

What Story does your taste of Music tell about you ?

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Young People Survey & PitchFork Mag Music Reviews

1. Do music reviews on pitchfork differ from young people's reviews?
2. Do siblings make you more or less happy?
3. Are metalheads more into horror movies than others?
4. Does your degree affect your taste of music?

Statistical Testing deep-dive

Aggregate Data

Using the right data

The data is organized, cleaned, and formatted for the particular hypothesis and its accompanying test

Run Statistical Test

Choosing the right test

The data is put through the statistical test, and the results are analysed for accuracy and significance

Formulate Conclusion

Prove / reject hypothesis

Based on the analysis of the result, we either accept or reject our hypothesis

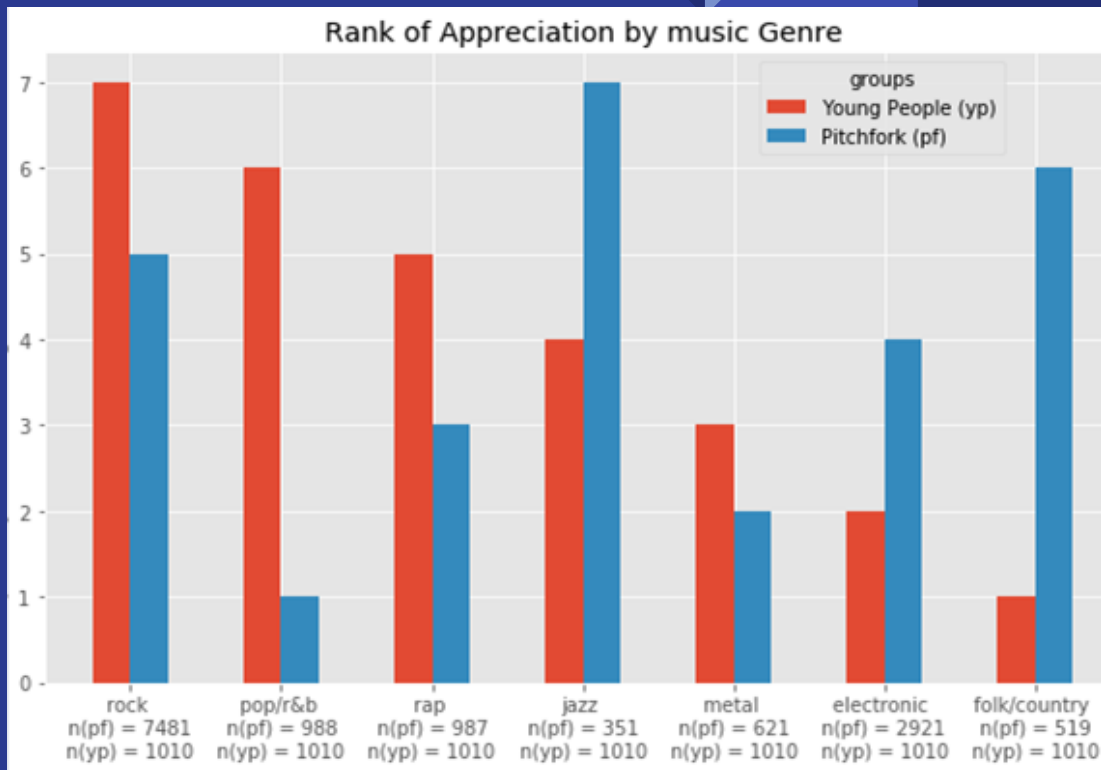
Question 1

“Does music genre popularity differ between pitchfork users and young people (until age 30) ?”

Results

Key Takeaways:

- Consider your target Audience when looking for music genre recommendations
- Stick to rock music when targeting a broad audience



Mann-Whitney-U Test for Rankings ($p = 0.005$) \Rightarrow Significant at $\alpha = .05$

Observation

// Pitchfork music genre rankings are significantly different from the ranking in the young people's study //

Question 2

Do Siblings Make You More Or Less
Happy?

Two Sample t-test

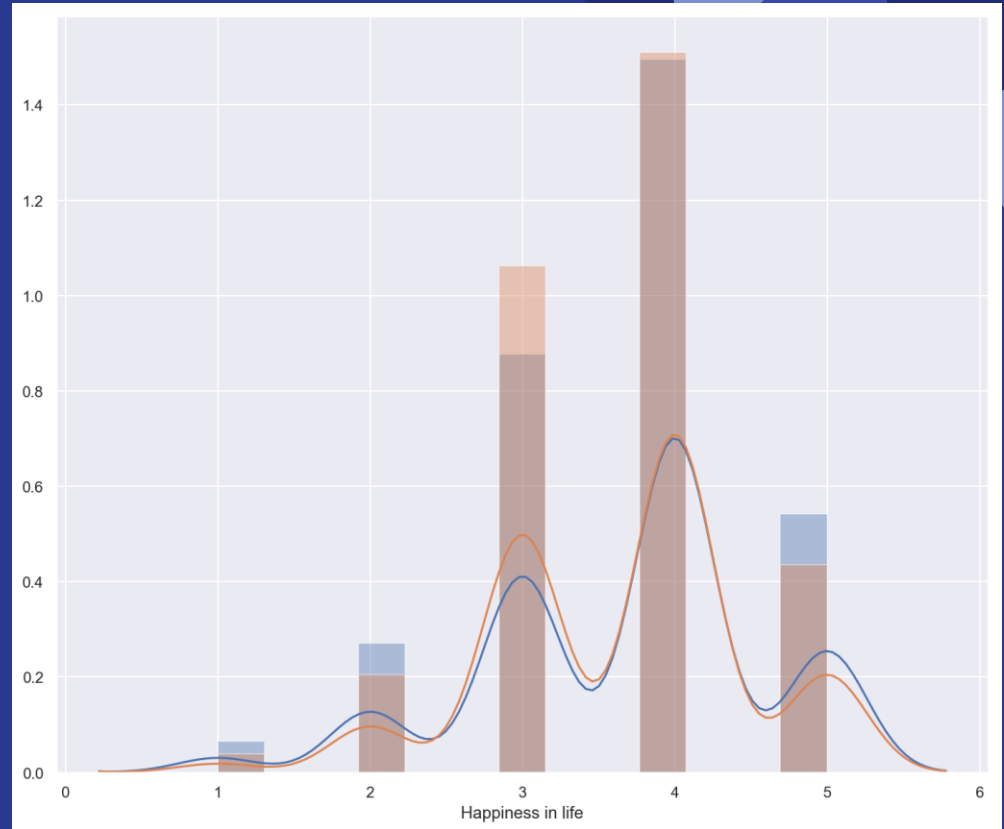
p-value = 0.7228247802566437

t-statistic = 0.3548850124690555

1-5 rating on "Happiness In Life"

Blue:
only child = True

Orange:
only child = False



M1 = 3.67

M2 = 3.64

Std1 = 0.91

Std2 = 0.83

Observation

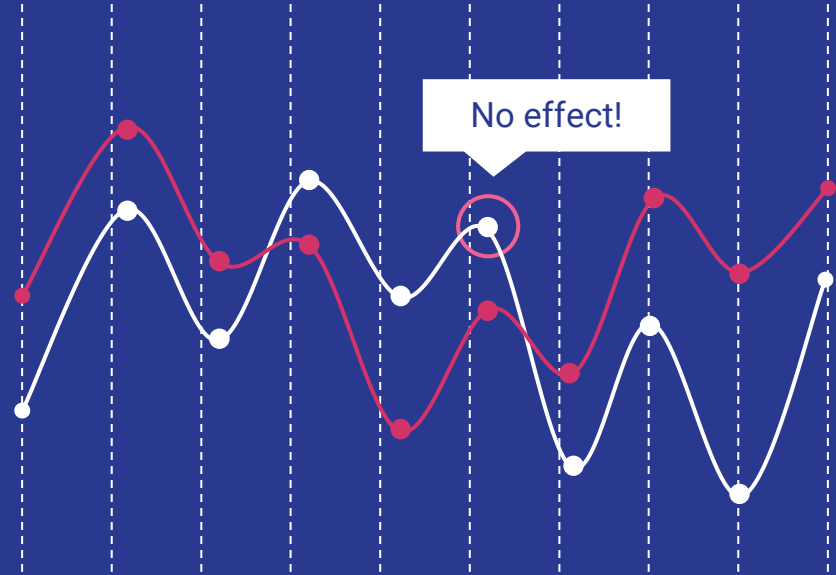
After running a Two-Sample t-test on score results from students who are an only child (experiment group), and students with siblings (control group), we concluded that though the mean averages were not equal, their difference was not statistically significant, therefore we fail to reject the null hypothesis

***“being an only child
has no effect on your
happiness in life!”***

$M1 \neq M2$

$p\text{-value} >$

α



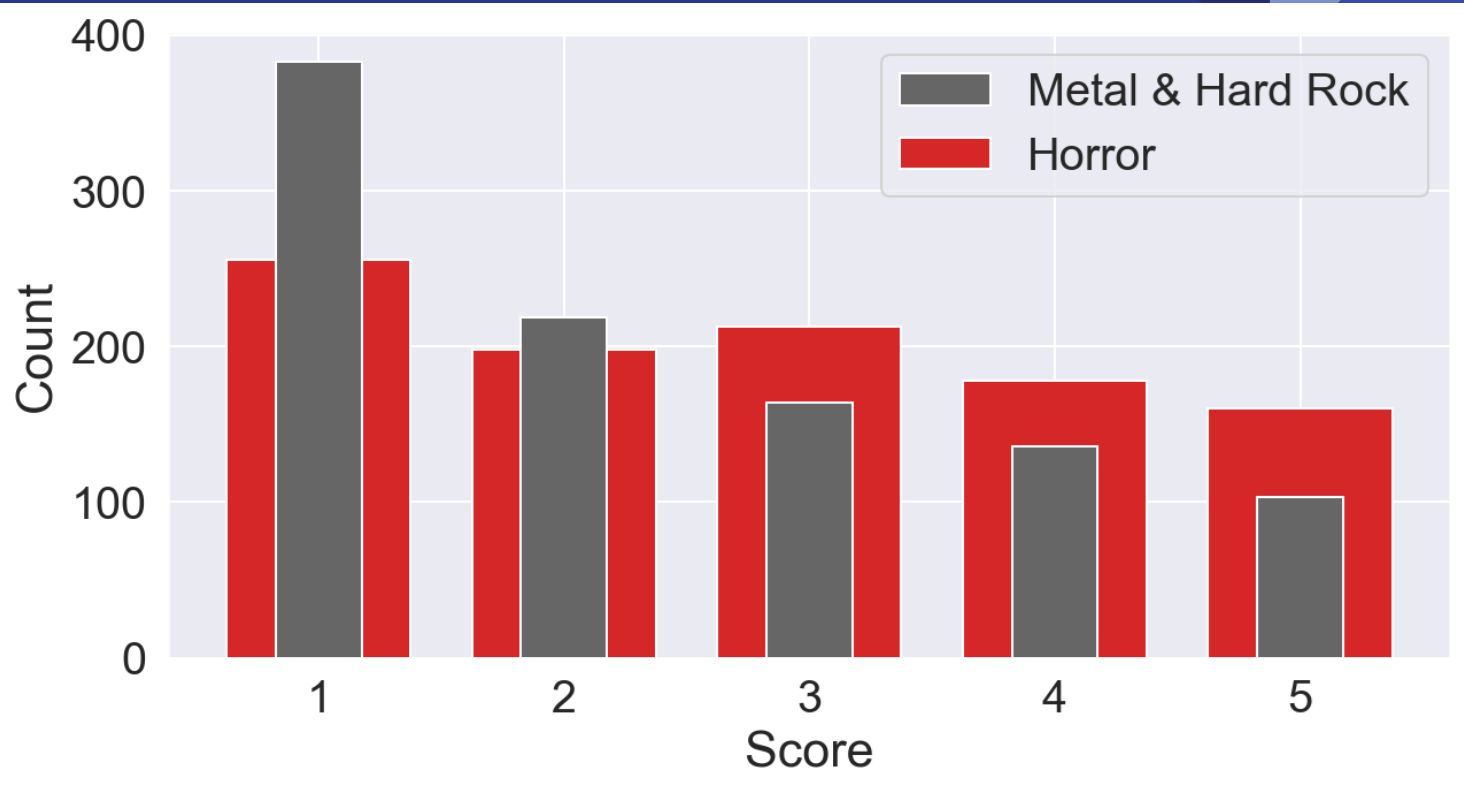
Question 3

Is your taste in movies directly
dependent on your taste in music?

Chi-Square Test of Independence

$X^2 = 12.4094776565072$ P-value = 0.982950866929013

DF = 25



Observation

A Chi-Squared Test of Independence showed that movie preference is NOT dependent on music preference, and rating a particular music genre highly does not mean that you would rate a particular movie genre highly as well

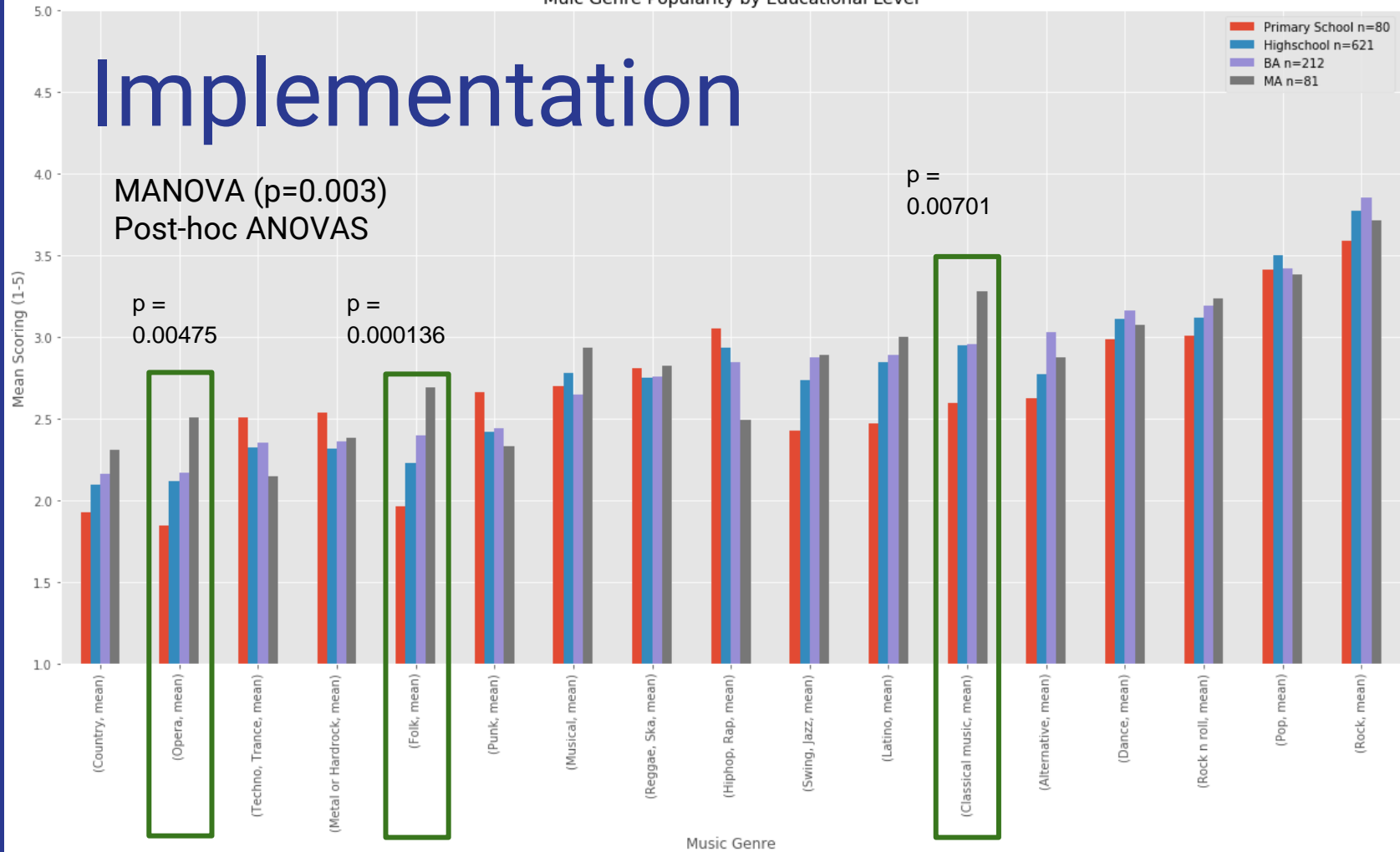
“There is no dependence between Movie preference and Music preference.”

Question 4

**“Are there significant
differences in music
genre preference at
various education levels
?”**

Implementation

MANOVA ($p=0.003$)
Post-hoc ANOVAS



Observation

*// There is a significant
difference between
Educational groups in
their music preference //*

*// in the Genres:
/Opera
/Classical
/Folk*

Summary

1. Pitchfork music genre rankings are significantly different from the ranking in the young people's study
 1. Being an only child has no significant effect on happiness
 1. Being a metal or hardrock fan has no significant influence on how you like horror movies
 1. Academic degree has a significant influence on preference for folk, classical and opera music
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