STATISTICAL (A) – PERSONALITY
Descriptive Analysis

METHODS

Using the purposive sampling procedure, the total number of sample taken for the age group 13 - 19 years, 20 - 40 years and 40 - 75+ years were 1000. 13 - 19 years of youth were from the classes 8th to graduation level. It includes the students from the schools and universities of Lucknow, Kanpur and Rajasthan. 20 - 40 years of people were from the post graduation level including the working people from the field of engineering, doctors, bankers etc. 40 - 75 + years of people were engaged into different jobs, business, few were retired people and some were from the old age homes as well.

Under the age group of 13 – 19 years out of 1000, total 946 appeared for the test. Amongst them total number males were 483 and that of females where 463 and rest 54 were not present. I divided the males and females in equal ratios. Amongst the participants, few were learning music, many of them just had interest in listening to different types of music, few even had no inclination towards music and many were from different subjects like commerce, science, sports and arts as well. Therefore this sampling is supposed to be the purposive sampling.

Under the age group of 20 – 40 years out of 1000 total 946 appeared for the test. Amongst them total number of males were 463 and that of females where 483 and rest 54 were not present. We took equal numbers of males and females for this age group. They were students of graduation level, some were into jobs and professionals like teachers, doctors, or self employed etc.

Under the age group of 40 - 75+ years out of 1000 total 900 appeared for the test. Amongst them total number of males were 468 and that of females where 432 and
rest 100 were not present. I took 100 each students of post graduation level i.e. 100 from pg first year and 100 from pg second year total 200 students and 200 students of different professional courses. 300 people were from the different jobs including that of bankers doctors teachers (both related to music and non music background), IAS officers policemen etc. And 200 other were the people who were either living in old age homes or were single in their old age or are forced to live isolated or lonely.

**Objectives:**

7. To find that there is or there isn’t any significant association in gender and personality for all music types and for all age groups.

8. To find that does liking for any type of music will have same type of effect on personality irrespective of gender.

9. To compare average score obtained by rural and urban persons according to their personality traits and music inclinations for various age groups.

To find the answers for the above planned aims every student were given the sets of questionnaire to answer. To get the personality of each, they were given ‘TIPI’: “TEN ITEAM PERSONALITY INVENTORY” and next to know their favorite music style or genres they have been give ‘STOMP’: “SHORT TEST OF MUSIC PREFERENCE”.

Further data have been elaborated with graphical presentation for more lucid view of the analysis for the broad picture of acceptance of our hypothesis. The purpose of graphical presentation of data is to give a visual of numbers by using various charts or bar diagram.

On getting the entire solved questionnaire, we used statistical process using SPSS – 16.0 where we used Chi-Square – \[ x^2_e = \sum \left( \frac{O_i - E_i}{E_i} \right)^2 \] to see the association between personality and music types including the gender criteria as 5% level of significance. This has been used for statistical hypothesis. It’s been used to compare observed data with data we would expect to obtain according to the specific hypothesis.
Above mentioned objective and methods would remain the same for the gender analysis between the rest of the age groups i.e. 13 - 19 years, 20 – 40 years and 40 - 75+ years. Each analysis of male and female will be explained individually through tabulation form along with the graphical presentation. Towards the end of analysis it would be concluded with the result for the planned aim of each gender in context to age group and personality.

**Descriptive Analysis:**

Here we'll be conducting our test on youth between the age group of 13 – 19 years, including the 5 personality traits and four music types, by the individual analysis of each personality traits under the same age group i.e. Youth – 13 – 19 years.

A. **AGREEABLENESS:**

The students with the personality trait of Agreeableness, we attempted to see the reflection of music types. Number of males and females who have different liking for music are given below in graphical form.

**H01** – There is an association between choice of music and gender for Agreeableness personality.

**H1** – There is no association between choice of music and gender for Agreeableness personality.

![Agreeableness Table](A-Fig.19)
According to the above graph we can see that ratio of males is higher as compared to females in the music type accept in Energetic and Rhythmic music type, were the numbers are equal. As per the individual analysis of this particular trait amongst, it shows that males and females are proved to be having Agreeableness personality with the inclination towards Upbeat and Conventional music type according to the graph obtained above.

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 1.096 and corresponding p – value = .778

Since the p value is greater than .05, we can conclude that there is no significant association between inclination towards music types and gender, for Agreeableness personality trait.

**B. CONSCIENTIOUSNESS:**

The second personality trait amongst the five traits is Conscientiousness. The persons with the personality trait of Conscientiousness between the age group of 13 – 19 years, we tried to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below:

**H02** – There is an association between choice of music and gender for Conscientiousness personality.

**H2** – There is no association between choice of music and gender for Conscientiousness personality.
As we can see in the above graph there is not much difference in the inclination for music in males and females. Where as in Intense and Rebellious music type the ratio is equal as compared to other music types followed by a slight variation in Upbeat and Conventional Music type. But according to individual analysis we could say that males and females who are proved to be having Conscientiousness personality trait have inclination towards Reflection and Complex music type in comparison with the other present data.

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 1.321 and corresponding p – value = .724

Since the p value is greater than .05, we can conclude that there is no significant association between inclination towards music types and gender, for Conscientiousness personality trait.

C. **EXTRAVERSION:**

Being the 3rd trait amongst the five personality factor we further continued the process of attempting the test to see the reflection of music types on the following
trait. Number of males and females who have different liking for music are given below in graphical form:

**H₉** – There is an association between choice of music and gender for Extraversion personality.

**H₃** – There is no association between choice of music and gender for Extraversion personality.

![Extraversion Graph](image_url)

According to the above graph there is very slight difference amongst the inclination of males and females towards music type. But according to the above bar diagram it proves that people having Extraversion personality trait in them, they have inclination more towards Energetic and Rhythmic music type.

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 6.881 and corresponding $p$ – value = .076

Since the $p$ value is > .05, we can conclude that there is no significant association between inclination towards music types and gender. However, the association is
significant if we conclude at 10% level of significance, for Extraversion personality trait.

**D. NEUROTICISM:**

The 4th personality trait amongst the five traits is Neuroticism. We attempted the same procedure to see the reflection of music types further on the following trait. Number of males and females who have different liking for music types are given below:

**H₀₄** – There is an association between choice of music and gender for Neuroticism personality.

**H₄** – There is no association between choice of music and gender for Neuroticism personality.

As we can see from the above graph that almost in all the music types the ratio of inclination is equal in males and females except Intense and Rebellious and Upbeat and Conventional music types. **Though according to the individual analysis of this particular trait amongst the five other, it shows that the number of males and females who answered the highest in this trait is for Intense and Rebellious music type.**
Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 1.808 and corresponding p – value = .613

Since the p value is greater than .05, we can conclude that there is no significant association between inclination towards music types and gender, for Neuroticism personality trait.

E. OPENNESS

The last and the final trait amongst the Big Five Personality trait is Openness. Further continuing the process of attempting the test to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below:

H$_{05}$ – There is an association between choice of music and gender for Openness personality.

H$_{5}$ – There is no association between choice of music and gender for Openness personality.

According to the above graph, the ratio of males and females inclination towards the four music types differ slightly as in Upbeat and Conventional music type the ratio
are same as compared to other three. But according to the individual analysis of this particular trait amongst the five other, it shows that the number of males and female who answered the highest in Openness is for Intense and Rebellious music type.

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ - Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = .469 and corresponding p – value = .926

Since the p value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Openness personality trait.

Conclusion –
From the graphs 1 – 5 we have seen individual analysis of each personality with the four music types and even observed that which personality is more inclined towards which music type. But viewing the whole data it is very much clear that the most people between the age group of 13 – 19 years i.e. youth have **Openness to New Experience** personality trait in them and the choice of music they have or they are more inclined is **Intense and Rebellious** music type which includes genres like: heavy metal, rock, alternative types. It is found that choice of music for all personality traits is not gender bias.

Which proves that music have a very important impact on personality and behavior. As youths are often dominated by the need to establish identity, their urge for independence often takes the shape of a juxtaposed stance to the perceived ‘status quo’, that of parents and the establishment,” Therefore Intense and rebellious music, seen as aggressive, tense and characterized by loud, distorted sounds has the rebellious connotations that allow youth or children of 13 – 19 years to stake a claim for the autonomy that is one of this period’s key ‘life challenges’.
DESCRIPTIVE ANALYSIS

Here we’ll be conducting our test on Adulthood and Senior Adulthood under the age group of 20 – 40 years, including the 5 personality traits and four music types, by the individual analysis of each personality traits under the same age group i.e. Adults.

A. **AGREEABLENESS**:  
The adults or seniors with the personality trait of Agreeableness, we attempted to see the reflection of music types. Number of males and females who have different liking for music are given below in graphical form.

**H₀₁** – There is an association between choice of music and gender for Agreeableness personality.

**H₁** – There is no association between choice of music and gender for Agreeableness personality.

![Graph showing Agreeableness](A-Fig.24)

According to the above graph there is very slight difference amongst the inclination of males and females towards music type. But according to the above bar diagram it proves that adults having Agreeableness personality trait are more inclined towards Energetic and Rhythmic music type.
Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ - Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 5.628 and corresponding $p$ – value = .131

Since the $p$ value is greater than .05, we can conclude that there is no significant association between inclination towards music types and gender, for Agreeableness personality trait.

**B. CONSCIENTIOUSNESS:**

The second personality trait amongst the five traits is Conscientiousness. The adults with the personality trait of conscientiousness in the age group of 20-40 years, we tried to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below:

**H02** – There is an association between choice of music and gender for Conscientiousness personality.

**H2** – There is no association between choice of music and gender for Conscientiousness personality.

<table>
<thead>
<tr>
<th>Music Type</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>R &amp; C</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>I &amp; R</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>U &amp; C</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>E &amp; R</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

**(A)-Fig.25**

417
As we can see in the above graph there is not much difference in the inclination for music in males and females. Where as in Intense and Rebellious, Upbeat and Conventional and in Energetic and Rhythmic music type the ratios are equal as compared to Reflective and Complex music type. But according to individual analysis we could say that males and females who are proved to be having this personality trait have inclination towards three music types i.e. Intense and Rebellious, Upbeat and Conventional and Energetic and Rhythmic music type.

Now to test the hypothesis that choice of music types will be affected by gender through applying \( X^2 \) – Test for all personality traits. For the above trait the values that are obtained is reported below:

\[ X^2 - value = 0.917 \text{ and corresponding } p - value = 0.724 \]

Since the p value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Conscientiousness personality trait.

C. **EXTRAVERSION:**

Being the 3\(^{rd}\) trait amongst the five personality factor we further continued the process of attempting the test to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below in graphical form:

**H03–** There is an association between choice of music and gender for Extraversion personality.

**H3 –** There is no association between choice of music and gender for Extraversion personality.
According to the above graph above, the ratio of males and females inclination towards the four music types differ slightly as in Upbeat and Conventional music type the ratio are same as compared to other three. But according to the individual analysis of Extraversion personality trait amongst the five other, it shows that the number of males and female who answered the highest with this trait is for Upbeat and Conventional music type. 

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = 2.840 and corresponding $p$ – value = .417

Since the $p$ value is greater than .05, we can conclude that there is no significant association between inclination towards music types and gender, for Extraversion personality trait.

**D. NEUROTICISM:**

The 4\textsuperscript{th} personality trait amongst the five traits is Neuroticism. We attempted the same procedure to see the reflection of music types further on the following trait.
Number of males and females who have different liking for music types are given below:

**H02** – There is an association between choice of music and gender for Neuroticism personality.

**H2** – There is no association between choice of music and gender for Neuroticism personality.

![Graph showing Neuroticism](image)

As we can see from the above graph that almost in all the music types the ratio of inclination differs in male and female. *Though according to the individual analysis of Neuroticism personality trait, it shows that the number of males and females who answered the highest in this trait is for Intense and Rebellious music type.*

Now to test the hypothesis that choice of music types will be affected by gender through applying X² – Test for all personality traits. For the above trait the values that are obtained is reported below:

\[X^2 \text{ – value} = 1.881 \text{ and corresponding } p \text{ – value} = .598\]
Since the p value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Neuroticism personality trait.

E. OPENNESS:
The last and the final trait amongst the Big Five Personality trait is Openness. Further continuing the process of attempting the test to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below:

H0 – There is no association between choice of music and gender for openness personality.

H1 – There is no association between choice of music and gender for openness personality.

![OPENNESS](image)

According to the above graph above, the ratio of males and females inclination towards the four music types differ slightly as in Upbeat and Conventional music type the ratio are same as compared to other three, and also the highest with this trait.

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:
X² – value = 1.914 and corresponding p – value = .590

Since the p value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Openness personality trait.

Conclusion –
From the graphs 1 – 5 we have seen individual analysis of each personality with the four music types and even observed that which personality is more inclined towards which music type. But viewing the whole data it is very much clear that the most people between the age group of 20–40 years i.e. Middle Adulthood have Extraversion personality trait in them and the choice of music they have or they are more inclined towards is Upbeat and Conventional music type which includes genres like: Jazz, Romantic, Pop types. It is found that choice of music for all personality traits is not gender bias.

DESCRIPTIVE ANALYSIS
Here we’ll be conducting our test on Adulthood and Senior Adulthood under the age group of 40+-75+ years, including the 5 personality traits and four music types, by the individual analysis of each personality traits under the same age group i.e. Senior Adulthood

A. AGREEABLENESS:
The person with the personality trait of Agreeableness, we attempted to see the reflection of music types. Number of males and females who have different liking for music are given below in graphical form.

H₀₂ – There is an association between choice of music and gender for Agreeableness personality.

H₂ – There is no association between choice of music and gender for Agreeableness personality.
According to the above graph we can see that ratio of males is higher as compared to females in Reflection and complex and also in Intense and Rebellious music type but in Energetic and Rhythmic female is high. Though in Upbeat and Conventional music type the ratio is equal accept in energetic and rhythmic music type, were the numbers of female is slightly higher than that of male. *As per the individual analysis of this particular trait, it shows that males and females who are having Agreeableness nature their inclination is more towards the Reflection and Complex music type.*

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = .631 and corresponding $p$ – value = .889

Since the $p$ value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Agreeableness personality trait.
B. **CONSCIENTIOUSNESS**

The second personality trait amongst the five traits is Conscientiousness. The seniors with the personality trait of conscientiousness in the age group of 40+ – 75+ years, we tried to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below:

**H₀₁** - There is an association between choice of music and gender for Conscientiousness personality.

**H₁** – There is no association between choice of music and gender for Conscientiousness personality.

![Conscientiousness](image)

As we can see in the above graph there is not much difference in the inclination for music in males and females. Where as in Reflection and Complex and in Upbeat and Conventional music type the ratio is equal as compared to other music type followed by a slight variation in Intense and Rebellious and that in energetic and Rhythmic Music type. *But according to individual analysis we can say that males and females who are proved to be having this personality trait have inclination towards Upbeat and Conventional music type in comparison with the other present data.*
Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = .060 and corresponding $p$ – value = .996

Since the $p$ value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Conscientiousness personality trait.

C. **EXTRAVERSION**

Being the 3rd trait amongst the five personality factor we further continued the process of attempting the test to see the reflection of music types on the following trait. Number of males and females who have different liking for music are given below in graphical form:

**H01**: There is an association between choice of music and gender for Extraversion personality.

**H1**: There is no association between choice of music and gender for Extraversion personality.

![Graph showing Extraversion](image)

(A)-Fig.31

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According to the above graph we can see that ratio of males is higher as compared to females in all the music type accept in energetic and rhythmic music type, were the numbers are equal. *As per the individual analysis of Extraversion personality trait, it shows that males and females who are having Extraversion nature, their inclination is more towards Intense and Rebellious music type according the graph obtained above.*

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$$X^2 \text{ – value } = 1.248 \text{ and corresponding } p \text{ – value } = .742$$

Since the $p$ value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Extraversion personality trait.

**D. NEUROTICISM**

The $4^{th}$ personality trait amongst the five traits is Neuroticism. We attempted the same procedure to see the reflection of music types further on the following trait. Number of males and females who have different liking for music types are given below:

$H_{0i}$ – There is an association between choice of music and gender for Neuroticism personality.

$H_{1}$ – There is no association between choice of music and gender for Neuroticism personality.
As we can see from the above graph that almost in all the music types the ratio of inclination that of males are slightly higher as compared to females except in Energetic and Rhythmic music type where the inclination of both the genders are equal. *Though according to the individual analysis of Neuroticism personality trait, it shows that the number of males and females who answered the highest in this trait is for Reflection and Complex music type.*

Now to test the hypothesis that choice of music types will be affected by gender through applying $X^2$ – Test for all personality traits. For the above trait the values that are obtained is reported below:

$X^2$ – value = .315 and corresponding $p$ – value = .957

Since the $p$ value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Neuroticism personality trait.

**E. OPENNESS:**

The last and the final trait amongst the Big Five Personality trait is Openness. Further continuing the process of attempting the test to see the reflection of music types on
the following trait. Number of males and females who have different liking for music are given below:

H₀₁ – There is an association between choice of music and gender for Openness personality.

H₁ – There is no association between choice of music and gender for Openness personality.

According to the above graph above, the ratio of males and females inclination towards the four music types differ slightly as in Reflection and Complex and in Intense and Rebellious music type the number of males is higher than that of females and in Upbeat and Convention and in energetic and Rhythmic music type females are slightly higher than males. But according to the individual analysis of Openness personality trait, it shows that the number of males and female who answered the highest with this trait is for Reflection and Complex music type.

Now to test the hypothesis that choice of music types will be affected by gender through applying X² – Test for all personality traits. For the above trait the values that are obtained is reported below:

X² – value = .469 and corresponding p – value = .926
Since the p value is > .05, we can conclude that there is no significant association between inclination towards music types and gender, for Openness personality trait.

**Conclusion –**

According to the analysis we could say that the trait that is being most reflected in the age group of 40+ – 75+ years i.e. in Middle Adulthood and Senior, is Agreeableness with the preference and choice of music they have is Reflection and complex which includes genres like: Blues, classical, folk, jazz etc types. Which proves that music have a very important impact on personality and behavior. It is found that choice of music for all personality traits is not gender bias.

As by this time of adulthood and senior, music remain the extension to acquire more resources to express themselves – career, home, family and there aspects of wanting to promote social status, intellect and wealth, play into the increased gravitation towards ‘sophisticated’ music. They linked a taste for ‘unpretentious’ music to sentiments of family, love and loss. According to them these emotionally direct music speaks to the experiences most people have had by this life stage. For many this life stage is frequently exhausted by work and family, and there is a requirement for relaxing, emotive music for those rare down times that reflects the other major ‘life challenge’ of this stage – that of nurturing a family and maintaining long-term relationships, perhaps the hardest of all.