The Rhythm of Mental Wellness:

Exploring the Relationship Between Music Preferences and Mental Health

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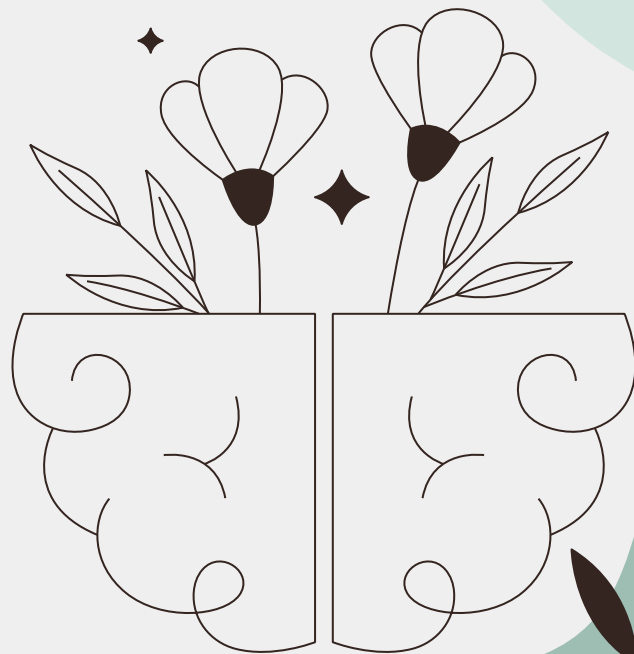# Table of contents

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Let's talk about Music!

- What's your favorite music genre?
- How does music influence your mood?
- Does it impact your mental health?

Music Therapy (MT) leverages music to improve stress, mood, and overall mental well-being by stimulating "happy" hormones like oxytocin.

Although MT includes diverse genres tailored to individual needs, questions remain about the specific impact of genre preferences on mental health.

Data Preprocessing

MxMH Survey Results

Kaggle link to the <u>dataset</u>

- Check for duplicate rows
- Check for the presence of null values
- Deal with null values
- Filter outlier values
- Generate descriptive statistics for categorical and numerical columns
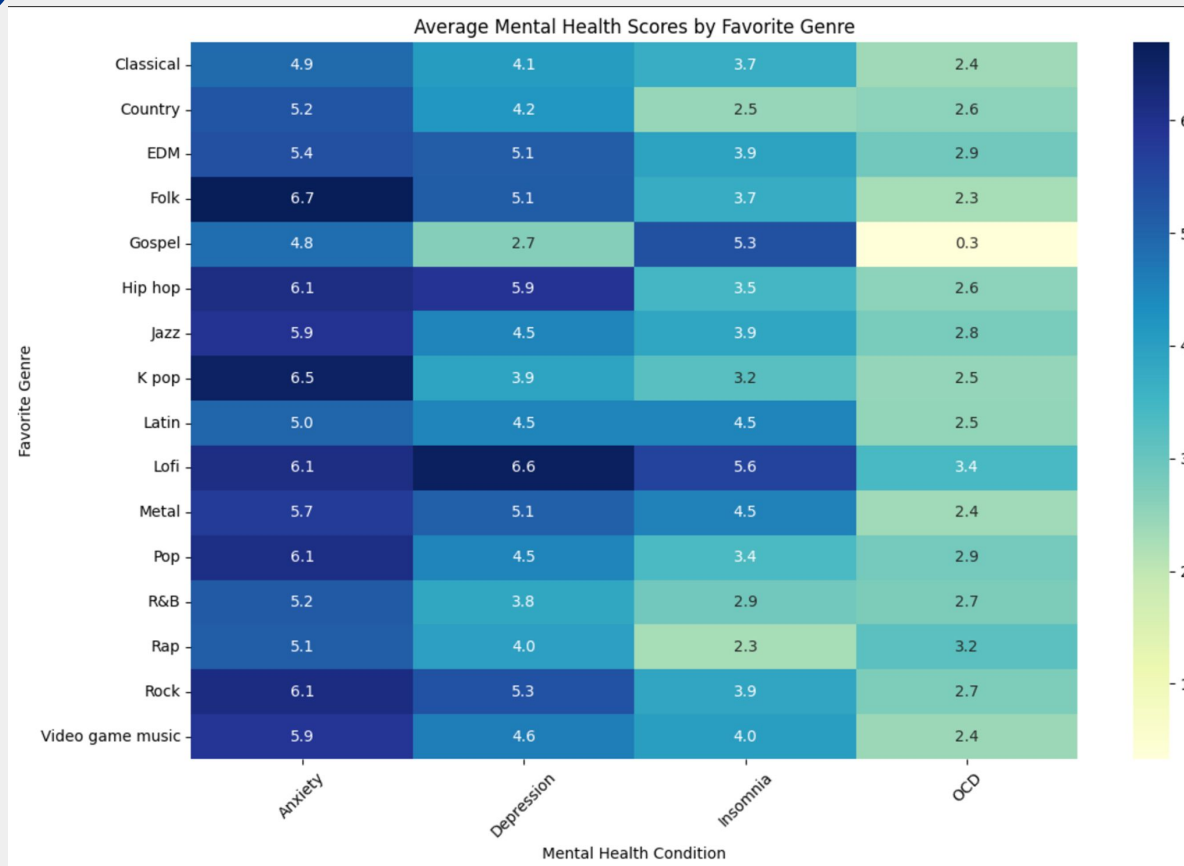- Understand dataset structure

Key Columns:

Primary streaming service; While working; Fav genre; Anxiety, Depression, Insomnia, and OCD; Music Effects
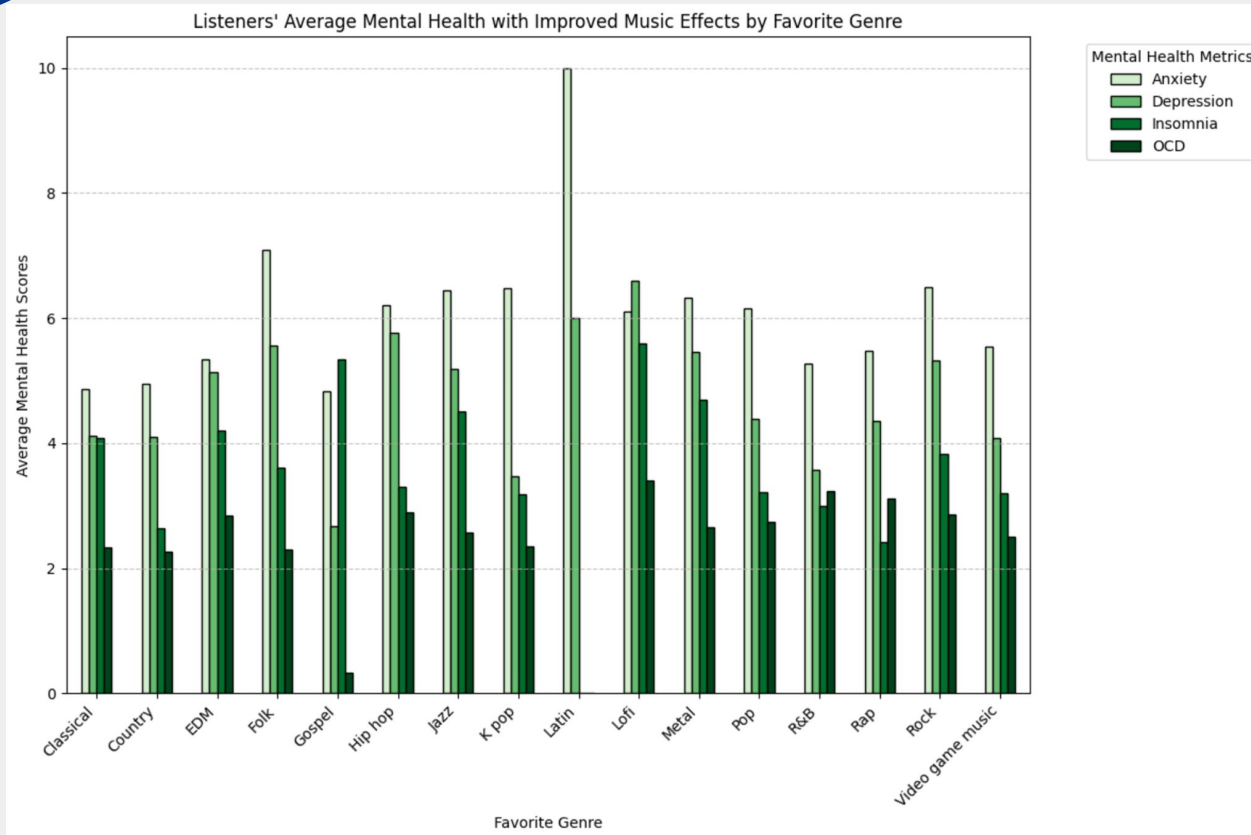
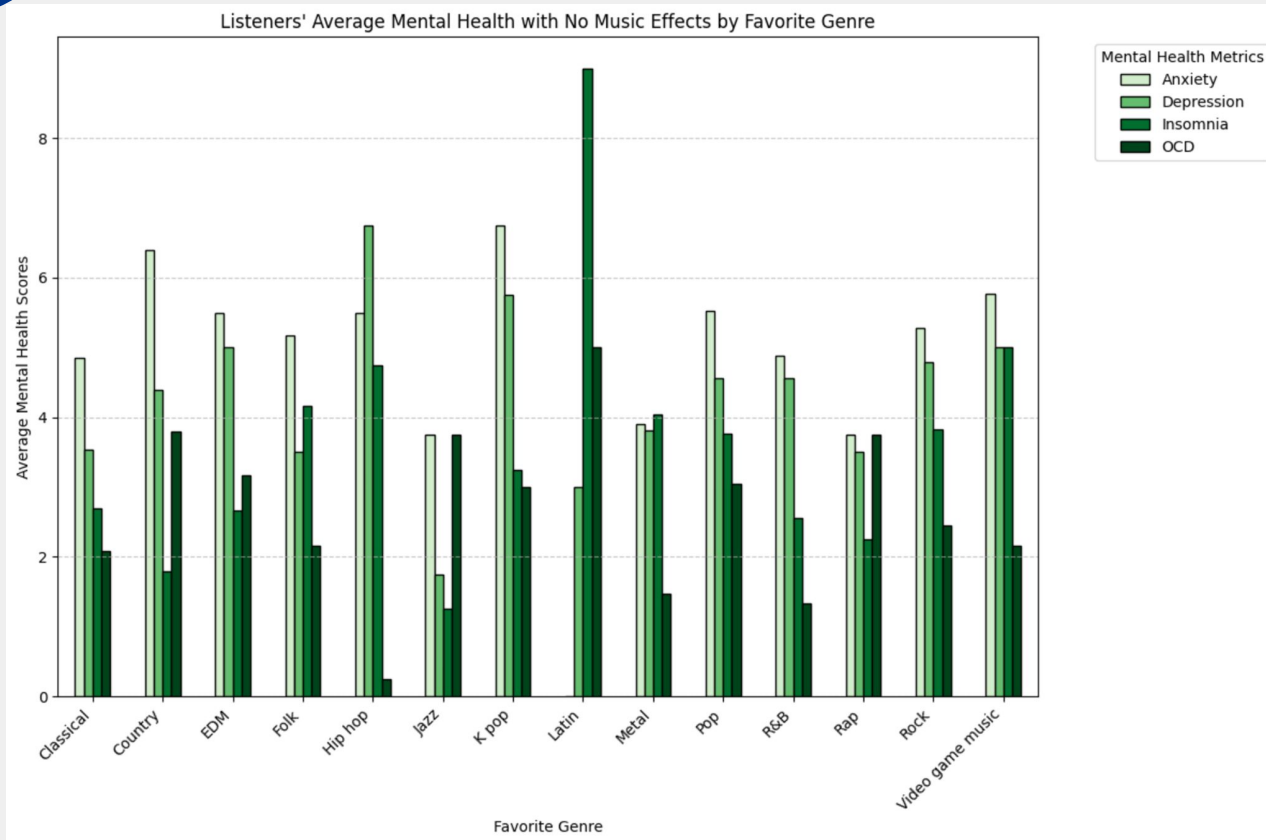# Exploratory & Explanatory Sections using
Tableau

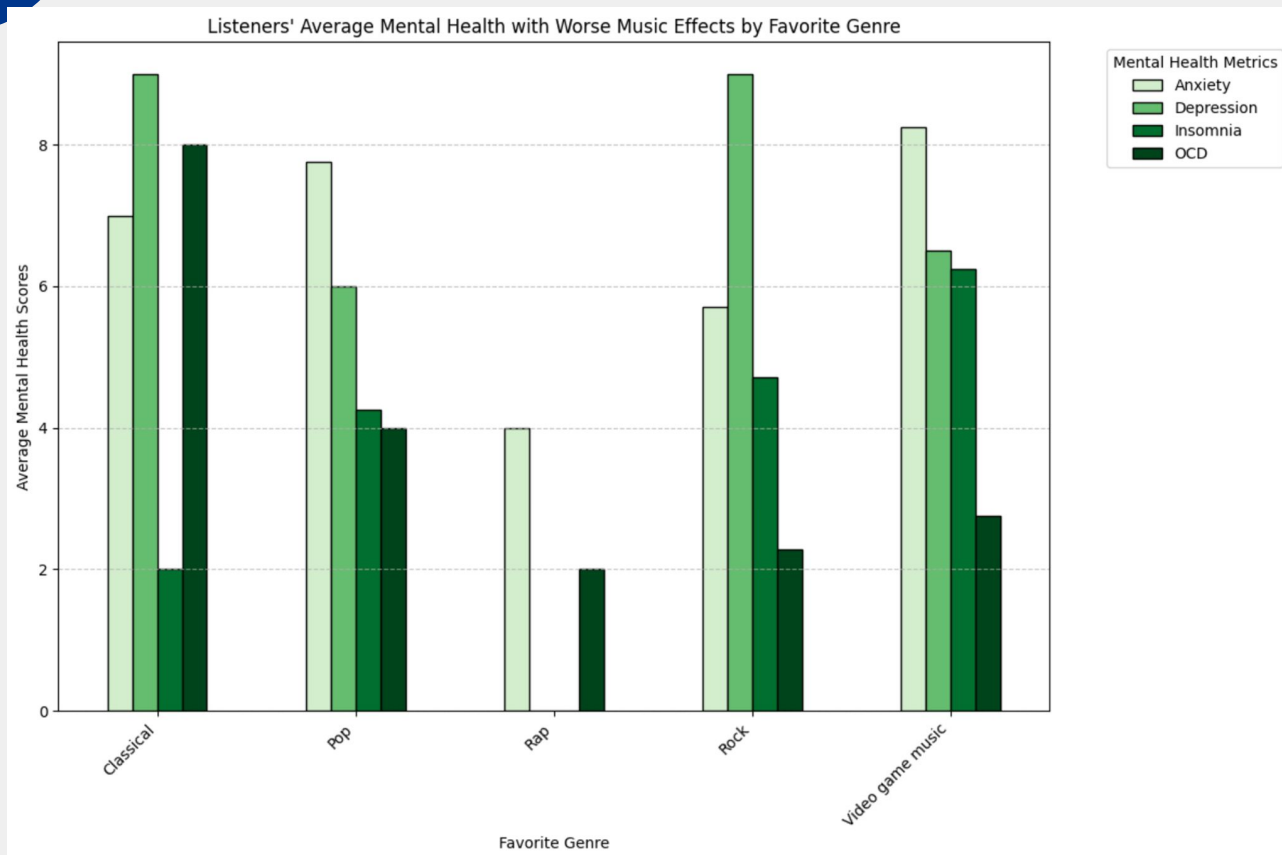# Some Extra Explanatory Visualizations Using

Python

Average Mental Health Scores by Favorite Genre

Favorite Genre	Anxiety	Depression	Insomnia	OCD
Classical	4.9	4.1	3.7	2.4
Country	5.2	4.2	2.5	2.6
EDM	5.4	5.1	3.9	2.9
Folk	6.7	5.1	3.7	2.3
Gospel	4.8	2.7	5.3	0.3
Hip hop	6.1	5.9	3.5	2.6
Jazz	5.9	4.5	3.9	2.8
K pop	6.5	3.9	3.2	2.5
Latin	5.0	4.5	4.5	2.5
Lofi	6.1	6.6	5.6	3.4
Metal	5.7	5.1	4.5	2.4
Pop	6.1	4.5	3.4	2.9
R&B	5.2	3.8	2.9	2.7
Rap	5.1	4.0	2.3	3.2
Rock	6.1	5.3	3.9	2.7
Video game music	5.9	4.6	4.0	2.4

Mental Health Condition

Listeners' Average Mental Health with Improved Music Effects by Favorite Genre

Ras Gaitis, Catherine. *MXMH Survey Results Dataset*. Kaggle. Available at:
https://www.kaggle.com/datasets/catherinerasgaitis/mxmh-survey-results

Listeners' Average Mental Health with No Music Effects by Favorite Genre

Listeners' Average Mental Health with Worse Music Effects by Favorite Genre

Ras Gaitis, Catherine. *MXMH Survey Results Dataset*. Kaggle. Available at:
https://www.kaggle.com/datasets/catherinerasgaitis/mxmh-survey-results

Conclusion & Further Work

- This project explores the connection between music preferences and mental health, demonstrating music's therapeutic potential to regulate emotions, reduce symptoms, and promote well-being.

- The findings highlight the need for personalized approaches in Music Therapy, supporting data-driven strategies for mental wellness.

- Future work could focus on tracking mental health improvements over time to understand the long-term effects of Music Therapy.

THANK YOU!

Questions?