

Impact of Music on Student's Academic Performance

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Abstract: Music has become an indispensable part of student's life. This Paper aims to portray the impact of Music on Student's Academic Performance. Therefore, this study was conducted among one hundred students to observe the impact of Music on Student's Academic Performance.

Index-words: Music, Frequency of listening, Student's Perception, Studies, Academic Performance

1. INTRODUCTION

Music is an art of communicating our thoughts and feelings in significant sound forms by expressing the components of rhythm, melody and harmony through voices, instruments, or both. Music plays an extraordinary role in everybody's life. It keeps us occupied in our free time and makes our life serene. In this digital era, we see student's plug in their earphones for almost all a day. So here comes the need to test whether it has affected the lives of students. How it has made changes in the lives of students. The definition of music has been evolved over the years, every sound that they listen is Music. But that is not the case, so this research has been proposed towards sensitising the essence of Music in the lives of students, while they are studying. The findings of the study revealed that students possess a positive attitude towards listening music but they are bewildered to believe that Music had helped in their academic performance. It was also found that the genre of listening music while studying does not differ among genders.

2. OBJECTIVES OF THE RESEARCH:

1. To gain student's perception, feelings and ideas about the role of Music in concentration.
2. To observe the effect of music on concentration while studying and analysing the performance.
3. To observe the impact of different types of music on students' performance.
4. To widen the scope of awareness and sensitivity towards Students.
5. To analyse, appreciate and value musical compositions and performances.

3. HYPOTHESES:

H0: Students Listening music while studying impacts their academic performance.

H1: Students Listening music while studying does not impacts their academic performance

4. REVIEW OF LITERATURE:

Antony, Vishnu and gayatri (2018) concludes that music plays a major role in the academic performance of college students. 40.5% of the students listen to music while studying. 64% of students who lack concentration while studying. 64% of students believe that listening to music while studying increases their efficiency whereas they lack concentration while studying in silence. Usually, the students who have a knowledge of music are more benefitted. It was also found that music has an effective effect on relieving stress. Especially, since the survey was focused on college students, it proves that they tend to listen music as it helps in relieving them from stress and it also helps them to focus on their studies. The research was conducted by the means of Primary data by surveying 80 college students, by making them questionnaires filled. Their opinions to the effect of music on studies were recorded and to attain results on whether it had a positive or negative feedback in their grades were analysed through the questionnaire. The survey also included question about their interest in music and how it helps them in studies. The survey was conducted through online mode.

Naveen, Mohamad, Wajidi, Yong, Vishroothi Swamy Ravindra and Ashwini Aithal (2016) concludes that the effect of listening to music on concentration and academic performance of the student: Cross-sectional study on medical undergraduate students. Nowadays, many students are developing keen interest in listening to music. Some of them think that it is good for them as it enhances their efficiency and effectiveness. On the other hand, some think that it might disturb them and not let them do their work with full attention and focus. The main aim of this study was to find out if the students agree to the notion of listening to music while studying or it disturbs them. 200 Malaysian students were asked various kinds of questions regarding their inclination and interest towards music, specifically when they are studying. Moreover, there was a small experiment conducted for better results. The data then was plotted on graph and the results were as follows: 47% of the respondents felt that music helped them concentrating while studying. 29% of them are of view that music helps them keep their mind calm. 80 out of 200 Students didn't prefer to listen music as they thought it

would be a distraction for them. So, by the given data we can conclude that listening to music while studying is actually beneficial and it helps to increase concentration. In fact, it just might also improve the academic performance of the student.

Emily A. in her article named 'Impact of Music on Student Achievement' (2015) says that pop music helps student in reading. The study was done on 17 students of grade 5. It states that background music creates a positive vibe. Students were asked to solve a quiz while the music was been played in background. The independent variable in this study is the types of background music playing during independent work and quiz taking. The two types of music are classical and pop music with lyrics. According to the data, 8% more of the students when pop music was played in background. The findings from this study also open up more possibilities for studying the impacts of various other genres could have in the classroom on student learning

5. RESEARCH METHODOLOGY:

- (1.) **Respondents and Sample Size:** The current research intends to investigate the degree of effectiveness of music on academic performance among students. The data was collected from various college students and school students who are studying at current. The sample was a cumulative of 100 student responses which was used.
- (2.) **Participants and Procedure:** A cumulation of one hundred student responses were taken for the study. Data on the same were procured on real time basis using online method of collecting data with the help of Google Forms. Questionnaires were administered to the participants only after taking the due consent and assuring them about the privacy related issues. Data were collected during a period of 5 days from
Among the respondents, 51% were male and 49% were female belonging to colleges as well as schools.

6. DATA CLASSIFICATION

Table 1. Classifications of Respondents Based on Gender

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 51 | 51.0 | 51.0 | 51.0 |
| female | 49 | 49.0 | 49.0 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |

Table 2. Classification of respondents based on Listening Frequency of Music While Studying

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Valid 1 | 8 | 8.0 | 8.0 | 8.0 |
| 2 | 18 | 18.0 | 18.0 | 26.0 |
| 3 | 23 | 23.0 | 23.0 | 49.0 |
| 4 | 33 | 33.0 | 33.0 | 82.0 |
| 5 | 18 | 18.0 | 18.0 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |

- ❖ **Demographic Profile of the Respondents:** As per Table 1, of the respondents 100 respondents, 49 were female and 51 were male students from various colleges.

- ❖ **Frequency Distribution of the Respondents on the basis of Listening Music while Studying:** According to Table2. Out of a total of 100 respondents 18 were the dedicated listeners of music while studying, 33 respondents rated for a three rate which showed their enthusiast towers music while studying, 23 respondents rated two as their scale which shows a casual use while studying, 18 respondents rated one as their scale which signifies that they are mild-user music while studying, while 8 of the respondents rated one as their scale of operation which showed their unlikeliness towards listening music while studying.

7. TOOLS USED FOR ANALYSIS:

- 7.1 Regression Analysis** is a Statistical tool that is used to examine the relationship two or more variables of interest. Regression analysis helps in determining the change in value of dependent variable when Independent variable has a significant change. In this analysis we used Frequency of listening Music while studying as an Independent variable and the Duration of Study as Dependent Variable to study the impact on Academic Performance.
- 7.2 ANOVA:** Analysis of variance (ANOVA) is a collection of statistical models and their associated estimation procedures used to analyse the differences among group means in a sample. ANOVA statistical significance result is independent of constant bias and scaling errors as well as the units used in expressing observations
- 7.3 One Sample t – Test:** One sample t – test is a statistical procedure that is used to know the mean difference between the sample and the known value of the population mean. We draw a random sample from the population and then compare the sample mean with the population mean and make a statistical decision as to whether or not the sample mean is different from the population. The study used one sample t – rest to test the significant difference between test value and observed mean.
- 7.4 Graphical Representation-** It is the visual representation of data which help us to present our observations in a meaningful and easily understandable format. We had used Bar Graphs to determine that how many students believed that music is helpful in their academics.

8. ANALYSIS & RESULTS:

Table 3: Model Summary of Regression Analysis

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .330 ^a | .109 | .100 | .620 |

Predictors: (Constant), Impact on Duration of Study
Dependent Variable: Frequency of Listening Music

The Regression analysis between Frequency of Listening Music and Duration of Study Time gave us an outcome that is represented in Table 3 which provides us with the value of R and R². The R vale represents the simple correlation which is 0.330 (the “R” Column), which indicates a positive low correlation. The R² value (the Square column) indicates how much of the total variation in the dependent variable. In this case 10.9% can be explained.

Table4: ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 4.591 | 1 | 4.591 | 11.950 | .001 ^b |
| | Residual | 37.649 | 98 | .384 | | |
| | Total | 42.240 | 99 | | | |

a. Dependent Variable: Impact on Duration

b. Predictors: (Constant), Frequency

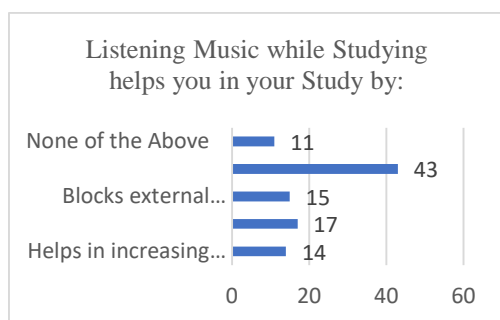
The next table is the ANOVA table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable) and is shown below:

- **Functional Outcome:** Look at the Regression Row and observe the value of Sig. which tells us the significance of the test, we obtain a value of 0.001 which is less than 0.05 which tells that our study is significant and there is a positive relationship between the Frequency of Music on the Duration of Study-Time.

Table 5. Independent Samples T- test between the usage of Lyrical music or Non-Lyrical Music

| | | t-test for Equality of Means | | |
|-------------------|-----------------------------|------------------------------|-----------------|-----------------------|
| | | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Lyrical Music | Equal variances assumed | .001 | .730 | .205 |
| | Equal variances not assumed | .001 | .730 | .205 |
| Non-Lyrical Music | Equal variances assumed | .000 | .834 | .216 |
| | Equal variances not assumed | .000 | .834 | .217 |

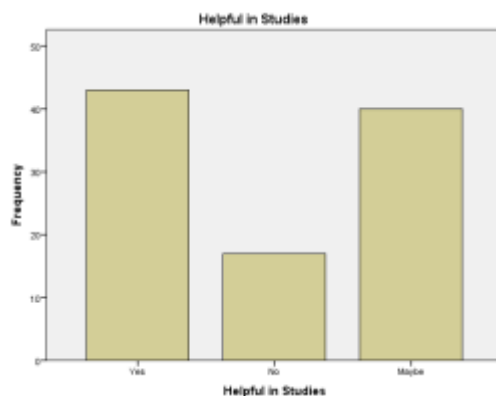
- **Functional Outcome:** As per t - test Table 6, gender and the behaviour of listening music shows that the value of “t – test” is 0.205 among lyrical music and 0.216 among non-lyrical music. A positive value indicates the relationship between the variables in the same direction. The value of p for the test is above 0.05. It signifies that t - test is not significant. Therefore, it does not matter the type of music being played among students while studying whether it is lyrical or non-lyrical music.



- **Functional Outcome:** Through the above graphical analysis, 43% of the respondents believe that listening music while studying which makes feel them lively, and 17 people believes that listening music prevents them from sleeping while 14 people believes that increases their level of concentration which helps to study them efficiently and among 11 of the respondents believes that it does not helps them. So, the mean observation that we found was Music helps most of students in their studies in one or another way, so we can conclude that Music has impacted the Academics of the Student.

Table 6. Classification of Respondents belief of Music Being helpful in their academics

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| Yes | 43 | 43.0 | 43.0 | 43.0 |
| No | 17 | 17.0 | 17.0 | 60.0 |
| Maybe | 40 | 40.0 | 40.0 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |



H0: Students Listening music while studying does not impacts their academic performance.

H1: Students Listening music while studying impacts their academic performance

- **Functional Outcome:** The above Histogram Chart depicts the opinion of the students that Is Music helpful in Studies. We obtained a bewildered kind of response from Students where forty three percent students believed that Music directly helps in their studies while forty students were not sure that whether Music had benefited in their Studies or not whereas seventeen of them believed that Music had not impacted their academics. So, we can conclude that students somehow believed that Music had impacted their Academic Performance either directly or indirectly. Hence, we reject null hypotheses which proves H1 is True which signifies that Students Listening Music while studying Impacts their Academics.

9. LIMITATIONS OF THE RESEARCH:

There is always scope for future research to improve the study. The present study has certain limitations that needs to be addressed for any future research. This research work, despite the useful results, suffers from limitations, first of all, sample used mainly consisted students from Christ (Deemed to be University). This may limit the generalizability of the findings.

This study was carried on quantitative data with a well-structured research. Researchers can add more variables in the future and can carry on research with factors that have not been covered due to limitations. In future researchers can provide useful insights on the acceptance behaviour of listening music while studying. The researcher can also analyse the dependency of music in student's life and his academic curriculum.

10. CONCLUSION:

It was observed that students hinge to believe that music has a direct implication in their academic performance but the study analysed that students found music helpful while studying, which may have an impact student's academic performance. Hence, our research marked a positive end with a conclusion that Music had helped students in different ways while studying.

We also found that the types of different music whether it is lyrical or non-lyrical it does not matter to students that which music to listen while studying, at the same time we also found a common medium of listening music for 75% of our respondents were Mobile-Phones which may be a distracting element in their studies. The only source of inspiration towards listening music was to feel lively during their studies irrespective of their parent's advice of not listening music while studying. The current research had made answers to much of the unknown answers which can be helpful in understanding further perception of students for music.

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