

# The fourth music therapy session

## Abstract

We hereby present a brief report on the fourth music therapy session in connection with our ongoing research project titled Hindustani Raga Analysis Using Statistical Musicology with Therapeutic Applications for Stress Management sponsored by IDEA: Technology Innovation Hub @ Indian Statistical Institute, Kolkata. Details of the first three music therapy sessions have been published.

**Keywords:** music therapy, melodic intonation therapy, melody, rhythm, raga

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## Introduction

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## Material and methods

### Bhramari pranayama

The name *Bhramari* originates from *Bhramar* or black bee. *Bhramari* pranayama produces a humming sound during exhalation resembling the buzzing sound of a bee. That is why *Bhramari* pranayama is also referred to as bee breathing. This is an ancient yoga that can be performed in two mudras (postures):

**Mudra 1:** Performed without *Shanmukhi* mudra, i.e., simply inhaling and exhaling with humming sound

**Mudra 2:** Performed with *Shanmukhi* mudra, a sacred hand posture, where the eyes are closed with the index and the middle fingers, mouth with the ring and the little fingers and the ears with the thumbs. The eyes should remain closed and very gentle pressure should be applied on them by the index and the middle fingers).

### Benefits:

- (i) Reduces anxiety and stress, helps in developing self-esteem and increases mind-body coordination.
- (ii) Blood circulation is activated. Research shows that the humming sound of bee breathing produces nitric oxide the body which is produced by the sinuses and nasal mucosa cells that helps in microcirculation of the blood and oxygen. The vibrations open the tiny blood vessels circulating the blood.
- (iii) Humming buzz sound works as self-induced sound therapy that is beneficial in Tinnitus (ringing in ear which can be due to several factors including hearing impairment). The nitric oxide produced causes a healing effect in hearing impairment.
- (iv) Eliminates negative emotions, cools the mind, helps combat insomnia, helps in concentration, helps in migraine episodes and helps in acquiring a steady mental state.

## Raga

A raga is a melodic structure with fixed notes and a set of rules characterizing a particular mood conveyed by performance.<sup>4</sup> The emotional content of a raga is called *rasa*. For example, raga Kafi is of joyful nature, where the term joyful is in a romantic sense (*shringar rasa*) while raga Bhairavi depicts sadness (*karuna rasa*). It is important to note that raga Shivranjani also evokes sadness but the typical emotional content of Shivranjani is different from that of Bhairavi. This is just as saying that a mango and an apple are both sweet (commonality) and yet a mango differs in taste from an apple (diversity)!

## Results

### Report on the fourth music therapy session

The fourth music therapy session was held on 3<sup>rd</sup> May, 2023 in the music room of BIT Mesra, Ranchi, India.

The session started with meditations and a few asanas. The participants began with deep breathing exercise and the time duration was gradually increased to make the heart beat steadier and the body more relaxed. The next exercise was *anulom vilom* followed by *ujjayi* which is a good asana for thyroid and throat problems. Next the participants practiced *Bhramari* pranayama. After this, Ohm (Aum) chanting and *Mahamrityunjaya mantras* were chanted. The session was carried forward with *Shantakaram Bhujagasharanam* which is an auspicious mantra devoted to Lord Vishnu and his blessings who is held as the preserver and regulator of the universe. At the point when we serenade it, our psyche delivers positive energy that eliminates negative feelings and thoughts.

Next, the therapy session had some interesting activities. Various melodic and rhythmic mind games were played with the participants and scores were given by the music therapist according to the best and fastest reply (rapid fire round). To begin with, participants were encouraged to sing a simple Bollywood song *Lakri ki Kathi* in different taals (a taal is a cycle of beats). Taal is an important concept in Indian music. One can be mentally tricked while changing the cyclic pattern without changing the tune (melody) and this is a good exercise to test the mental ability of the participants. Rhythmic speech cueing, one of the essential components of MIT (Melodic Intonation Therapy), was performed which required the participants to tap each syllable of the intoned phrases. The therapist guided them to tap the speech rhythm

to phrases obtained from the song lyrics. The rhythmic cueing speed would correspond speed of the speech of the participant, prosodic rhythm of the phrases or musical rhythm of the lyrics, depending on circumstantial condition of each individual and the types of phrases.

Musical Bingo activity was performed next where the opening background musical piece was played in some instrument and the participants were asked to guess the song. It is a nice cognitive musical activity that improves the memory and reality orientation. This rapid fore round was made harder by shifting from the popular to the uncommon old songs. Next the therapist sang the *mukhra* (opening line) of some selected songs and the participants were encouraged to sing the *antara* (next line or stanza) and vice versa. The participants were next explained about major and minor notes. They were encouraged to sing a song *Jeena Yahan Marna Yahan* replacing all minor notes by the corresponding major notes. Major notes simplify a song and people can sing it easily. Of course the tune changes. This exercise was great fun and the participants thoroughly enjoyed it.

Next another interesting musical game was played. A story was being narrated and the participants were asked to sing a song matching with the intermediate situations at which the story was stopped in steps. We got both intelligent and some very funny responses. For example, in one case, the situation was inspirational from a teacher's point of view while one of the participants sang a romantic number. This was followed by a wonderful brain storming musical jam involving guitar, Casio, drums, Cajon and dholak. Participants were encouraged to sing songs belonging to their native place including villages. Then one of the artists took the tabla and explained the basics of taal. *Keherwa* taal was played and he showed how a fat man's walking can be musically demonstrated by a *prakar* of *Keherwa* taal on the tabla. A beautiful tabla rela was played in such a way that everyone felt as if a train was passing by. *Ekgun*, *Dugun*, *Aad*, *Kuad* and *Biyad* were explained which refer to the fractional timings in tempo (*laya*). It is a rhythmical unique feature of Indian classical music (ICM). Finally, some fundamental features of ragas in ICM were explained. The PI (principal investigator, second author) closed the session thanking the musicians, the music therapist (first author), the coordinator and all the participants.

## Conclusion

Given the non-musical background of some of the participants, the fourth music therapy session with a variety of musical activities was a big success, as per the positive feedback received from the participants. Apart from the breathing exercises, several melodic and rhythmic activities were performed in this session. The participants received a nice exposure to rhythmic speech cueing, one of the essential components of Melodic Intonation Therapy. They were also introduced to the basics of Indian classical music.

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## Conflicts of interest

The authors declare that there is no conflict of interest.

## References

1. Chakraborty S, Katyayan N. Statistical musicology with therapeutic applications. *MOJ Biol Med.* 2023;8(2):50–53.
2. Chakraborty A, Chakraborty S. The Second music therapy session. *Bulletin for Technology and History Journal.* 2023;23(6):159–161.
3. Chakraborty A, Chakraborty S. The Third Music therapy session. *Bulletin for Technology and History Journal.* 2023;23(6):181–183.
4. Chakraborty S, Mazzola G, Tewari S, et al. Computational musicology in Hindustani music. *Springer.* 2014.