Research Study on Healing with Sound:

“The Efficacy and Longevity of Vibroacoustic Therapy for the Treatment of Chronic Anxiety”

Globe Institute
Student: Kat Bayer
June 2021

Abstract

In these days of political upheaval and life-altering events, more and more people are experiencing extreme anxiety. Some people have experienced chronic anxiety which can last for years. For others, this is a relatively new condition. Regardless, the vast majority of people are looking for ways to stay calm, balanced and healthy while under increasingly tenuous circumstances.

The purpose of this study is twofold: to determine the efficacy and longevity of vibroacoustic therapy for the treatment of chronic anxiety, and secondarily to determine if there are voice profile commonalities among those with this condition.

Vibroacoustic therapy is a way of broadcasting sounds and frequencies into the body through a variety of devices installed in different configurations. Sound, frequency and vibration therapies have found much acceptance and success in the last number of years as it begins to work its way into mainstream medicine.

The quantifiable results of this study show an average of 14% improvement up to 3 to 5 days following treatment. Although not recorded as part of this study, verbal feedback following each session demonstrate the immediate benefits of this therapy for acute anxiety; and therefore would be an excellent focus for a future study.

Introduction

During sessions, volunteers lay on a vibroacoustic lounge with a weighted vibroacoustic pillow over their thighs and torso while also wearing headphones. All three devices are attached to a music player that broadcasts a compilation of vibroacoustic music and frequencies. The lounge and pillow vibrate with the music, so the person feels immersed in a full-body sound experience.

To quantify the effectiveness and longevity of vibroacoustic therapy, volunteers go online to make an appointment at which time they complete an intake questionnaire. Later, after their session and after

listening to an audio file for 3 days, they go online to complete an outtake questionnaire.

When volunteers arrive for their session, I collect a computerized voice sample using Voice Analysis Harmony (VoiceBio) software. The resulting graphic analysis gives me a sound profile that helps determine which vibroacoustic music to play during their sound therapy session.

Since I would be collecting voice profiles from people with a common condition, I decided I might as well attempt to see if their voice profiles indicated any similar patterns, or any other health or emotional commonalities. See Table 2 for a visual of patterns of all participants.

Background

I chose this research topic because I have personally suffered from chronic and intermittent anxiety as do many others in the world today. It is the number one underlying cause of disease overall. Chronic anxiety causes stress hormones to flood the body, weakening the immune system over time, and is just plain unpleasant. Life is meant to be enjoyed as an adventure and bring personal growth as we are challenged to improve and excel. Anxiety gets in the way of our growth and inhibits our ability to love ourselves and others. I really enjoy helping people release their traumas and find health, happiness, fulfillment, and peace. It's a true blessing to witness people find relief from anxiety, pain, fatigue and other stress-related health issues that get in the way of their happiness.

Methodology

Data was collected by finding local volunteers, having them fill out an intake questionnaire online, scheduling a session, receiving a vibroacoustic therapy session, listening to a sound file for 3 days, then following up with an outtake questionnaire.

First, I made a website explaining what the study is about, asking for volunteers. They were informed that participants need to be able to fill out online questionnaires, download and listen to an audio file, and be

able to get on and off the vibroacoustic lounge with minimal assistance. The website included a link to volunteer for the study. Once they clicked on the link, they were required to fill out an intake form in order to make an appointment to participate.

The intake form gave me a snapshot of their physical and emotional health. When they arrived for their session, we reviewed this form together to confirm the data and also to see if they had any healing goals above and beyond the anxiety.

The intake questionnaire asked for basic personal contact info, as well as both qualitative and quantitative data. There were 11 "required" ratings questions that were the same on both intake and outtake questionnaires. This gave me the quantitative data I needed for analysis. I also asked questions about goals, any pain they might be experiencing, how they currently manage their stress, and other similar questions.

Just before the vibroacoustic session, I collected a voice sample to be analyzed into a profile using the computer program *Voice Analysis Harmony*. This gave me the information I needed to choose the best frequency music to play during the vibroacoustic session for that particular person. The vibroacoustic music used during the session is "Awakening" by David Gibson, prerecorded in 12 different keys.

After the interview and voice analysis, we transitioned into a relaxing treatment room with the participant on the sound lounge with sound pillow, earphones, and eye pillow. I gave them instructions on how to adjust the volume and to let me know if the vibration was too low or too high, then led them thru a short, guided meditation to ground and bring their attention to a state of calm and presence. I started the vibroacoustic music and remained in the room doing basic "off-body" reiki energy work with tuning forks in areas of pain or discomfort. When the session was over, I removed the sound pillow, earphones and eye pillow, allowed a few minutes of silence to assimilate the experience, then we gently transitioned into presence and discussed anything they wished to share about their experience.

Treatment room

After their session, I sent a follow-up email with a graphic of their voice profile, the audio file played during their session, and some suggestions for their continued reduction in anxiety.

After another 3 to 4 days, they received an email with a link to complete an online outtake questionnaire. This form contained the same 11 ratings questions that were on the intake form, as well as questions about their experience.

Results

Both intake and outtake questionnaires contained the same 11 categories that participants were asked to rate from 1 to 10. Table 1 compares their overall stress level when they made the appointment, and again 3-4 days after their session. The data shows a 14% improvement (14% reduction) in overall level of anxiety.

Table 1. Percentage improvement of overall level of stress from before session to 3 to 4 days after session

		Please RATE Overall level of stress (1-10) *			
Participant	First name	Before	After	Qty improved	% Improved
1	Kathryn	9	5	4	40%
2	Becky	8	6	2	20%
3	Kayla	6	7	-1	-10%
4	Roxiann	6	8	-2	-20%
5	Sheryl	7	3.2	3.8	38%
6	Janis	8	7	1	10%
7	Paula	7	4	3	30%
8	Yana	4.7	3.4	1.3	13%
9	Catherine	3	7	-4	-40%
10	Mary	6	2.3	3.7	37%
11	Caryl	7	3.7	3.3	33%
12	Terri	3	4	-1	-10%
13	Rebecca	6	2.7	3.3	33%
14	Dorothy	10	7.7	2.3	23%
				AVERAGE	**14%**

DESCRIPTION: Both intake and outtake questionnaires contained the same 11 categories (statements) to be evaluated from 1 to 10. The data above compares ONLY the overall stress level before the sound therapy session, then 3 to 4 days after.

*CALCULATION: If no number was provided (computer glitch?) for "overall level of stress," THEN I averaged the other ratings to approximate a value. Because the stress question is negatively correlated and the others are positively correlated, the calculation was adjusted accordingly.

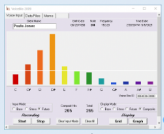
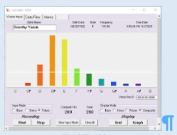
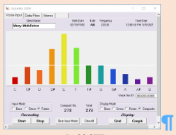
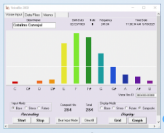
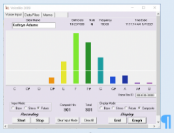
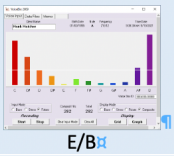
Below are the 11 categories participants were asked to rate from 1 to 10 on both the intake and outtake questionnaires.

- Overall level of stress
- Quality of sleep
- Emotional wellness (mood stability)
- Self-care habits
- Spiritual connection
- Cognitive processes
- Digestive processes
- Personal energy or motivation
- Feelings about your career or job (or daily activities if retired)
- Level of productivity overall
- Satisfaction in relationships with family and friends

Any Pattern Similarities?

As for similarities in voice profiles for those that suffer from anxiety, see Table 2. They are grouped in 5 main patterns. At this point, even if there are similarities, it's hard to analyze commonalities until I have a chance to compare them against other common disorders and/or traits. The inventor of this software spent years working with these profiles and developed a working knowledge of common patterns for similar diseases. I thought I might identify a pattern for anxiety. It's possible there is a pattern, but it will take more personal experience to evaluate, especially since it is a common underlying factor to other diseases that may have their own patterns.

Table 2. Voice profile visual pattern grid

Pattern 1	 A/D	 A#/D	 G#/D	 B/D#	 B/D#
Pattern 2	 C/E	 A#/E	 C#/E		
Pattern 3	 C/F	 C#/F	 C#/F#	 C#/F	 C#/F
Pattern 4	 D#/A	 F/G#	 D/G	 D#/G#	
Pattern 5	 E/B	Missing profile: James G. Low: F#, E			

Faulty data gathering design led to faulty data

In hindsight, I made some mistakes in how I chose to gather data.

It was a mistake to wait days to measure the improvement. I should have measured right after the session, then again days later after they listened to the audio file given to them. Also, a few participants did not follow thru. Even with reminders, they did not return outtake data. In some cases, lack of technical skills to download and listen to the sound file caused issues. In some cases, the online questionnaire app failed to record an answer. A couple people had a stressful event happen between the session and before completing the outtake form, which really skewed the results.

By waiting 3 days to collect outtake results, I ended up with a hodgepodge of partially complete data. Out of 18 volunteers, I got 14 outtake forms. Out of the 14 volunteers for which I had both intake and outtake questionnaires, some of the ratings questions were incomplete. For example, out of 11 ratings questions, one or two questions were not answered on some. For the sake of this study, I found a way to mathematically average that person's other answers to get an overall improvement number for the missing answers. These are marked in green in Table 1.

It's important to note, I received very positive verbal feedback immediately after every single session. Unfortunately, since I was planning on collecting data only after participants listened to the music file for 3 days, I did not create a mechanism to log the comments or measure status immediately following the session. This was a big mistake on my part. Therefore, I do not have a way to qualify or quantify the results immediately following the vibroacoustic session.

However, the fact that I still got good results 3-4 days later is very telling.

Conclusion

I conclude that vibroacoustic therapy for anxiety is highly effective and recommended for treatment of chronic anxiety as well as intermittent stressful events. Even though my data is lacking due to poor design, there is still a minimum of 14% improvement – which is statistically significant.

Adding that to my eye-witness account of positive responses from all participants, along with requests for more sessions, I am convinced this is an overall effective modality for the treatment of both chronic, intermittent and acute anxiety, as well as other conditions.

Further research is needed in a more controlled manner so that concrete repeatable data is available. Having enough published data on the effectiveness of vibroacoustic therapy could open the door to coverage by insurance companies. It is already a well-known fact that anxiety leads to excess cortisol in the body which can contribute to a number of chronic illnesses. Therefore, any therapy that can reduce anxiety, is likely to reduce the occurrence, and EXPENSE, of other chronic conditions.