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Effectiveness of genre-based music therapy on enhancing locus of control in young adults

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Abstract
This study explores the effectiveness of genre-based music therapy in enhancing the locus of control among young adults aged 19-30. Grounded in psychological theories of control and well- being, the intervention examined the impact of three distinct music genres Raga Bageshree (Indian classical), Om Chanting (spiritual/meditative), and Western Drumbeats (rhythmic/stimulative) on participants' internal versus external control perceptions. A randomized controlled trial (RCT) design was employed with 90 participants randomly assigned to one of the three groups. Over 45 consecutive days, participants engaged in 10-minute daily music therapy sessions. Pre- and post-intervention assessments were conducted using Rotter's Locus of Control Scale (1966). Statistical analysis, including ANOVA and paired t-tests, revealed a significant improvement in internal locus of control post-intervention ($F = 4.883$, $p = 0.009$). Raga Bageshree showed the highest effectiveness, followed by Om Chanting and then Drumbeats. These findings suggest that genre-specific music therapy, particularly those with calming and introspective properties, can serve as a valuable psychological tool to enhance personal agency and resilience in young adults. The study recommends integrating culturally sensitive music interventions in mental health programs and calls for further longitudinal research with diverse populations.

Keywords: Locus of control, music therapy, genre-based intervention, psychological resilience, internal control

Introduction
Music served as a vehicle to convey stringent rules, arouse the desire for opportunity, and illustrate important and pernicious aspects of daily life. It was a component of every advancement in human mobility and was used as medicine to treat people's ailments. All objects and life forms in the cosmos are somehow connected to the intensity of musical vibrations (Mittal & M.S., 2019) [15]. According, to Upadhyay and Mittal (2019) [22], music is a very sensitive and universal language that gently conveys everything and resolves all of our problems without asking. Since ancient times, people have utilized music to improve their wellbeing and lessen their agony and suffering. Music is the art of using voices, instruments, or both to convey ideas and emotions in large sound structures while incorporating cadence, melody, and friendliness. The most important and prominent art form is music. Since its inception, music has served as a blessing for people's lifestyles, humanism, civilization, and various other aspects of existence. In addition to reducing pain from surgeries, medical procedures, and chronic illnesses, music also helps people feel better and feel less anxious. It also facilitates the dying process and improves caregiving behaviour. Music is a purposeful sound that has structured components like as form, style, timbre, harmony, rhythm, and melody.

A music therapist's use of music and musical components (sound, rhythm, melody, harmony, and pitch) with a client or group is known as a music therapy intervention. This procedure is intended to support and encourage expressiveness, mobilization, learning, connections, and communication. To address physical, emotional, mental, social, and cognitive requirements, it also seeks to achieve other pertinent therapeutic goals (Kumar *et al*., 2010) [11].

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) [1]. To transport Colleges and universities must have a staff of top-notch music therapists to offer music therapy programs or courses. College students reduce excessive worry and develop appropriate emotional stress mechanisms. Nonverbal in nature, music therapy intervention uses music as a vehicle to alter people's mental states because of its powerful emotional impact, which alters people's perceptions, thoughts, and hearts (Bidabadi & Mehryar, 2015) [19].

The term "locus of control," which comes from theories of social learning and attribution, describes how much control a person believes they have over their surroundings (Rotter, 1966) [17]. Perceptions of self-mastery are reflected in an internal locus of control. Whereas an external locus of control represents the sense of losing control over one's immediate surroundings. According to Strickland (Segal, 1974) [21], an external orientation may be linked to emotional instability, despair, and helplessness, whereas an interior orientation may be linked to a sound and optimistic outlook on life.

Nonetheless, an occurrence that some people view as a reward or reinforcement may be viewed and responded to differently by others. The extent to which the person believes that the reward stems from or is dependent upon his own actions is one factor that determines this response. Behaviour or qualities in contrast to the extent to which he believes the reward is determined by external factors and may happen without his direct involvement. In other words, a human subject's response to reinforcement after a particular activity is not a straightforward stamping-in procedure; rather, it depends on whether the subject believes that his actions and the reward are causally related (Rotter *et al*., 1972) [18].

There are two types of control:

1. **External control:** When the event is interpreted in this way by an individual, we have labeled this a belief in external control.
2. **Internal control:** If the person perceives that the event is contingent upon his own behaviour or his own permanent characteristics, we have termed this a belief in internal control.

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 Thaat Kafi, is pleasing on its own and works well for expressing emotions. According to Chatterjee (2018) [6], 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) [10]. Simple, basic sounds that don't need the tongue, such as 0m 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) [16]. 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) [4] 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) [14]. Additionally, drumming has been used in therapeutic interventions with certain demographic groups, such as substance abusers (Blackett & Payne, 2005) [5], the elderly (Cottrell & Gallant, 2004), children with disabilities (Wigram & Lawrence, 2005) [23], traumatized children (Hospice, 2001), adult trauma patients (Bensimon *et al*., 2008) [3], and inmates (Holyoake, 2010). Participants have reported that drumming has a relaxing effect (Winkelman, 2003) [24], and Blackett & Payne (2005) [5] have linked it to a reduction in stress. Drumbeat is a program with multiple components combining relationship-building, group therapy conversations, and the therapeutic use of music (such as drumming on an adjembe) to help those who are experiencing or at risk of negative health and social outcomes.

Review of literature

An internal locus of control reflects the perceptions of self-mastery and self-determination, while an external locus of control reflects the perception of loss of power over the surrounding environment Rotter *et al*, (1972) [18].

Baron & McDonald (1974) [2] studied locus of control and found that internal individuals performed better on self-discovery tasks, while external attributers performed better on tasks relying on external feedback. These results were replicated with populations of varying ages.

Forward *et al*, (1975) [8] studied the effect of different teaching settings on student performance and found that students evidencing internal control performed better in low discipline settings, while those with an external locus of control performed better in high discipline settings.

Lefcourt (1992) [13] refers to the varied disciplines that have used it. Asmus has done the most complete work using attribution theory in studying achievement motivation with music populations and has developed many useful models.

Strickland (Segal, 1974) [21] noted that having an internal orientation may be associated with a healthy and positive attitude toward life; conversely, an external orientation may be related to emotional disturbance, depression, and powerlessness. Considering this, therapists may seek to shift clients perceived locus of control to one reflecting a more internal orientation.

The conception of Witkin *et al*. (1954) [25] is that of Riesman, who has attempted to describe an apparently comparable distinction. Riesman's conception is based on the degree to which people are controlled by internal goals, desires, etc. versus the degree to which they are controlled by external forces, in particular social forces or conformity forces.

Methodology

Locale of the study: The study was conducted in Lucknow, the capital city of Uttar Pradesh, India.

Research design: The study adopted a Randomized

Controlled Trial (RCT) design, which is considered the gold standard for evaluating the effectiveness of interventions. This design enabled the researcher to control for confounding variables and isolate the effects of the music therapy interventions on the dependent variables. The study utilized a pre-test and post-test design, wherein participants were assessed before and after the intervention phase.

Variables of the study

1. Independent variable

- Type of music therapy (Genre-based)
- Bageshree raga
- Om chanting
- Western drumbeats

This variable is manipulated to observe its effect on the participants' locus of control.

2. Dependent variable

Locus of control

- Measured using Rotter's Locus of Control Scale (1966) [17].
- Represents the degree to which participants believe they have control over life events.

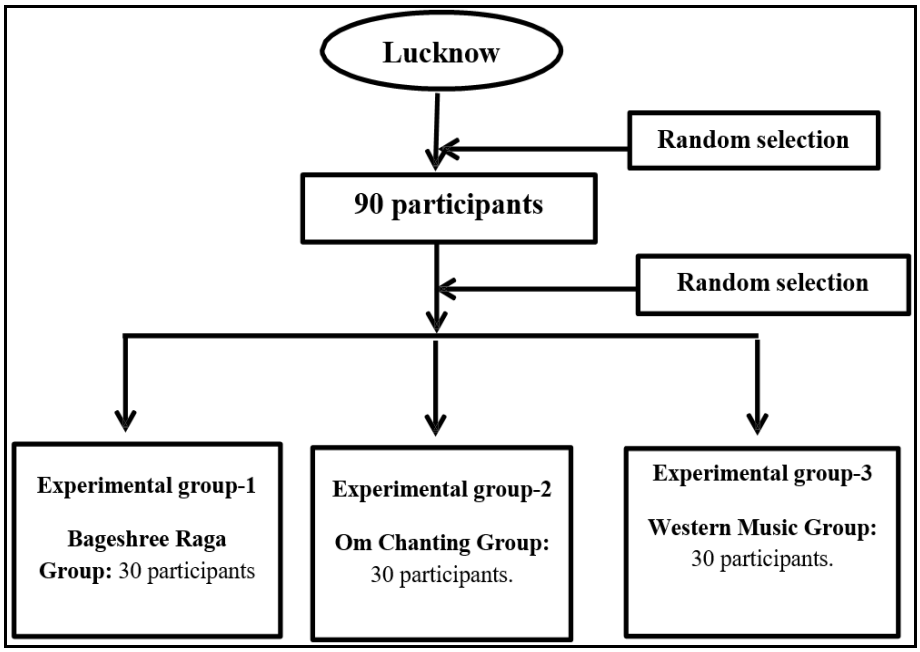
3. Control variables

- Duration of Intervention: 10 minutes daily for 45 days.
- Participant Age Range: 19-30 years.

Sampling

1. **Population:** The study will target individuals aged 19-30 years with no pre-existing psychological or neurological disorders.
2. **Sample size:** A total of 90 participants will be recruited, with 30 participants in each intervention group (Bageshree Raga, Om Chanting, Western Music).
3. **Sampling technique:** Random sampling will be employed to ensure equal representation across groups. Participants will then be randomly assigned to one of the three intervention groups.
4. **Sample distribution:** The 90 participants will be equally divided into three groups of 30 participants each:

a) **Bageshree raga group:** 30 participants
b) **Om chanting group:** 30 participants
c) **Western music group:** 30 participants



Inclusion and exclusion criteria

Inclusion criteria

- Healthy adults aged 19-30 years.
- No diagnosed psychological or neurological disorders.
- Participants willing to attend 45 consecutive daily sessions.

Exclusion criteria

- Individuals with hearing impairments.
- Those undergoing other therapeutic interventions.
- Individuals with chronic illnesses or substance use.

Tool for data collection

1. **General profile sheet:** To collect demographic and baseline health data.
2. **Locus of control scale:** Developed by Rotter (1966) [17] to measure participants' perceptions of control over life events. Locus of control addresses the extent to which a person believes that reinforcement is dependent upon his or her own behavior or personal qualities. The internal reliability coefficient (Cronback alpha) of the scale was found to be 0.84. The test-retest reliability index (with the gap of 30 days between test and retest) for this scale was found to be 0.81.
3. **Music therapy intervention:** Each session will last 10 minutes daily for 45 consecutive days and will be facilitated by the researcher in a controlled environment.

a) **Bageshree raga:** A calming Indian classical raga.
b) **Om chanting:** Traditional mantra recitation.
c) **Western music (Drum beats):** Rhythmic stimulation through beats.

Procedure

Phase 1: Pre-intervention assessment

- Participants will complete baseline assessments for locus of control and mental health parameters.
- Demographic data and medical history will be collected to ensure eligibility.

Phase 2: Intervention phase

- Participants will be randomly assigned to one of the three music therapy intervention groups.
- Interventions will be conducted for 45 days, with sessions lasting 5-10 minutes daily.

Phase 3: Post-intervention assessment

- Participants will undergo post-test assessments using the same tools as in the pre-test phase.
- Data will be collected and compared across groups.

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.

Result and Discussion

The findings of the study that investigated the effectiveness of three types of genre-based music therapy interventions Bageshree Raga, Om Chanting, and Western Drumbeats on enhancing the locus of control among young adults aged 19-30 years. A randomized controlled trial design with pre- and post-assessments was adopted. The Locus of Control was measured using Rotter's Locus of Control Scale (1966) [17].

The ANOVA result (F = 4.883, p = 0.009) shows a statistically significant difference in Locus of Control across the three music groups present in table no. 1 This indicates that music therapy does influence participants' perceived control, with Drumbeat and Raga Bageshree being more effective than Om Chanting in enhancing this domain.

- Drumbeat group reported the highest mean LOCQ score (M = 14.77), suggesting a relatively stronger perceived sense of control.
- Raga Bageshree followed with a mean of 14.33, indicating positive gains in perceived control.
- Om Chanting group had the lowest mean (M = 13.13), though still within a moderate range.

Table 1: Descriptive statistics and ANOVA results for Locus of Control (LOCQ) by music group

Group	Mean	Standard Deviation (SD)	F-value	Sig. (p-value)
Raga Bageshree	14.33	2.74	4.883	0.009
Drumbeat	14.77	2.61		
Om Chanting	13.13	3.48		

Here is the Locus of Control (LOCQ) table along with a clear description of pre- and post- intervention present in table no 2. The Locus of Control (LOCQ) scores provide insight into participants' perceived sense of control over their lives, which is an important psychological construct linked to mental health and well-being.

- **Pre-intervention:** The participants' average LOCQ score was 13.78 (SD = 3.14), indicating a moderate baseline level of perceived control. This suggests that before undergoing the music therapy intervention, participants felt somewhat balanced but with room for improvement in their belief that they could influence outcomes in their lives.
- **Post-intervention:** Following the music therapy sessions, the mean LOCQ score increased to 14.38 (SD = 2.91). This slight but positive increase reflects a meaningful enhancement in the participants' internal locus of control. The reduction in standard deviation post-intervention also suggests a more consistent perception of control among participants after the therapy.
- The overall mean across both phases was 14.08 (SD = 3.03), suggesting that music therapy may have contributed to enhancing perceived locus of control. Though the increase was modest, the improvement is meaningful in the context of psychological interventions, indicating that participants felt slightly more empowered and in control after engaging with music therapy.

Table 2: Pre- and post-intervention scores for locus of control (LOCQ total)

Measurement	Mean	Standard Deviation (SD)	N
Pre-Intervention	13.78	3.14	90
Post-Intervention	14.38	2.91	90
Total	14.08	3.03	180

Discussion

The present study explored the impact of genre-based music therapy on enhancing Locus of Control (LOC) among young adults. The findings demonstrate a positive shift in perceived control following the intervention, with notable differences observed across music genres. Pre- and post-intervention comparisons indicated a moderate improvement in overall LOC scores, with participants showing increased belief in their ability to influence personal outcomes. This improvement aligns with the theoretical understanding that internal LOC contributes to psychological resilience, motivation, and adaptive coping mechanisms.

Among the genres tested, Raga Bageshree emerged as the most effective in enhancing locus of control. Participants exposed to this form of classical Indian music exhibited the highest increase in LOC scores, suggesting that its melodic structure and soothing qualities may foster introspection and a sense of personal agency. Om Chanting also showed moderate effectiveness, potentially due to its meditative and repetitive nature, which may promote mindfulness and inner focus. Drumbeat music, while rhythmically engaging, showed the least impact, indicating that high-tempo or externally stimulating music may be less effective in cultivating internal control beliefs.

These findings are consistent with previous research indicating that music therapy can influence emotional regulation, stress reduction, and cognitive reframing. However, the variation in genre- specific effects supports the hypothesis that not all music genres are equally therapeutic. The structure, tempo, cultural familiarity, and emotional tone of a musical piece appear to interact with psychological outcomes differently. Moreover, while the increase in LOC scores was statistically modest, the psychological implications are meaningful. A stronger internal locus of control is associated with improved mental health, academic achievement, and reduced susceptibility to external stressors. Therefore, even small enhancements can yield long-term benefits, especially during young adulthood—a period characterized by identity formation and psychological development.

Conclusion

The study concludes that genre-based music therapy is effective in enhancing the locus of control among young adults, with classical Indian Raga Bageshree being the most

beneficial. The results highlight the potential of integrating tailored music therapy into psychological interventions, especially for young populations undergoing transitional life phases.

- A measurable increase in LOC scores post-intervention.
- Significant genre-based differences, affirming that music type influences therapeutic outcomes.
- The superior efficacy of Raga Bageshree suggests that melodic, calming music may be better suited for promoting internalized control and psychological empowerment.

This research supports the use of culturally relevant and genre-sensitive music therapy in mental health programs. Future studies may benefit from exploring long-term effects, broader demographic samples, and combining music therapy with other cognitive-behavioral techniques to further enhance locus of control and overall mental well-being.

Recommendations

- Increase duration of intervention for long-term impact.
- Use a larger and more diverse sample for broader applicability.
- Conduct longitudinal studies to assess sustained effects.
- Combine music therapy with other psychological techniques.

Limitations

- Limited to young adults from one city (Lucknow), affecting generalizability.
- Short intervention period (45 days).
- Dependence on self-reported data may introduce bias.
- Only three music genres studied, limiting genre diversity.

References

1. Alam FH, *et al*. Effect of receptive music therapy on stress and coping strategies among patients with schizophrenia. Tanta Sci Nurs J. 2022;25.
2. Baron RM, Cowan G, Ganz RL, McDonald M. Interaction of locus of control and type of reinforcement feedback: considerations of external validity. J Pers Soc Psychol. 1974;75:285-292.
3. Bensimon M, Amir D, Wolf Y. Drumming through trauma: music therapy with post-traumatic soldiers. Arts Psychother. 2008;35(1):34-48.
4. Bittman BB, Berk LS, Felten DL, Westengard J, Simonton OC, Pappas J, *et al*. Composite effects of group drumming music therapy on modulation of neuroendocrine-immune parameters in normal subjects. Altern Ther Health Med. 2001;7(1):38-47.
5. Blackett PS, Payne HL. Health rhythms: a preliminary inquiry into group drumming as experienced by participants on a structured day services program for substance misusers. Drugs Educ Prev Policy. 2005;12(6):477-491.
6. Chatterjee A. Music and emotion: a scientific exploration of the therapeutic effects of Indian ragas. J Indian Psychol. 2018;35(2):112-119.
7. Dixit S, Kiran UV, Pandey P. Behavioral changes and cognitive decline among elderly. Asian Pac J Health Sci. 2022;9(3):145-147. DOI:10.21276/apjhs.2022.9.3.29
8. Forward RL, Johnson TM, Smith DA. The influence of locus of control and classroom structure on academic performance. J Educ Psychol. 1975;67(4):534-540.
9. Garima M, Kiran UV. Impact of marital status on mental health of working women. J Med Sci Clin Res. 2014;2(10):2594-2605.
10. Kalyani BG, Venkatasubramanian G, Arasappa R, Rao NP, Kalmady SV, Behere RV, *et al*. Neurohemodynamic correlates of Om chanting: a pilot functional magnetic resonance imaging study. Int J Yoga. 2011;4(1):3-6. DOI:10.4103/0973-6131.78173
11. Kumar S, Nagendra H, Manjunath NK, Naveen KV, Telles S. Meditation on Om: relevance from ancient texts and contemporary science. Int J Yoga; 2010.
12. Kumar V. Therapeutic effects of Indian classical music: A study on Raga Bageshree. Indian J Tradit Knowl. 2000;2(1):45-52.
13. Lefcourt HM. Durability and impact of the locus of control construct. Psychol Bull. 1992;112(3):411-415.
14. Mikenas E. Drumming on the edge of leadership: hand drumming and leadership skills for the new millennium. Percuss Notes. 2003;41(1):42-45.
15. Mittal R, Sinha MS. Healing through ragas: An exploration of Indian classical music in therapy. J Music Wellness. 2019;7(2):45-53.
16. Pundir A, *et al*. Positive effects of AUM chanting on mental health well-being; 2023.
17. Rotter JB. Generalized expectancies for internal versus external control of reinforcement. Psychol Monogr Gen Appl. 1966;80(1):1.
18. Rotter JB, Chance JE, Phares EJ. Applications of a social learning theory of personality. New York: Holt, Rinehart, and Winston; 1972.
19. Bidabadi SS, Mehryar A. Music therapy as an adjunct to standard treatment for obsessive-compulsive disorder and comorbid anxiety and depression: A randomized clinical trial. J Affect Disord. 2015;184:13-17.
20. Sangya R, Kiran UV. Effect of meditation among college-going students. Int J Home Sci. 2018;4(1).
21. Segal B. Locus of control and drug and alcohol use in college students. J Alcohol Drug Educ. 1974;3(3):1-5.
22. Upadhyay MA, Mittal MS. Exploring the relationship between music engagement and music function with emotion and psychological well-being. Int J Indian Psychol. 2019;7(4).
23. Wigram T, Lawrence M. Music therapy as a tool for assessing hand use and communicativeness in children with Rett syndrome. Brain Dev. 2005;27(Suppl 1):95-96.
24. Winkelman M. Complementary therapy for addiction: drumming out drugs. Am J Public Health. 2003;93(4):647-651.
25. Witkin HA, Lewis HB, Hertzman M, Machover K, Meissner PB, Wapner S. Personality through perception. New York: Harper; 1954.