0.0516	BORDER
	I saw colours behind my closed eyes	0.5786	NS	0.0038	**
Ineffability	The experience cannot be described adequately in words	0.0053	**POS	0.4655	NS
	I could not do justice to my experience with words	0.0514	*POS	0.2724	NS
Transcendence of time and space	I lost my usual sense of time	0.0005	***POS	0.0058	**POS
	I lost my usual sense of space	0.0007	***POS	0.0058	**POS
	I was in a realm with no space boundaries	0.5786	NS	0.0140	*POS
Physical Relaxation	My muscles felt relaxed	0.0033	**POS	0.0001	***POS
	Physical tension drained from my body	0.0019	**POS	0.0413	*POS
	My breathing felt relaxed and steady	0.0001	***POS	0.0001	***POS

Key – BORDER = borderline

NS = not statistically significant

*** = statistically significant**

**** = highly statistically significant**

***** = extremely statistically significant**

Limitations

This research could be improved with a larger study, and a more balanced live-online ratio. Some of the questions asked could be refined further, for example the question 'physical pain disappeared' was asked and would only apply if there was physical pain in the first place. Also some participants in the live study commented that they could not relax as much as they wanted to because they were uncomfortable laying on the floor, so this would need to be addressed in future studies.

Future Implications

I see this research as providing a useful platform for our work at The British Academy of Sound Therapy going forward. Altered State Therapy has been used in conventional healthcare setting for mental health conditions as well as drug and alcohol misuse due to the mental relaxation that an ASC creates which enables a softening to be experienced, a loosening of the boundaries and of any control related issues. This loosening was also observed on the physical level with the relaxation of muscles and the draining of physical tension being reported. I see further research being beneficial that explores stress-related imbalances and chronic pain, as well as exploring the enhanced creativity that ASC can bring – I intend to undertake more research into these areas in the near future. It would also be beneficial to test other therapeutic sound techniques, such as those for invigorating and uplifting the system for example.

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