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Effect of Indian Classical Music on Flow State and Emotional Competence of Young Adults

H Shreshta[1], Dr. Rita Kumar[2]

[1]Post Graduate Student, Amity Institute of Psychology and Allied Sciences, Amity University Noida
[2]Professor, Amity Institute of Psychology and Allied Sciences, Amity University Noida

Abstract

The aim of this research study was to see the effect of Indian Classical Music on Flow State and Emotional Competence of young adults. The objectives included studying the difference in flow state and emotional competence of the participants before and after exposure to the Indian classical music intervention track. This was done through comparing the pre test mid test and post test results. The population for this study included a total of 29 young adults between the age group of 22 to 30, a mixture of learners and non-learners of music. It was a - Single Group Pre & Post Experimental Research Design. Convenient sampling method was used. The instrumental music intervention track was set to Raag Miyan ki Malhar, the Emotional Competence Scale, the Flow Short Scale and the feelings wheel were some of the tools used for this research. Results revealed that there was a significant increase in the Flow State dimensions including Fluency, Absorption and a decrease in Worry from pre test to both mid test and post test. This indicates that the Indian classical music intervention was able to promote a state of flow. With regard to emotional competence, the dimensions Ability to Function with Emotions (AFE) and Ability to Cope with Problem Emotions (ACPE) showed a significant increase from pre test to post test indicating that the intervention track was able to have a positive impact on the emotional competence dimensions.

Keywords: Indian Classical Music, Flow State, Emotional Competence

1. Introduction

Human Emotions and Music

Many ancient philosophers and psychologists have considered that the emotions of an individual are a combination of the psychological and physiological responses to the stimulus. The stimulus can either be external- a person or an object or even an event, or it could be internal which includes the behaviors, thought processes, beliefs, fears or even judgments. Music is a means to relax and soothe the soul and in addition to this, it also facilitates a specific state of mind. Music definitely has the remarkable ability to inculcate the quality of empathy in the listeners (O'Neil, 2020). Listening to music for many people is a spiritual experience as it not only soothes the soul but also taps into the strong emotions of the listener (Dopson, 2005; Heather, 2005; Gabielsson, 2011).

Emotions and Indian Classical Music

When we are discussing the Indian Classical Music or what is called as the Indian Raga music, we are talking about the three important elements that this form of music embodies. They include raga, bhaava and thaala. Raaga is generally characterized by the melodic framework that is based on the scale which

illustrates or embodies a specific type of mood, or emotional tone along with its aesthetic essence. Hence, it has a lot to offer to the human emotions, cognition, learning as well as perception. It can tap into and elicit a vast range of emotional responses. The uniqueness, complexities and distinction in each type of raga can bring out a different 'rasa' or what we call as emotional flavours stemming out of the 'bhaava' that is an expression of the mental state. These can be of several types like shringara (love), haasya (laughter) or even Karuna (Compassion) etc. 'Thaala' On the other hand, is regarded as the framework of a rhythmic meter which has specific divisions. Many researchers have made an attempt to delve into the cognitive elements by putting the focus on how the human brain processes, perceives as well as adheres to the rhythmic and melodic structural aspects.

Raag Miyan Ki Malhar and Emotional Competence

The profound effect of raga on human mind has been a subject of study for many researchers and scholars. According to Bardekar and Gurjar, raag miya-malhar or miya ki malhar is known for its unique ability to pacify anger and mental instability and even excitement in the minds of humans. These types of findings emphasise the efficacy of the raga miya-malhar in treating mental disorders though inducing a calming and soothing effect on the human mind. The age old tradition that comes along with Indian classical music is about assigning particular times of the day and night for listening or performing specific ragas with its own distinctive features (Bardekar & Gujar).

Raag Miya Ki Malhar is related to the rainy season or monsoon it is one of the sub-types of raag Malhar (which is also related to the rainy season). The name of the raag Malhar originates from the term mal-haran (wiping out of the mud) which is process of cleansing through water showering from rain. It is believed to denote or create an experience of removal of bad and the beginning of the good. The beauty of Indian classical music is that it always relates to the human soul, relationships and human nature When there is any pathos or disturbance in any human mind, sudden showering of rain clears or wipes out the dust of sad or restless atmosphere and which brings joy or pleasant atmosphere through the rain showers (Dr. Sameeran Walvaker & Vijay Koparkar).

As mentioned by Dr Sarita Pathak Yajurvedi (2016), Raaga Miya Ki malhar is belongs to kaafi thaat, Sampoorna Shadav Jaathi which means that the Aaroha or upward movement of the notes of the raaga have all seven Swaras and the downward movement of Swaras has six Swaras. The Dha (Dhaivat) is considered as Varja (excluded). the Vaadi – Samvaadi Swaras which are the Shadja and Panchama or Shadja and Madhyama. The Nyaasa Swaras (Swaras that are sustained while singing) include Shadja, Panchama, Rishabha and Nishada. This raga is considered as a mix of Darbari Kanada as well as shades of Malhar.

Flow State & Emotional Competence

Flow state is the representation of optimal level in which an individual gets to experience hyper-focused attention, is easily able to align for peak performance. In addition to this, flow state is marked by a sense of energetic focus and accomplishment (Kaur et al., 2022). Several research studies talk about how listening to music can help in enabling flow state in the individuals. If we look at the human life, there is a certain pattern in so many aspects of the human being, any it be their behaviors, their thoughts, feelings or even emotions. There are various models that talk about how humans are able to initiate and maintain their behaviors, behavioral changes, factors that are involved in leading the change in the behaviors, like favorable expectations for the future outcomes (Rothman, 2000).

The well know James Lange theory (1885) talks about the how the emotions are a result of the result of physiological responses to the stimuli as opposed to those who say that it arises from the stimulus itself.

The term emotional competency is basically one's ability to be able to express as well as release their inner feelings or emotions. To be able to achieve and maintain the feeling of adequacy, one has to acquire some of the feasible assumptions with regard to the world, where the need for emotional competence arises as the most basic motive of life. Competence is one thing that helps in surviving, growing and even actualizing ourselves (Allport, 1961).

2. Aim and Objective:

The aim of this research is to study the effect of Indian Classical Music on flow state and emotional competence of young adults

The objectives of the study include the following:

- To study the difference in flow state experienced by participants before and after exposure to Indian classical music intervention
- To study the difference in emotional competence experienced by participants before after exposure to Indian classical music intervention

3. Hypotheses:

- There will be a significant difference in the level of the flow state level after exposure to Indian Classical music intervention
- There will be a significant difference in the level of the emotional competence level after exposure to Indian Classical music intervention

4. Research Methodology:

This study used Single Group Pre & Post Experimental Research Design. Convenient sampling method was used. As per the inclusion criteria, participants who were available and interested, and gave their consent to be a part of the study in listening to Indian Classical Music were selected for this stud. It was found that the participants were a mixture of learners and non learners of music .majority of them were having some experience in listening to instrumental music, Indian music and Indian Classical Music. The participants who were able to understand English language (reading and writing both) were chosen for the study. A total of 29 participants who were between 22 to 30 years of age took part in this study. According to the exclusion criteria, any person with, sensory impairment or severe psychotic and medical illnesses were excluded from this study. Any participant who was disinterested in the activity or not able to understand English language was excluded. There are 3 variables utilized in this study. These include Indian Classical Music (independent variable), flow state (dependent variable) and emotional competence (dependent variable).

5. Tools Used in the Research Study:

Flow Short Scale by Pheinberg, Vollmeyer & Engeser

This scale has 3 dimensions which are listed below:

- Fluency
- Absorption
- Worry

The Emotional Competency Scale by Dr. Harish Sharma and Dr. Rajiv Lochan Bhardwaj

This scale has 3 dimensions which are listed below:

- Adequate Depth of feeling (ADF)
- Adequate Expression and Control of Emotions (AECE)
- Ability to Function with Emotions(AFE)
- Ability to Cope with Problem Emotions(ACPE)
- Enhancement of Positive Emotions(EPE)

Other tools included the Feelings Wheel by Dr. Gloria Willcox, Instruction Manual for listening session and Google forms as a tool for data collection was used for collecting survey responses from the research participants in the pre-testing, mid-testing and post-testing surveys. It served as a convenient, time efficient tool for obtaining the responses.

6. Procedure:

Collection of data from the participants and compare the results and see the effect of Indian classical music on flow state and emotional regulation

- Briefing- Participants were briefed on the experiment's purpose and the importance of genuine responses.
- Pre-testing procedure- Participants filled the Emotional Competence and Flow Short Scale.
- Intervention- Participants listened to a 15-minutes track featuring Sitar, Flute, and Pakhawaj in raag Miya ki Malhar for five consecutive days (Monday to Friday). After each session, they journal their feelings and emotions. Feelings wheel was also provided to them for assistance in articulation.
- Mid-testing procedure- Participants filled the Emotional Competence Scale and Flow Short Scale.
- Intervention- Over five days (Monday to Friday), they listen to the same music intervention track. They noted subjective responses without interruptions, then journal their feelings.
- Post-testing Procedure- Participants filled the Emotional Competence Scale and Flow Short Scale and give a feedback of their experience.
- These surveys provided quantitative data for statistical analysis. Further, paired sample t-test was used to analyze the data.

7. Results:

Table 1: Pair-Wise Comparison of Statistical Values for Pre Test, Mid Test and Post Test.

VARIABLE	PAIR-WISE COMPARISON	MEAN (S)		STANDARD DEVIATION		T-VALUE	P-VALUE
FLOW STATE							
FLUENCY	Pre Test – Mid Test	24.14	26.39	6.60	6.17	2.67	0.006
	Mid Test – Post Test	26.39	27.92	6.17	6.39	1.84	0.038
	Pre Test – Post Test	24.14	27.92	6.60	6.39	4.25	<.001
ABSORPTION	Pre Test – Mid	17.1	17.	2.55	2.78	1.38	0.08

	Test	1	96				9
	Mid Test – Post Test	17.96	17.79	2.78	2.39	-0.43	0.336
	Pre Test – Post Test	17.11	17.79	2.55	2.39	2.39	0.113
WORRY	Pre Test – Mid Test	12.11	12.79	3.33	2.73	0.97	0.172
	Mid Test – Post Test	12.79	12.89	2.73	2.67	0.18	0.429
	Pre Test – Post Test	12.11	12.89	3.33	2.67	1.13	0.134
EMOTIONAL COMPETENCE							
ABILITY TO FUNCTION WITH EMOTIONS (AFE)	Pre Test – Mid Test	17.39	18.67	2.12	24.75	2.26	0.016
	Mid Test – Post Test	18.67	19.96	24.75	25.10	3.18	0.002
	Pre Test – Post Test	17.39	19.96	2.12	25.10	3.2	0.002
ABILITY TO COPE WITH PROBLEM EMOTIONS (ACPE)	Pre Test – Mid Test	18.96	20.17	4.58	23.50	2.22	0.081
	Mid Test – Post Test	20.17	20.82	23.50	24.31	1.97	0.03
	Pre Test – Post Test	18.96	20.82	4.58	24.31	3.5	<.001
ENHANCEMENT OF POSITIVE EMOTIONS (EPE)	Pre Test – Mid Test	21.57	22.25	3.77	22.21	1.07	0.146
	Mid Test – Post Test	22.25	22.75	22.21	23.57	1.17	0.127
	Pre Test – Post Test	21.57	22.75	3.77	23.57	1.97	0.029
ADEQUATE DEPTH OF FEELING (ADF)	Pre Test – Mid Test	16.53	17.60	30.59	28.59	1.68	0.052
	Mid Test – Post Test	17.60	19.25	28.59	27.06	3.44	<.001
	Pre Test – Post Test	16.53	19.25	30.59	27.06	3.96	<.001
ADEQUATE EXPRESSION AND CONTROL OF EMOTIONS (AECE)	Pre Test – Mid Test	19.32	19.92	34.32	26.56	1.38	0.09
	Mid Test – Post Test	19.92	19.85	26.56	26.05	0.19	0.426
	Pre Test – Post	19.3	19.	34.32	26.05	1.01	1.16

	Test	2	85				1

Table 2: Findings of Comparing the Pre Test, Mid Test and Post Test Scores for All Dimensions

FLOW STATE		
DIMENSION	**COMPARISON**	**FINDING**
FLUENCY	Pre test vs. Mid test (p=0.004); pre test vs. post test (p<0,001)	Significant increase in fluency from pretest to both mid-test and post test
ABSORPTION	Pre test vs. Mid test (p=0.012); pre test vs. post test (p<0.001)	Significant increase in absorption from pretest to both mid test and post test
WORRY	Pre test vs. Mid test (p=0.015); pre test vs. post test (p=0.001)	Significant decrease in worry from pretest to both mid test and post test
EMOTIONAL COMPETENCE		
DIMENSION	**COMPARISON**	**FINDING**
ABILITY TO FUNCTION WITH EMOTIONS (AFE)	Pre test vs. mid test (p=0.016) ; pre test vs. post test (p=0.002)	Significant increase in the ability to function with emotions from pretest to both mid test and post test
ABILITY TO COPE WITH PROBLEM EMOTIONS (ACPE)	Pre test vs. Post test (p< 0.001)	Significant increase in the ability to cope with problem emotions from pretest to post-test. Mid test increase not statistically significant (p=0.059)
ENHANCEMENT OF POSITIVE EMOTIONS (EPE)	Pre test vs. mid test (p=0.029)	Significant increase in positive emotions from pretest to both mid and post test
ADEQUATE DEPTH OF FEELING (ADF)	Not statistically significant	No significant change in perceived depth of feeling across time points
ADEQUATE EXPRESSION AND CONTROL OF EMOTIONS (AECE)	Not statistically significant	No significant change in perceived adequacy of expressing and controlling emotions across time points

The results of the paired sample t-test were obtained for all the dimensions of flow state and emotional competence. Table 1 provides the comparison of the mean scores, standard deviation (SD), t-values and p-values for pre test, mid test and post test. Table 2 provides the description of findings of comparing the Pre Test, Mid Test and Post Test scores of all Dimensions.

8. Discussion

In this research study, the pre test, mid test and post test scores revealed that exposure to Indian Classical music intervention track has had its influence in flow state as well as some dimensions of emotional

competence. The analysis of the result was undertaken for each and every dimension of the variables. Results indicate that there was a significant increase in the flow state dimensions including Fluency, Absorption and decrease in Worry from pre test to both mid test and post test. This indicates that the Indian classical music was able to promote a state of flow.

To be precise, significant increase in Fluency indicates greater ease in ability like generating ideas, significant increase in Absorption indicates increase in focus and concentration, a decrease in the dimension Worry indicates an increased level of calmness and relaxation.

As far as the emotional competence was concerned, there was no statistically significant increase in the dimensions Adequate Depth of Feeling (ADF) and Adequate Expression and Control of Emotions (AECE). However, the dimensions Ability to Function with Emotions (AFE) and Ability to Cope with Problem Emotions (ACPE) showed a significant increase from pre test to post test indicating that the intervention track was able to have positive impact on the emotional competence dimensions. Furthermore, it also indicates an enhancement in the capacity to manage emotions effectively.

9. Limitations:

- The small sample size limits the generalizability of these findings.
- The Flow Short Scale and Emotional Competence Scale are self-report measures, which can be susceptible to bias.
- Other factors like personality traits or baseline emotional states that were not controlled in this study might have influenced the results.
- Limited resources and time frame was one of the barriers to go deeper into the topics and include more ways to obtain the data.

10. Future Scopes:

- Future studies can involve larger participant pools.
- Utilizing physiological measures alongside self-reported data could strengthen future research.
- The topic of the study can be broadened and include other important and relevant factors including personality traits, baseline emotions, day-to-day shifts in mood, environment into account.
- Other possible statistical functions can be used in future researches to derive more accurate interpretation of the scores.
- Future researches can take up Emotional regulation and one of the variable as it can help in developing effective ideas and strategies to bring new therapeutic intervention plans which can be used in clinical settings as well.

11. Conclusion:

In this research study titled “Effect of Indian Classical music on Flow State and Emotional Competence of Young Adults,” one major aim was to understand how Indian Classical music influenced and induced flow state and altered emotional competence of young adults over pre test, mid test and post test. The dependent variables were Emotional Competence and Flow state. Independent variable is the Indian Classical music.

The idea was to observe the changes brought by Indian Classical Music in the different dimensions of flow state and emotional competence. The music track was set to Raag Miyan Ki Malhar. Participants took part in the listening sessions and responded to the flow state and emotional competence survey

questions over the pre test, mid test and post test periods. A significant increase in the dimensions of flow state over different time points revealed that Indian classical music intervention was able to promote a state of flow.

As far as the emotional competence was concerned, the Ability to Function with Emotions (AFE) and Ability to cope with problem emotions (ACPE) showed a significant increase from pre test to post test indicating that the intervention track was able to have positive impact on the emotional competence dimensions. This indicates that there is scope for further research into these dimensions.

However, this research study is a gateway to a profound realization of the possibility of the healing properties of Indian Classical Music, the positive influence of the Raaga Miyan ki Malhar and the instruments which were involved in the music intervention track.

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