

By: Josh Ehlke, Gina Butler, Georgina Young and Dominique Kelsey

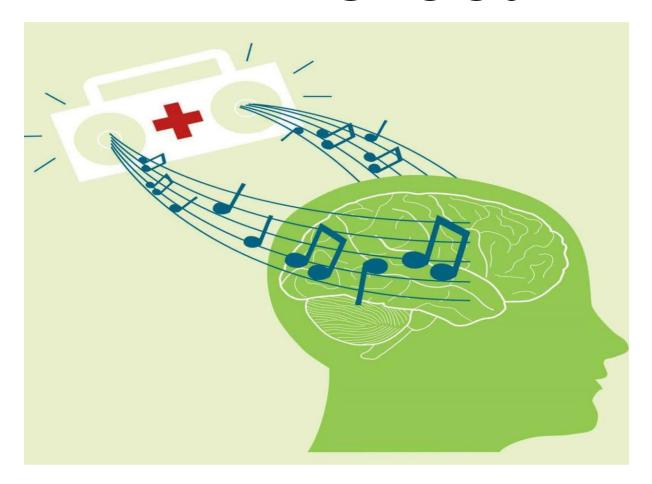
# OBJECTIVE

Our dataset explores the correlation between mental health and music preferences, examining factors like age, genre, streaming service usage, and types of mental health concerns.



# OUR DATA SET AND WHY WE CHOOSE IT

- We selected this dataset because mental health is a critical and widely discussed societal topic.
- Exploring how music influences mental well-being felt meaningful, as it combines two deeply personal and impactful areas.
- Additionally, some team members work in the fields of music and mental health, making this dataset especially relevant and inspiring to our project goals.

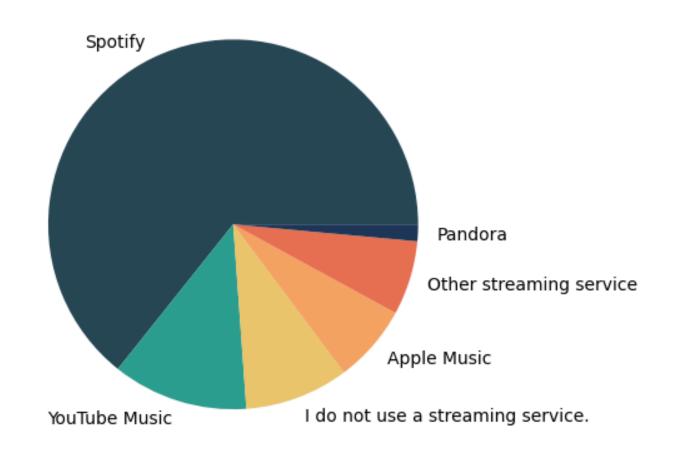


 Dataset Overview our dataset explores the correlation between mental health and music preferences, focusing on factors such as:

- 👶 💩 Age
- Music genre
- **B** Streaming service usage
- Types of mental health concerns

#### POPULAR STREAMING SERVICES

Streaming services by popularity



#### HIGH LEVEL QUESTIONS

- How does listening to music influence mental health outcomes, and what factors determine whether the effects are improved, worsened, or have no effect?
- How does the number of hours spent listening to music daily affect mental health?
- Does age influence the mental health impact of listening to diverse music genres?

#### QUESTION 1

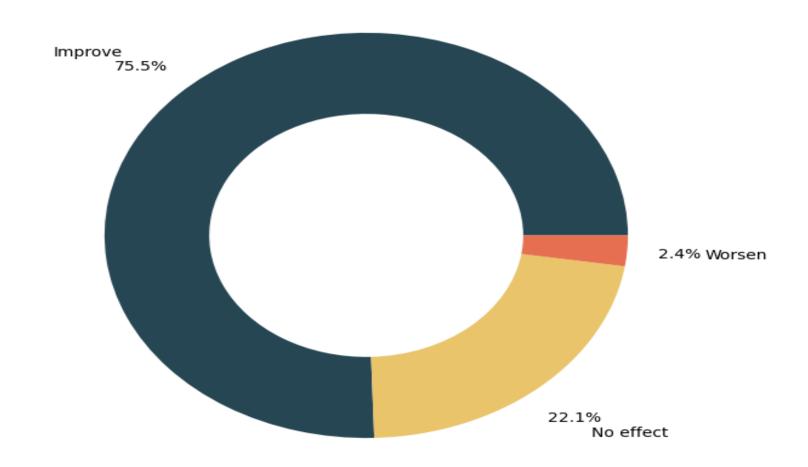
• How does listening to music influence mental health outcomes, and what factors determine whether the effects are improved, worsened, or have no

effect?

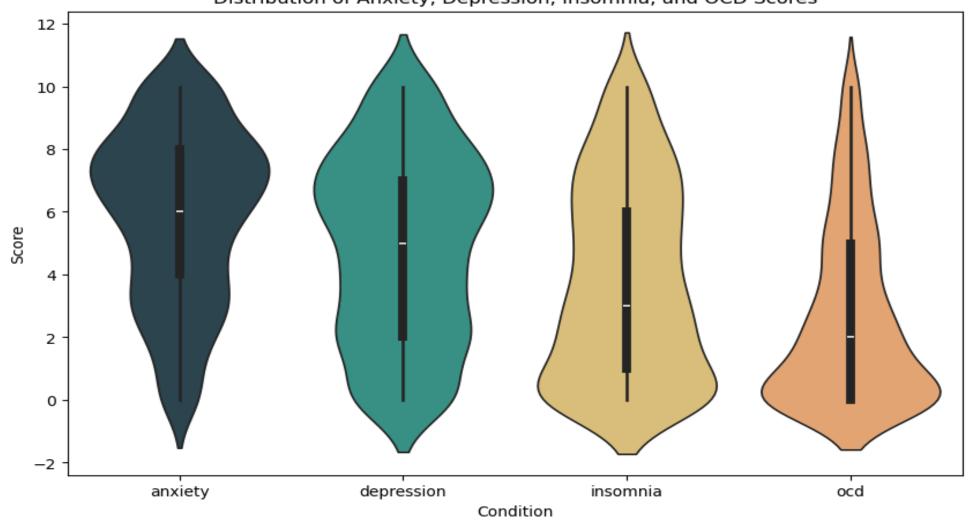


### EFFECTS OF MUSIC ON MENTAL HEALTH

Effects of Music on Mental Health

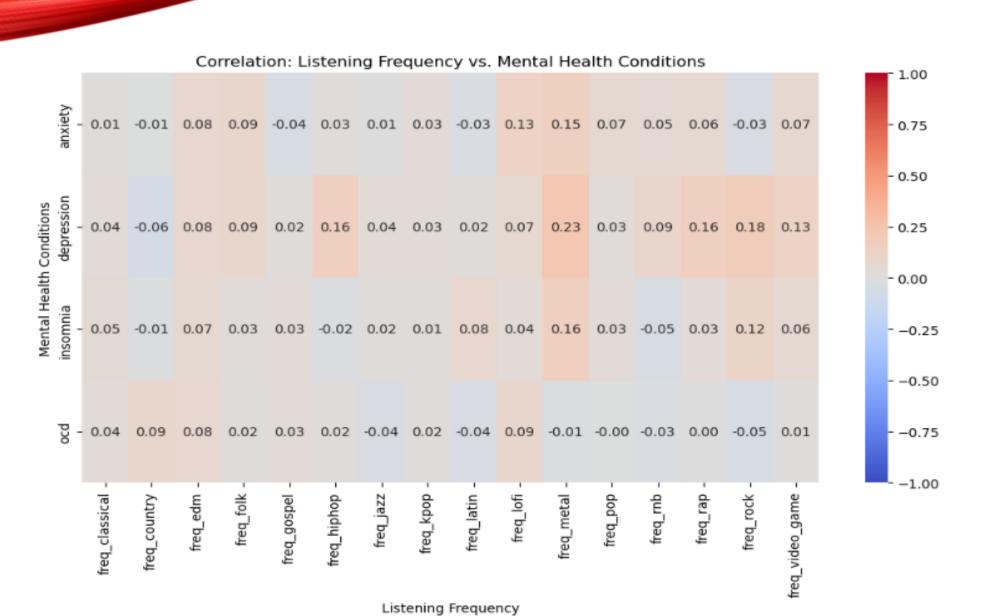


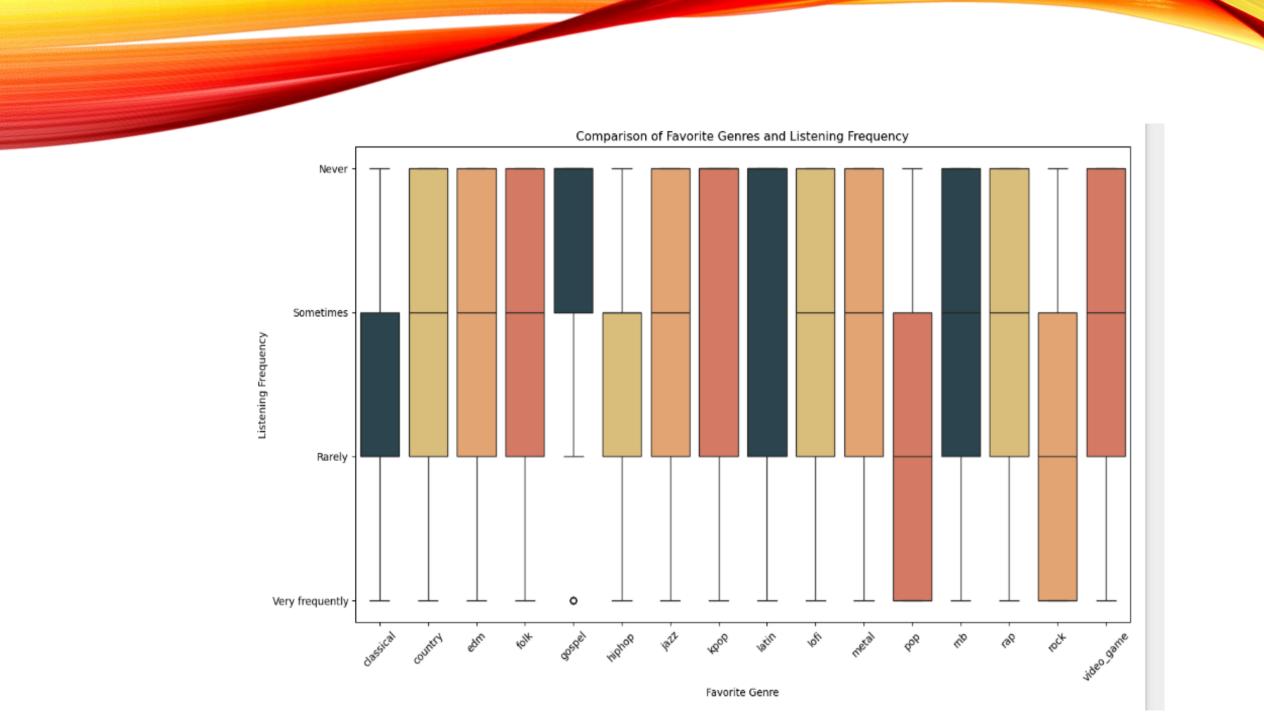
Distribution of Anxiety, Depression, Insomnia, and OCD Scores



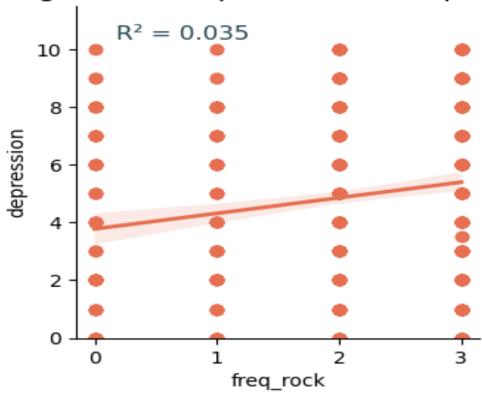
# QUESTION 2

 How does the number of hours spent listening to music daily affect mental health?



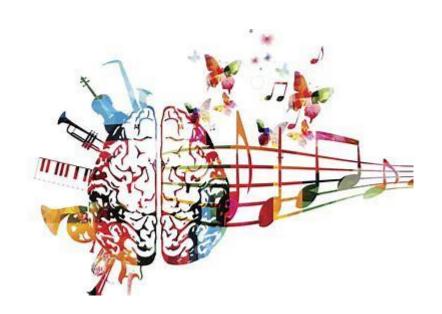


Linear Regression: Depression vs Frequency of Rock



# QUESTION 3

 Does age influence the mental health impact of listening to diverse music genres?



Average Age vs. Score by Mental Health Condition Mental Health Condition 32.5 anxiety depression insomnia 30.0 27.5 -Average Age 25.0 22.5 20.0 -17.5 -Score

#### BIAS AND LIMITATIONS

- Limitations to the dataset include bias from uneven number of subjects in the age groups.
- Only four mental health conditions were analyzed
  - Anxiety
  - Depression
  - Insomnia
  - OCD

# CONCLUSIONS/FINAL THOUGHTS

• We can conclude that music has a positive effect on mental health.

 Most subjects reported improvement in their conditions after listening, based on our analysis of the dataset

# THANK YOU



#### BIBLIOGRAPHY

• https://www.kaggle.com/code/catherinerasgaitis/music-mental-health-eda