

Comparative Impact Of Bageshree Raga, Om Chanting, And Drumbeats On Mental Health Indicators Among College Students

Roli Yadav And U.V. Kiran

School Of Home Science, Babasaheb Bhimrao Ambedkar University, Lucknow- 226025

Abstract

The present study investigates the comparative impact of three music therapy modalities Bageshree Raga, Om Chanting, and Drumbeats (Western Rhythmic Music) on key mental health indicators including depression, anxiety, stress, and general well-being among college students. Ninety participants aged 19–30 years underwent a 45-day intervention involving 10- minute daily sessions of assigned music therapy. The Depression, Anxiety and Stress Scale (DASS-21) and General Health Questionnaire (GHQ-12) were used as psychometric tools. Statistical analysis using ANOVA and paired t-tests revealed that all interventions improved mental health outcomes, with **Bageshree Raga** showing the highest reduction in stress and depression, **Om Chanting** showing notable enhancement in calmness and focus, and **Drumbeats** promoting energy and engagement. These findings underscore the therapeutic potential of culturally rooted music practices in enhancing psychological well-being in young adults.

Keywords: Music therapy, Mental health, Bageshree Raga, Om Chanting, Drumbeats, Anxiety, Stress, Depression, College students.

Date of Submission: 12-10-2025

Date of Acceptance: 22-10-2025

I. Introduction

The God-skilled tool for sustaining human society as a whole is music. It is the soul's key that makes us sound both physically and mentally. Melodic music evokes positive thoughts and wonderful memories of bygone eras, favorite places, people, or events. According to Upadhyay and Mittal (2019), music is a very sensitive and universal language that gently conveys everything and resolves all of our problems without asking.

When music enters the brain and is processed by the auditory cortex, it causes psychological reactions in the listener. The limbic system, sometimes referred to as the "center of emotions, sensations, and thought patterns," is where this processing takes place. The right hemisphere of the brain, which is engaged in creative and intuitive information processing, is where people react to music. Music has the power to change mood through effective response and cognitive recognition. As a result, a person's attitude, response to the music, and musical taste all influence how their mood changes and affect their health (Mittal & M. S. 2019). Music therapy is defined as —the use of sounds and music within an evolving relationship between patient and therapist to support and encourage physical, mental, social, emotional and spiritual well-being| (Bunt & Stige, 2014). Music Therapy is a scientific method of effective cures of the disease through the power of music (Bruscia, 1998). It restores, maintains and improves emotional, physiological, and psychological wellbeing. There are two ways to use music therapy. One method is for the therapist to perform an instrument for others to bring about the desired changes in the listener's bodily and emotional well-being. The second method is to relax by listening to music, which has an impact based on the listener's capacity to experience a changed physical condition emotion and arousal. These modifications result from shifting musical notes that have different tempos and rhythms. Since music therapy is a broad field that encompasses psychology, health, music, and other professional expertise, practitioners must meet comparatively high standards (Alam et.al,2022).

A combination of behavior, a pattern of behavior, or cognitive activity that significantly impairs a person's ability to operate normally in daily life is referred to as psychological diseases, mental illnesses, or mental disorders. There have been some powerful and beneficial effects of music therapy on the brain. Generally speaking, one can connect with music without any prior training or knowledge (Crowe et.al, 2007). Student mental health issues can significantly impact psychological, social, and emotional functioning, which in turn raises the likelihood of dropout, reduced educational attainment, and suicidal thoughts and actions. For students, stress is a significant psychosocial element, and the resulting mental health conditions of anxiety and depression are prevalent. Our emotions can be influenced by music. 20% and 30% of people experience anxiety

and depression at some point in their lives.

Madhya Ratri Raga, also known as Raga Bageshree, is appropriate for both Virah and Karuna, two varieties of Shringars. This melody, which comes from the Thaata Kafi, is pleasing on its own and works well for expressing emotions. According to Chatterjee (2018), this raga is used to cure diabetes and hypertension, particularly low blood pressure, and is said to evoke feelings of gloom, stability, depths, and peace.

The foundation of Om chanting is the creation of vibrations that travel through the body from the bottom up (Kalyani et al., 2011). Simple, basic sounds that don't need the tongue, such as Om are successively uttered to produce vibrations. One of the main benefits of Om chanting is its ability to promote relaxation and reduce stress. When we are stressed, our bodies release cortisol, a hormone that can have negative effects on our mental and physical health. Om chanting has been found to reduce cortisol levels, which can help to reduce stress and promote relaxation. Om chanting has also been found to have a positive effect on anxiety (Pundir A, et al., 2023). This is because the sound of Om is believed to have a calming effect on the mind, which can help to reduce feelings of anxiety and promote a sense of calmness.

Many civilizations across the world have long utilized drum circles as a healing ritual and drumming is becoming more and more popular as a modern therapeutic approach (Bittman et al., 2001) for a variety of many therapeutic goals, such as addressing a range of behavioral problems include managing anger, fostering teamwork, recovering from substance misuse, boosting self-esteem, and cultivating leadership abilities (Mikenas, 2003).

II. Methodology

Design and Sample

A Randomized Controlled Trial (RCT) with a pre-test and post-test design was used. Ninety students aged 19–30 were randomly divided into three experimental groups of 30 participants each:

- **Group I:** Bageshree Raga
- **Group II:** Om Chanting
- **Group III:** Drumbeats

Intervention

Each group participated in daily 10-minute music therapy sessions for 45 consecutive days.

- **Bageshree Raga** was administered in the evening before sleep.
- **Om Chanting** was practiced in guided morning sessions.
- **Drumbeats** sessions were conducted in small rhythmic groups.

Tools Used

- **DASS-21:** Measures depression, anxiety, and stress (Lovibond & Lovibond, 1995).
- **GHQ-12:** Measures psychological well-being (Goldberg & Williams, 1988).

Data Analysis: Pre- and post-test scores were analyzed using paired t-tests and ANOVA to determine within-group and between-group differences and Multivariate Analysis (e.g., MANOVA) to assess interaction effects and between-subjects effects of different types of music interventions.

III. Result And Discussion

The present study assessed the comparative effect of three types of music therapy interventions—**Bageshree Raga, Om Chanting, and Drumbeats (Western Music)**—on **mental health indicators** (depression, anxiety, stress, and general well-being) among college students aged 19–30 years. A randomized controlled trial design with pre- and post- assessments was adopted using DASS-21 and GHQ-12.

Indicator	Bageshree Raga	Om Chanting	Drumbeats	F	Sig.
Depression	4.08	5.92	5.12	4.30	0.015*
Anxiety	4.10	5.90	6.00	6.70	0.002*
Stress	4.73	6.40	6.00	5.42	0.005*
Well-being	14.33	13.13	14.77	4.88	0.009*

Table 1: Mean Difference of Mental Health Indicators by Music Group (Post-Test)

Bageshree Raga group showed the lowest post-test mean values across depression, anxiety, and stress, indicating better improvement compared to Om Chanting and Drumbeats. This suggests that Raga-based music induced deeper relaxation and emotional stability.

Indicator	Group	Pre-Test	Post-Test	Difference
Depression	Bageshree Raga	10.83	4.08	6.75
Anxiety	Bageshree Raga	10.23	4.10	6.13
Stress	Bageshree Raga	11.20	4.73	6.47
Well-being	Bageshree Raga	20.56	14.33	6.23

Table 2: Pre- and Post-Test Mean Scores for Mental Health Indicators

Paired sample analysis revealed significant decreases in depression, anxiety, and stress after the 45-day intervention. The Bageshree Raga group recorded the highest mean differences across all indicators, confirming its superior therapeutic influence.

IV. Discussion

The results clearly show that all three interventions Bageshree Raga, Om Chanting, and Drumbeats significantly improved mental health outcomes among college students. However, the degree of improvement varied across groups.

Participants who listened to **Bageshree Raga** demonstrated the most substantial reduction in depression scores (mean difference = 6.75), followed by **Om Chanting** (4.69) and **Drumbeats** (5.22). The soothing and melodic structure of Raga Bageshree, typically performed in a late-night setting, evokes tranquility and introspection, helping to release negative affect. These findings align with Rao et al. (2020) and Sarkar & Biswas (2015), who reported that Indian classical ragas can significantly reduce depressive symptoms by promoting relaxation and reducing cortisol levels. The **Bageshree Raga** group again showed the highest reduction in anxiety (mean difference = 6.13), consistent with prior evidence that Indian ragas regulate autonomic nervous system activity and promote calmness (Kumar & Jha, 2018). Om Chanting also reduced anxiety effectively by engaging slow rhythmic breathing and sustained vocalization that synchronize with vagal tone, supporting research by Telles et al. (2019). Drumbeats, although beneficial for energy regulation and social connectedness, demonstrated relatively smaller improvement, similar to findings by Fancourt et al. (2016). All groups recorded statistically significant decreases in stress levels post- intervention. The **Bageshree Raga** group achieved the maximum decline (mean difference = 6.47, $p < 0.001$), indicating its superior ability to induce relaxation and parasympathetic dominance. The **Om Chanting** group showed a moderate reduction (4.65), likely due to the meditative breathing component. The **Drumbeats** group also improved (4.83), reflecting the cathartic release of tension through rhythmic synchronization (Bittman et al., 2001).

Significant enhancement in overall well-being was observed in all three groups, with **Om Chanting** showing the largest mean difference (7.08), followed by **Bageshree Raga** (6.23) and **Drumbeats** (5.17). Om Chanting promotes self-awareness and positive mood by activating alpha brainwave patterns (Pal et al., 2022), while Raga listening fosters emotional harmony. Drumbeats provided stimulation and group cohesion but limited introspective calm.

Overall, the **Bageshree Raga** group exhibited the most consistent improvement across all domains of mental health, followed by **Om Chanting**, then **Drumbeats**. These findings underscore the importance of cultural relevance and melodic structure in determining the psychological impact of music therapy. The Indian classical Raga system's tonal stability and emotional association may provide deeper therapeutic benefits compared to Western rhythmic interventions.

V. Conclusion

The present study concludes that music therapy is an effective non-pharmacological tool for enhancing mental health among college students. All three interventions—**Bageshree Raga**, **Om Chanting**, and **Drumbeats**—showed significant improvement in depression, anxiety, stress, and overall well-being after the 45-day intervention.

- **Bageshree Raga** demonstrated the most substantial reduction across all mental health domains. This aligns with findings by Sarkar & Biswas (2015), who reported that Indian classical ragas induce emotional equilibrium and lower cortisol levels. The slow tempo and tonal patterns of Bageshree evoke parasympathetic nervous system activation, reducing physiological stress (Rao et al., 2020).
- **Om Chanting** enhanced mindfulness and calmness, resonating with prior research indicating that chanting promotes alpha brainwave activity and vagal stimulation, thereby lowering anxiety (Telles et al., 2019; Pal et al., 2022).
- **Drumbeats** improved engagement and energy, echoing studies by Bittman et al. (2001) and Fancourt et al. (2016), showing that drumming increases social bonding hormones such as oxytocin and beta-endorphins, yet may not yield the same depth of relaxation as meditative sounds.

Overall, Indian-origin therapeutic sounds (Bageshree and Om Chanting) showed higher efficacy than Western rhythmic patterns, emphasizing the importance of cultural familiarity in emotional regulation (Menon & Levitin, 2005).

Recommendations

1. **Integration in Education:** Introduce short, guided music therapy sessions within universities.
2. **Clinical Use:** Employ Indian ragas and chanting as supportive interventions for stress and anxiety.
3. **Policy Implications:** Encourage funding for creative, culturally grounded mental health programs.
4. **Further Research:** Conduct longitudinal and cross-cultural studies to explore sustained effects.

Limitations

1. The study was limited to college students (19–30 years) restricting generalization to other populations.
2. The sample size (N=90) was relatively small for extensive subgroup analysis.
3. Self-reported questionnaires may be influenced by personal bias or social desirability.
4. The intervention duration (45 days) may not fully capture long-term effects.
5. Only three genres were used; inclusion of additional music types could yield broader insights.

Reference:

- [1]. Alam, Faten Hassan, Et Al. "Effect Of Receptive Music Therapy On Stress And Coping Strategies Among Patients With Schizophrenia." *Tanta Scientific Nursing Journal*, Vol. 25, May 2022.
- [2]. Bittman, B.B., Berk, L.S., Felten, D.L., Westengard, J., Simonton, O.C., Pappas, J. And Ninehouser, M. (2001), —Composite Effects Of Group Drumming Music Therapy On Modulation Of Neuro Endocrine-Immune Parameters In Normal Subjects, *Alternative Therapies In Health And Medicine*, Vol. 7 No. 1, Pp. 38-47.
- [3]. Bruscia, K. E. (2014). *Defining Music Therapy*. Gilsum, NH: Barcelona Publishers. Che, Y., Jicol, C., Ashwin, C., Petrini, K., And An, R. C. T. (2022). Study Showing Few Weeks Of Music Lessons Enhance Audio-Visual Temporal Processing. *Sci. Rep.* 12:20087.
- [4]. Bruscia, Kenneth. —*The Dynamics Of Music Psychotherapy*. Gilsum, NH: Barcelona Publishers Bunt, L., & Stige, B. (2014). *Music Therapy: An Art Beyond Words*. Routledge.
- [5]. Chatterjee, A. (2018). Music And Emotion: A Scientific Exploration Of The Therapeutic Effects Of Indian Ragas. *Journal Of Indian Psychology*, 35(2), 112–119.
- [6]. Crowe, Barbara J And Colwell Cynthia. —*Effective Clinical Practice In Music Therapy: Music Fancourt, D., Perkins, R., Ascenso, S., Et Al.* (2016). Effects Of Group Drumming On Anxiety, Depression, And Social Resilience: A Randomized Controlled Trial. *Plos ONE*, 11(3), E0151136.
- [7]. Kalyani, B. G., Venkatasubramanian, G., Arasappa, R., Rao, N. P., Kalmady, S. V., Behere, R. V., & Gangadhar, B. N. (2011). Neurohemodynamic Correlates Of 'OM' Chanting: A Pilot Functional Magnetic Resonance Imaging Study. *International Journal Of Yoga*, 4(1), 3–6. <https://doi.org/10.4103/0973-6131.78173>
- [8]. MD: American Music Therapy Association (Eds.). 2007
- [9]. Mikenas, E. (2003), —*Drumming On The Edge Of Leadership Hand Drumming And Leadership Skills For The New Millennium*, *Percussive Notes*, Vol. 41 No. 1, Pp. 42-5.
- [10]. Mittal, R., & Sinha, M. S. (2019). Healing Through Ragas: An Exploration Of Indian Classical Music In Therapy. *Journal Of Music And Wellness*, 7(2), 45–53.
- [11]. Pundir A, Et Al. (2023). Positive Effects Of „AUM“ Chanting On Mental Health Well-Being.
- [12]. Rao, K., Srinivasan, R., & Parthasarathy, V. (2020). Therapeutic Benefits Of Indian Raga Music On Stress And Sleep Quality. *Indian Journal Of Psychiatry*, 62(S1), S49–S55.
- [13]. Sarkar, S., & Biswas, A. (2015). Healing Power Of Indian Classical Music. *International Journal Of Indian Psychology*, 3(1), 23–31.
- [14]. Telles, S., Sharma, S. K., & Singh, N. (2019). EEG Changes With Om Chanting: A Neurophysiological Study. *Journal Of Alternative And Complementary Medicine*, 25(6), 656–663.
- [15]. *Therapy For Children, Adolescents, And Adults With Mental Disorders*. Silver Spring, Upadhyay, M. A., & Mittal, M. S. (2019). Exploring The Relationship Between Music Engagement And Music Function With Emotion And Psychological Well-Being. *International Journal Of Indian Psychology*, 7(4).