

THE EFFECTS OF CRYSTAL BOWL TONING ON THE CHAKRAS AS MEASURED BY THE GAS DISCHARGE VISUALIZATION TECHNIQUE (GDV) AND SCORES ON THE PROFILE OF MOOD STATES SCALE

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The objective of this study was to investigate the effects of Crystal Bowl toning on the chakras as measured by the Gas Discharge Visualization Device (GDV) and scores on the Profile of Mood States. A randomized experimental Pre-test Post-test design was used utilizing the Gas Discharge Visualization Technique and Profile of Mood States Inventory. The subjects included two groups: $N = 41$ who received Crystal Bowl treatment as the independent variable and $N = 41$ the control group who did not receive treatment. In the treatment group, the Crystal Bowl was set to the tone of C. Each subject received fifteen minutes of either Crystal Bowl toning or Control group sitting quietly. The dependent measures were Gas Discharge Visualization Technique and the Profile for Mood States Inventory. Subjects completed these measures in a one hour period in the office setting. The subjects in the treatment group completed the Profile of Mood States Inventory followed by the GDV reading, which included three baselines five minutes apart, Crystal Bowl toning for a fifteen-minute period and two post readings five-minutes apart and twenty minutes to the final post-reading. Subjects then received results of their GDV readings. The Control group received the same protocol. However, during the fifteen-minute Crystal Bowl toning they were asked to remain in the same room and sit quietly while the researcher remained present. Significance was found in the first, third and seventh chakra reading, without filter. No significance was found in the results of the Profile of Mood States.

The use of vibroacoustic therapy, sound healing and music therapy are yielding positive results in healing practices and as therapeutic tools. Specifically, studies have been conducted to examine the effects of music and healing on emotional and physical disorders. However, there is no evidence from these studies demonstrating how sound affects the chakras. This study will examine how the crystal bowl, tuned to the note of C, effects readings on the Gas Discharge Visualization Device and Profile of Mood States questionnaire. The study will research the effects of this note on the chakra system to evaluate measurable change in GDV readings that can be quantified. The use of the Gas Discharge Visualization Device has been clinically proven in scientific

studies as an effective tool in measuring the energy field and chakra system. The use of this device in establishing quantifiable, statistically significant data on how the chakra responds to sound is the purpose of this study. This study is the first of its kind to bring an esoteric, theoretical model into the field of science and energy medicine. There are no studies to date showing the effect of sound and vibration on chakras. The measurement of chakras after being exposed to a fifteen-minute period of crystal bowl toning can provide data concerning the ability of sound to effect healing. If changes occur in the chakras after crystal bowl toning, inferences can be made about how these subtle energy bodies respond to sound vibrations. The definitions of terms include: 1) GDV or Gas Discharge Visualization Technique; 2) POM or Profile of Mood States questionnaire; 3) Chakras referring to the seven energy centers of the body; 4) Crystal Bowl refers to a crystalline bowl, tuned to a specific note, possessing a loud, deep tone, corresponding to notes in the chakra.

Sound and music therapy has its beginnings in Pythagoras, the Greek philosopher who lived approximately from 580 to 500 B.C. Pythagoras saw music as being based on the laws of nature. Sound is defined as vibrational energy which takes the form of waves or hertz and measures the cycles per second. The specific vibrational rates effecting energy fields point to the potential for notes, tones and vibrations to promote healing and that the tone of a crystal bowl can have an effect on a subject's emotional and physical state. Somatic listening can be understood as the way the physical and energy body as perceiving various forms of music, vibration and sound. In this study, the crystal bowl treatment can be termed somatic listening as the subject's energy field and physical body are expected to respond to the tones of the crystal bowl. The body simultaneously responds at every level and each part simultaneously signals the entire system, creating a supercommunication system in and around the body. In other words, the entire living matrix is simultaneously a mechanical, vibrational or oscillatory, energetic, electronic, and informational network. In addition, the cells are arranged in a crystalline manner and generate an electrical field when they are compressed or stretched. This is termed piezoelectricity. Piezoelectricity is occurring within the body and is generated into the environment. This explains further how vibration; i.e., sound, tones, notes, and vibroacoustic therapies thus affect the body and energy field. The human body is composed of liquid crystal and crystalline lattice type molecules. When using crystal bowls, a sine wave travels to the energy field and physical body producing a resonance or vibration of the crystalline structure. In other words, a kinetic effect on the energy field and body is achieved. This vibration is causing a ripple effect in the Living Matrix and sending signals to all parts of the body because it is creating a piezoelectric effect in the crystalline structure. When introducing a C note into this energy body the notes correspond to the seven main chakras. In this study, the C note was chosen for the crystal bowl as it encompasses all the notes in the octave that could potentially affect each chakra. The review of scientific research highlights that cells respond and reorganize as a result of the

electromagnetic fields that are directly introduced into that cell. These studies also suggest that frequencies, at varying rates, have the ability to alter, not only specific cells, but potentially energy fields, chakras, and organ systems of the body. The review of the literature thus far suggests that these kinetic vibrations from the crystal bowl may interact with the liquid crystalline materials and systems in the body. Theoretically, there may be an energetic effect occurring as a result of piezoelectricity that has yet to be studied. The introduction into the energy field or chakra of a note or tone, for example, a C note, has a specific frequency. A crystal bowl, tuned to C, when struck sends various vibrations at a frequency rate, in the shape of a wave, to the subject's energy field and physical body. The resulting change in the subject's energy field and chakras will be shown in this study as measured by the GDV. The GDV technique, having based upon the Kirlian effect, is a highly sophisticated computer software program, offering state of the art advancement in computer image processing. A photograph is taken of each of the ten fingertips called the GDV-grams which are then analyzed by the software's mathematical program. A resulting group of pictures depicting the biological effects of the subject are calculated based on the meridian points of Chinese medicine.

The principal investigator recruited 86 participants for this study, ages 18 through 79 in a suburban town in Ridgewood, NJ. Participants included the tri-state area. A total of 82 subjects completed the study. The treatment and control group completed the pre-POM, three baseline GDV readings, five minutes apart, a fifteen-minute period of crystal bowl toning (treatment group) or sitting in silence (control group). All GDV readings consisted of with and without filter. This was followed after five minutes a post-GDV reading, completion of the post-POM including a twenty minute period followed by a final post GDV reading. All subjects were given computerized readings of their GDV readings. The study was designed as an experimental pre-test/post-test design with random assignment of subjects.

The fourth chapter consists of the results of the statistical analysis of the data from the GDV and POM. We looked at the repeated measures allowing for a comprehensive comparison of baselines to posttest across the seven chakras. Data transformations were performed on GDV readings in order to simplify the analysis and interpretation of the study findings. First, the three pre-test GDV readings were averaged for all participants in order to provide the most stable possible GDV baseline against which to measure any subsequent changes. Next, because the focus of the study was on the impact of toning on changes in the human energy field (not necessarily directional changes, positive or negative changes), change scores were calculated between the average baseline and post-test 1, and between average baseline and post-test 2; then, these GDV change scores, calculated for each individual participant in both the control and experimental groups, were transformed into absolute values (disregarding the positive or negative sign signifying the direction of change). These absolute value

change scores formed the basis of the change analyses across the chakras. Results indicated significance in the first, fifth and seventh chakra. Results of Mixed Anova revealed no significance with the POM. With statistical data proving significance in the first, fifth and seventh chakra we can state that the crystal bowl, C note, affects chakra readings on the GDV.

Chapter Five summarizes and discusses the significance of the statistical analysis and includes possible reasons for the findings. The findings indicate that vibrational waves emanating from the tones of a crystal bowl does change these chakras. The following are the statistical data and answers the question: Why the Response of Chakras: First, Fifth and Seventh. The graphs of the average or means of the treatment group vs. average means of the control group illustrates the response > or <, 05 of the first, fifth and seventh chakra. The first chakra (muladhara) absolute change value is 0.119 between treatment and control means of the baseline and post readings. The fifth chakra (manipura) the absolute change between groups is -0.124. In the seventh chakra (sahasara) the absolute value change is -0.052. These three chakras demonstrated the greatest response to the fifteen minutes of the crystal bowl intervention.

The values for the treatment groups for the first chakra is > or less than 0.018; fifth chakra > or less than -0.068 and Seventh chakra > or less than -0.078. These values indicate the statistical significance of the treatment groups. The question must be asked why subject's reacted to the crystal bowl evident in the readings without the filter and not with the filter. I would hypothesize from the data that the sound vibration from the crystal bowl is affecting the subtle energy body of the emotional body before it comes in contact with the physical body. The kinetic wave of the crystal bowl is evidently activating the emotional body causing the GDV without filter (sympathetic nervous system) or emotional reading to change chakra readings in the first, fifth and seventh. According to Rosalyn Bruyere in *Wheels of Light*, she discusses the relationship of chakras having a positive and negative polarity. Those chakras that move energy out the front of the body are called output chakras and have a positive polarity. Those into which energy flows are called intake chakras and have negative polarity. In looking at Bruyere's discussion of the energy flow of chakras, the first, third, fifth and seventh are considered positive output chakras. The second, fourth and sixth are termed input negative chakras. This theory demonstrates how the energy enters the chakras and interacts with the other chakras based on their polarity, input and output functions. This can explain why the first, fifth and seventh chakra were activated and termed positive output chakras.

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