Does the kind of

#### Music

you indulge in affect your

#### Mental Health?

### Objective

This analysis examines how music can be used as a therapy to enhance an individual's mental health and well-being. It focuses on the relationship between music preference, age, and its impact on one's mood, stress levels, and other related factors.

#### The Data

https://www.kaggle.com/datasets/catherinerasgaitis/mxmh-survey-results datasetId=2659407&language=R&select=mxmh\_survey\_results.csv

The original data consists of 33 attributes, for the purpose of my analysis I only use 11

The data consists of different kinds of ordered categories

- Age
- Hours.per.day
- Anxiety
- Depression
- Frequency..Classical.
- Frequency..Pop
- Fav.genre
- Music.effect

Type: Integer

Type: Ordered Category Ranges between 0 and 10

Type: Ordered Category Never, Rarely, Sometimes, Very Frequently

Type: Character

Type: Ordered Category Improve, No effect, Worsen

# Questions I am trying to answer

#### **Objective 1**

What is the distribution of mental health disorders among the respondent

#### **Objective 2**

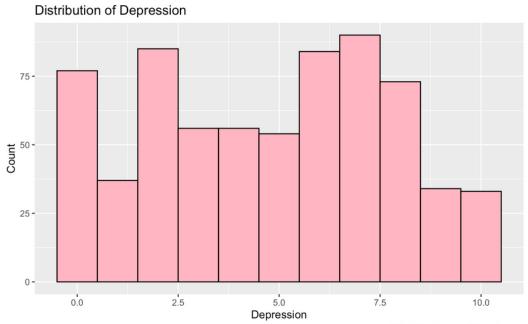
Is there a correlation between the duration of listening to music and mental health scores?

#### **Objective 3**

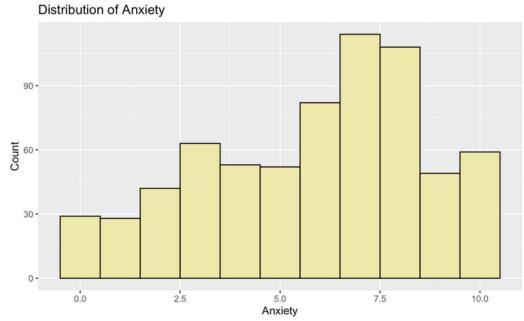
Are there differences in mental health scores based on the genre(s) of music listened to?

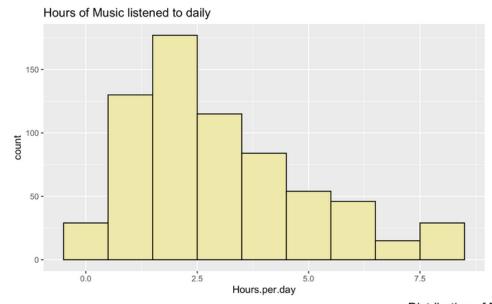
#### **Objective 4**

Are there any interesting patterns or relationships between mental health scores, music genres, and other variables in the dataset that warrant further investigation?

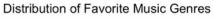


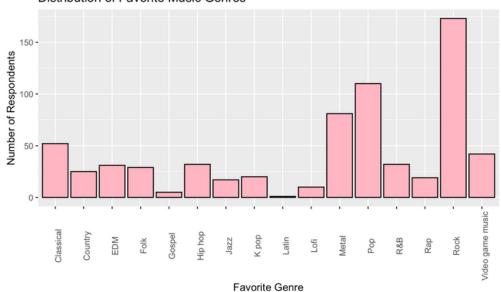
### Mental Health Data Distribution

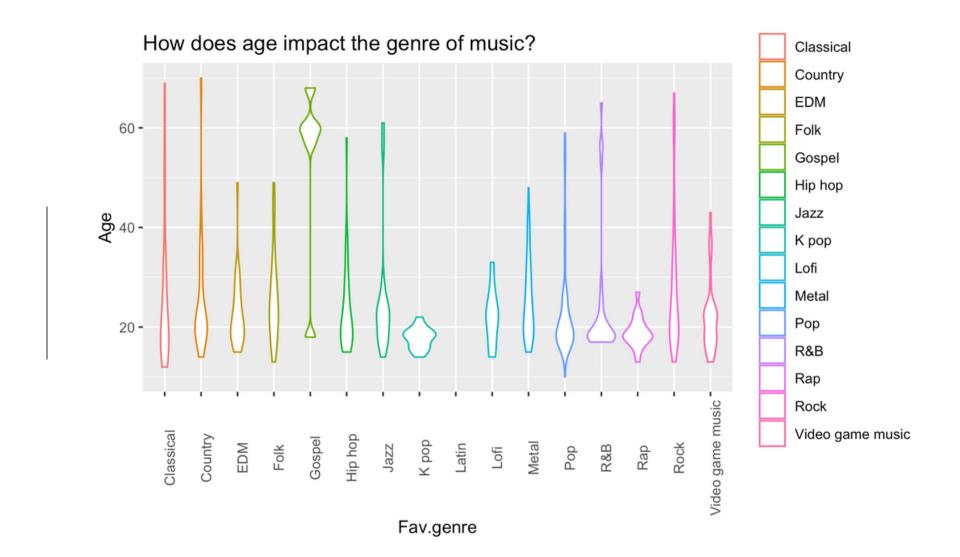




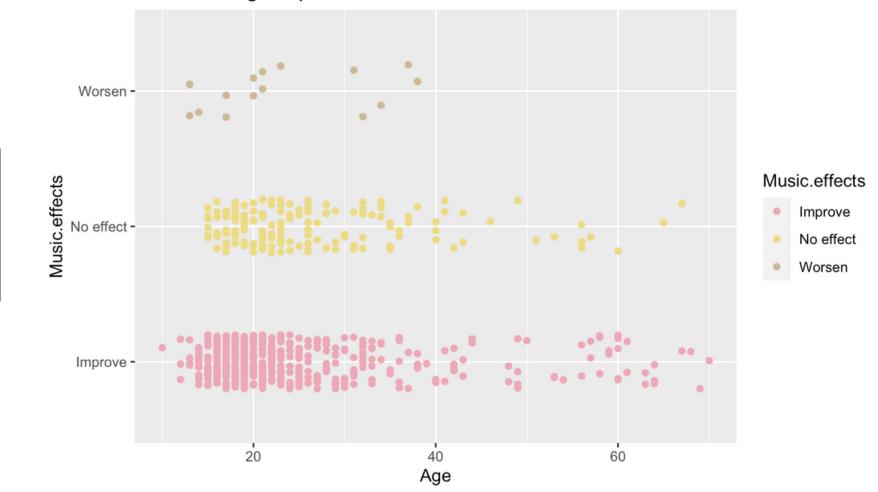
## Music Data Distribution



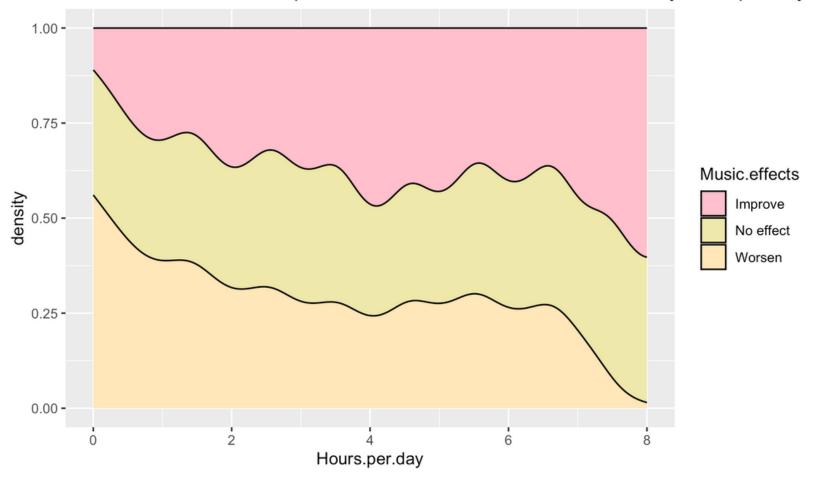


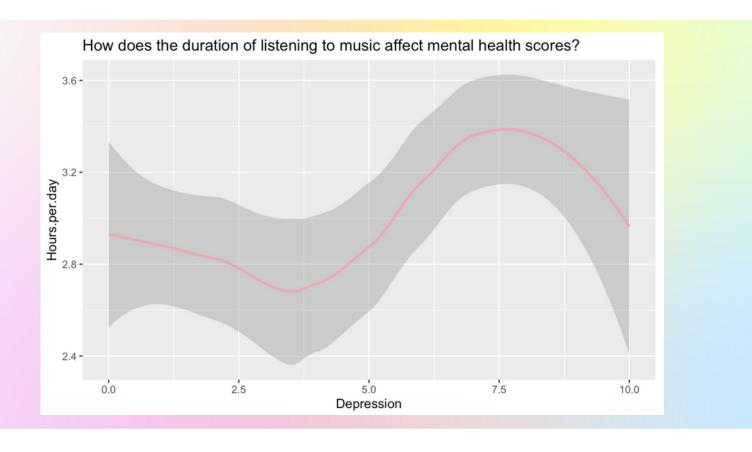


How does age impact the effect of music?

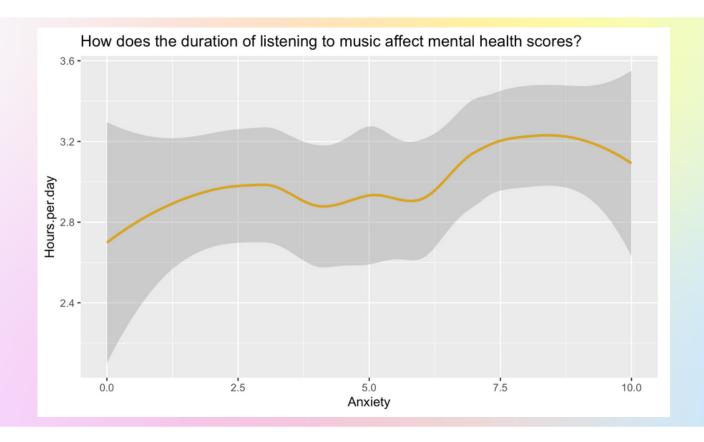


How does music affect a person based on the number of hours they listen per day?





## Does listening to more hours of music help?

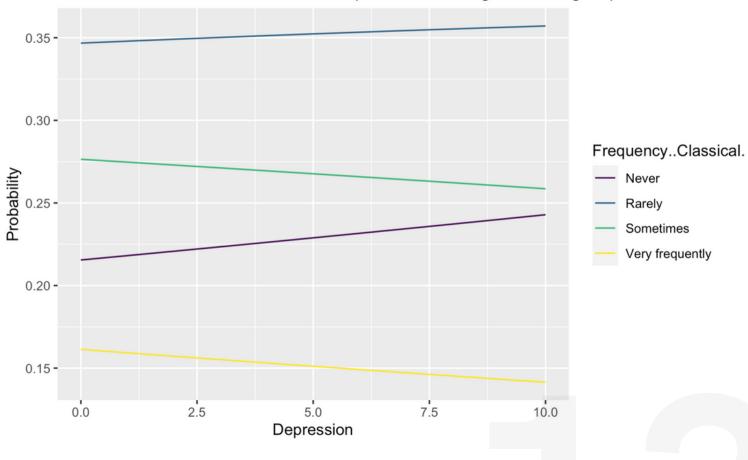


## Does listening to more hours of music help?

#### Exploratory Data Analysis

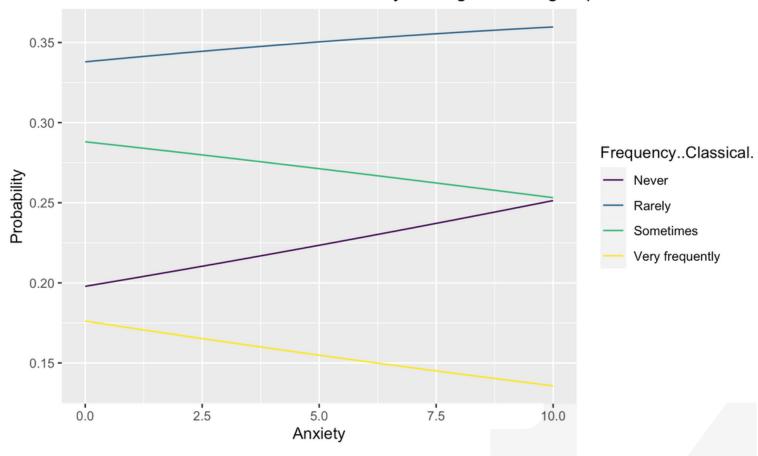
# Classical Music / Mental Health

How does classical music affect depression among different groups of individuals?



# proportional odds logisti regression Applying

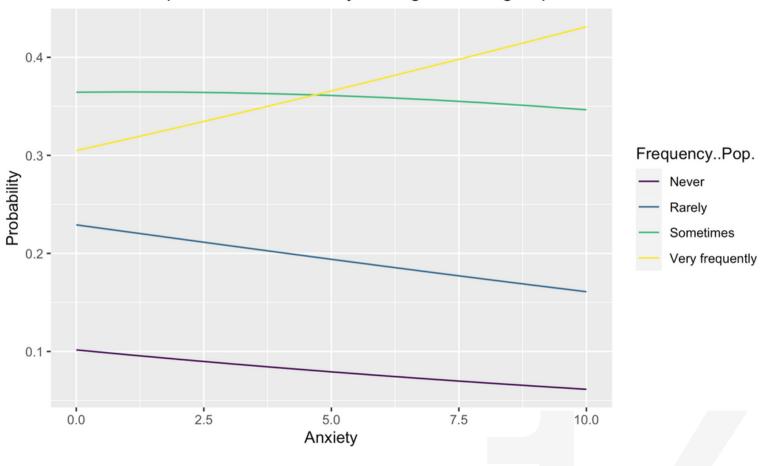
How does classical music affect Anxiety among different groups of individuals?



# Pop Music / Mental Health

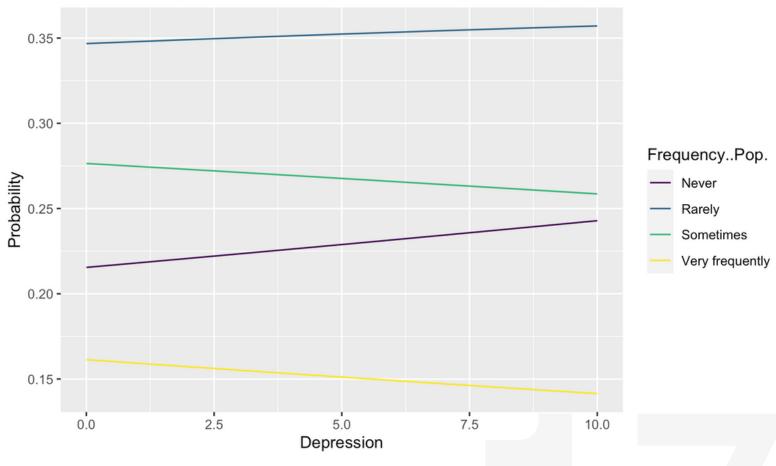
# proportional odds logistic model regression $\boldsymbol{\omega}$ Applying

How does Pop music affect Anxiety among different groups of individuals?



# proportional odds logistic model $\boldsymbol{\omega}$ regression Applying

How does Pop music affect depression among different groups of individuals?



## Thank you!