



**A SURVEY OF THE MUSICAL PREFERENCES OF YOUNG ADOLESCENTS  
NEWLY ADMITTED TO THE MEDICAL SCHOOL**

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**ABSTRACT**

To explore the association between musical preferences and the stress- relieving and/or enhancing reading ability of the preferred class of musical items. 60 adolescents (30 males and 30 females of I MBBS students of a private medical college in Puducherry) were given a single exposure of Rag Bilahari in folk style for 20 minutes, after which they were asked to describe their subjective feelings evoked on listening music which was analyzed with their individual musical preferences. The majority among the adolescent group felt that the musical piece would “reduced their stress” have a preference for folk tune (“reflective & complex” musical dimension of Rentfrow & Gosling) As most of the females felt the music is relaxing is significantly greater than males, we can presume females use music for emotional purpose. Majority of participants belong to the “reflective & complex” musical dimension and feel the music reduces their stress and would enhance their reading ability.

**KEYWORDS:** Medical students, Music preferences, Stress relief.



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## INTRODUCTION

It is well known that music is widely performed and listened to in social gatherings like weddings and parties. But music also serves important roles beyond the purely social context, since many individuals seek out particular types of music to regulate their emotional states. For example, depressed individuals may prefer to listen to musical pieces which sustain their melancholic mood<sup>1</sup>. There are multiple psychological factors behind peoples' different music preferences, from emotion regulation to cognitive development, along with providing a means for self-expression<sup>2</sup>. While Cattell (1953) considers musical preferences as a window into the unconscious, many researchers regard musical preferences as representing specific personality traits<sup>3</sup>. Many studies conducted conclude that individual personality influence music preferences. These studies use the Big Five Personality traits in order to classify personality into five divisions namely openness to experience, extraversion, neuroticism, agreeableness and conscientiousness. Though the myriad psychological and social processes influencing the peoples' music preferences are complex, examining the ties between musical preferences, gender and cognitive abilities can not only throw a light on the association between music preferences and cognitive psychology, but also allow us to gain an insight as to whether preferred musical items are capable of relieving stress, enhancing reading ability, etc. in those who are exposed to stressful situations, finding it necessary to enhance their cognitive faculties. The present study was designed to examine the individual differences in musical preferences of adolescents newly admitted to the Medical School, since we presumed that the new exposure to medical curriculum might trigger some stress in these adolescent students, which might provide some clues to their musical personalities, and the efficacy of their inherent musical preferences in reducing stress, on listening to a piece of music identical to their tastes

## MATERIALS & METHODS

### *Music*

For the study Indian melodic mode known as Rag Bilahari was used. Rag Bilahari is a melodic mode in Carnatic music<sup>4</sup>. This melodic mode evokes specific moods such as joy, courage and heroism. It is usually featured in the first half of a concert and is typically considered as a lively one to perform in a concert platform. It is similar to the C Major Scale of Western music and radiates a positive, lively and sprightly atmosphere. Folk tunes are traditional melodies sung from the times of our forefathers, specific to particular culture or region, that reflect the natives' carefree and simple outlook on life.

### *Subjects*

60 adolescents (30 male and 30 female of I MBBS students of a private medical college at Puducherry) who volunteered to participate were recruited for the study.

### *Inclusion Criteria*

Keen aptitude and taste for music listening.

### *Exclusion Criteria*

Hearing abnormalities & learning disabilities. Informed consent was taken after explaining the nature of the study. They have given a single exposure for a period of 20 minutes, after which they were asked to describe their subjective feelings invoked on listening to the musical item for the first time, for example, the effect the music had on relief from stress, feeling of relaxation, improvement in reading ability on a piece of paper

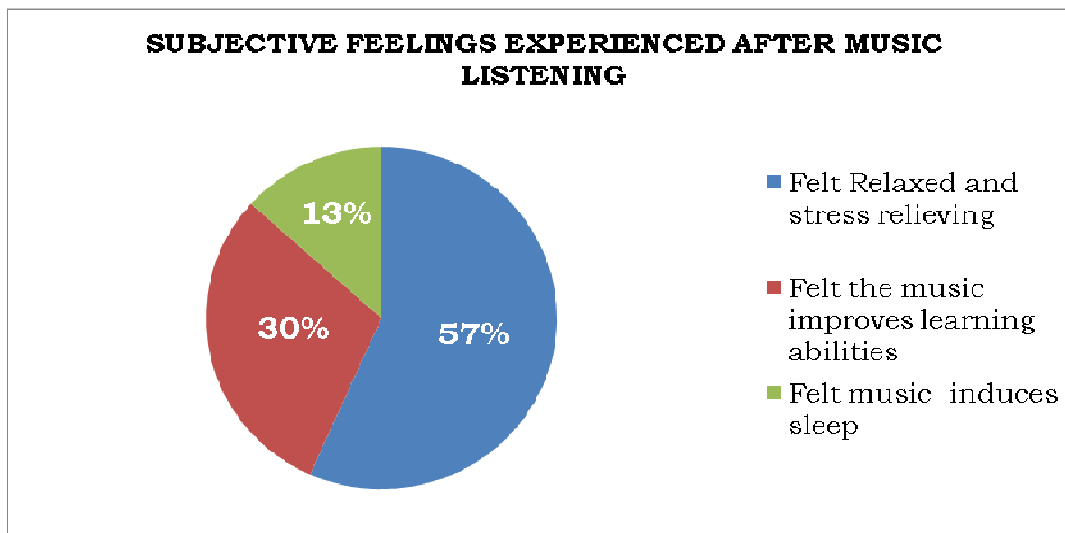
## RESULTS

The participants were categorized into three groups, based on the impact created by the music, when administered to them for 20 minutes. 34 participants out of 60 (57 %) felt that the music was relaxing and reduced their

stress and is consider as group I for further studies. 18 participants out of 60 (30 %) felt that it would improve their reading ability and is

consider as group II while 8 participants out of 60 (13 %) felt it was sleep inducing is consider as group III for further studies. (Graph 1)

**Graph 1**  
**Subjective feeling and experience after music listening**



Out of 34 participants who felt that music was relaxing and stress relieving (Group I), 14 (41%) were males and 20 (59%) were females. Out of 18 participants who felt that the music improves learning abilities (Group II), 10 (55%) were males and 8 (45%) were females. Out of 8 participants who felt music induces sleep (Group III), 6 (75%) were males and 2 (25%) were females. (Table 1)

**Table 1**  
**Gender differences in subjective feelings experienced after music listening.**

Groups	Category	No. of Students	No. of Males	No. of Females
Group-I	Felt Relaxed and stress relieving	34	14 (41%)	20 (59%)
Group-II	Felt the music improves learning abilities	18	10 (55%)	8 (45%)
Group-III	Felt music induces sleep	8	6 (75%)	2 (25%)

The musical preferences for classical music, folk tunes & heavy metals of the participants also were collected. In Group I participants out of 34 participants 8 (23.5%) preferred to listen classical music, 20 (58.8%) preferred to listen folk tunes and 20 (58.8%) preferred to listen Heavy metals. In Group II participants out of 18 participants 2 (11%) prefer to listen classical music, 10 (55%) preferred to listen folk tunes and 6 (33%) preferred to listen Heavy metals. In Group III participants out of 8 participants 1 (12.5%) preferred to listen classical music, 7 (87.5%) preferred to listen Heavy metals while no one wants to listen folk tunes. (Table 2)

**Table 2**  
**Subjective feelings after music listening and musical preferences**

Groups	Classical music	Folk tunes	Heavy metals
Group-I	8 (23.5%)	20 (58.8%)	6 (17.6%)
Group-II	2 (11%)	10 (55%)	6 (33%)
Group-III	1 (12.5%)	nil	7 (87.5%)

## DISCUSSION

Rentfrow and Gosling used the STOMP “Short Test Of Musical Preferences” to analyze the music preferences of undergraduate students. They also observed that these categories correlated with the Big Five Personality Triads’. They classified musical preferences into four categories viz, “reflective and complex”, “intense and rebellious”, “upbeat and conventional” and “energetic and rhythmic”. Based on their observations we can infer that each category prefer a certain type of music

1. **“Intense and rebellious”** group prefer alternative, rock and heavy metal music and are related to Openness to new experience and less Neuroticism.
2. **“Upbeat and conventional”** category enjoy country, religious, pop sound tracks they reveal a positive correlation with Extraversion, Agreeableness, Conscientiousness and negative correlation with Openness to New Experiences
3. **“Energetic and rhythmic”** people prefer hip hop, rap, funk, soul, electronic music and this group is positively related to Extraversion, Agreeableness, negatively related to Neuroticism.
4. **“Reflective and complex type”** enjoy classical, blues, jazz and folk music and are positively related to Openness to New Experiences, self perceived intelligence, verbal ability, negatively related to social dominance.

It is evident from the above categorization that students who prefer folk music and classical music are included under the category of “reflective and complex” dimension of musical personality, which is characterized by an

inventive nature with active imagination, valuing aesthetic experiences, considering themselves to be intelligent. These personalities of students are physically active, socially dominant and are not conventional. Therefore Groups I, II fall under the category of “*reflective and complex*” musical personality, according to the classification of Rentfrow and Gosling<sup>1</sup>. Our analysis reveals that on the whole, adolescents endowed with the ‘reflective & complex’ musical personality feel that the musical piece is relaxing, stress-relieving, and has the power of improving their reading ability. This makes us delve further into the stress relieving, and performance – enhancing attributes of folk tunes. The folk tunes reflect the wholesome and simple lifestyle of natives who live amidst nature, mountains, valleys, lakes etc. The folk songs are an expression of the natives’ constant touch with nature and face to face with reality. This harmonious existence with nature is in contrast to the spiritually empty routine of contemporary, crowded city life. These natives are immune from the continuous grinding mental pressures due to the attempt to “make a living” from which all of us in the modern world suffer<sup>5</sup>. This care-free and simplistic style of living is reflected typically in the music sung by them over multiple generations. The folk music of the natives is imbued with their energies, and is capable of relieving stress, which in turn, induces mental clarity in the student population receptive to such music. As far as gender differences are concerned, the majority of females who feel that the music is relaxing, is significantly greater than men (Group-I.). According to Chamorro-Premuzic<sup>6</sup>, men tend to use music

for cognitive reasons, while women use music for emotional purposes. Our analysis also reveals that females use music for emotional purpose.

## CONCLUSION

Our analysis of the musical personalities of adolescents newly admitted to the Medical School, and its impact on the subjective feelings, after a single exposure to a melodic mode in C Major Scale known as Rag Bilahari, rendered in folk style, reveals the following findings: The majority (87%) of the adolescents belong to the musical preference dimension of '*reflective & complex*', characterized by an active imagination with inventive nature, which probably led them towards their choice of

medicine as their profession. The subset of participants among the '*reflective & complex*' dimension, who state that the music reduces their stress, and would enhance their reading ability, have a predominant preference towards listening to folk tunes, probably because of the mental clarity attained as a result of the relief from stress on listening to folk music. When compared to men, women students state that the music is relaxing, making it evident that women use music for emotional purpose. Rendition of the melody in folk style may have been responsible for the relief from stress and mental clarity. More studies on adolescents admitted to other professional courses like Engineering, Chartered Accountancy, etc., are needed to extend these findings.

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