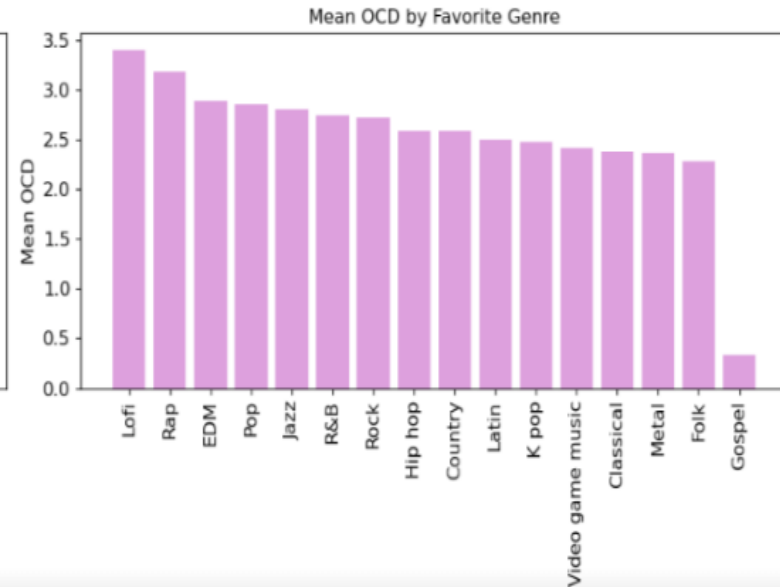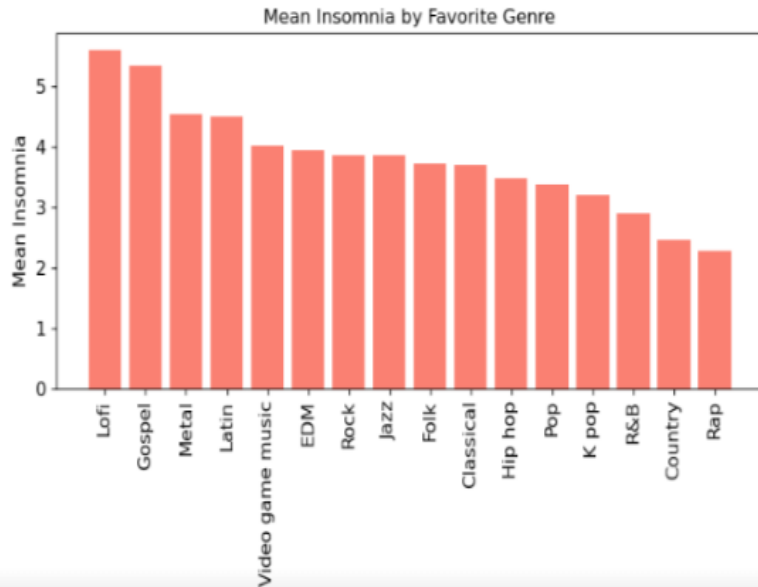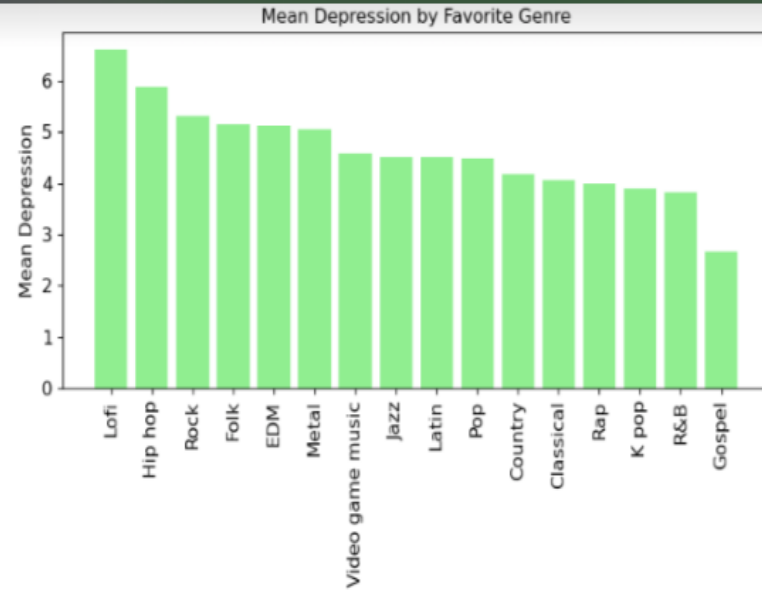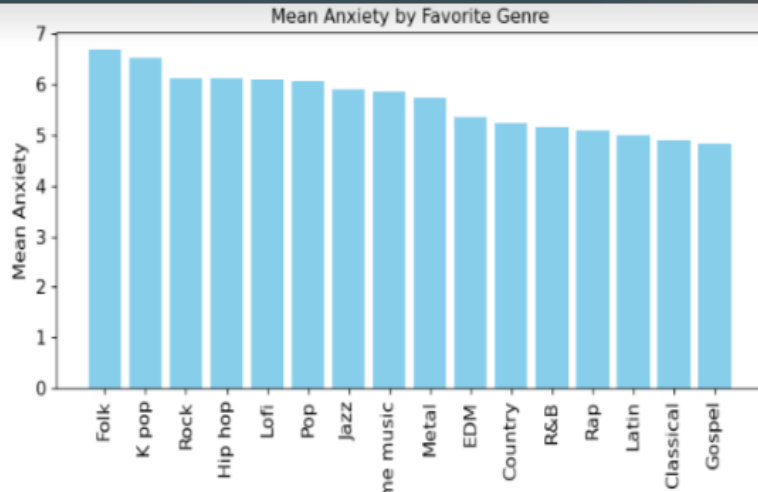# MUSIC AND MENTAL HEALTH

Context of the work

▶ Music therapy, or MT, is the use of music to improve an individual's stress, mood, and overall mental health. MT is also recognized as an evidence-based practice, using music as a catalyst for "happy" hormones such as oxytocin.

▶ However, MT employs a wide range of different genres, varying from one organization to the next.

▶ The **MxMH** dataset aims to identify what, if any, correlations exist between an individual's music taste and their self-reported mental health.

▶ Ideally, these findings could contribute to a more informed application of MT or simply provide interesting insights about the mind.
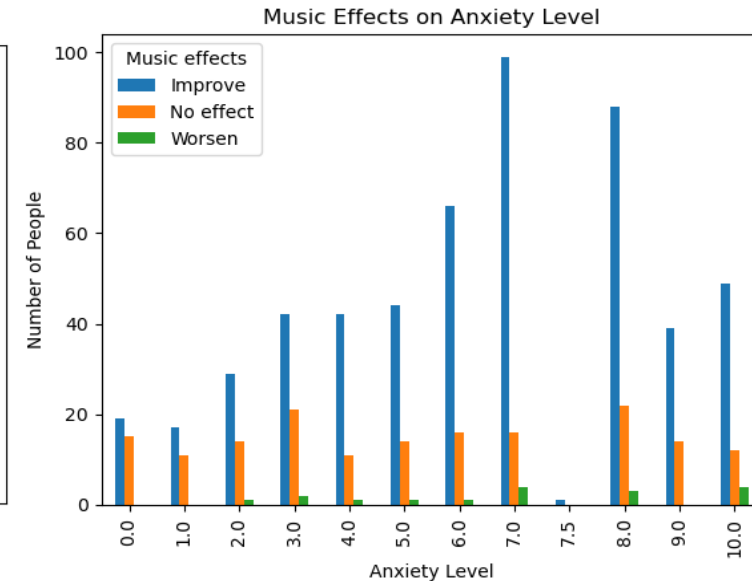
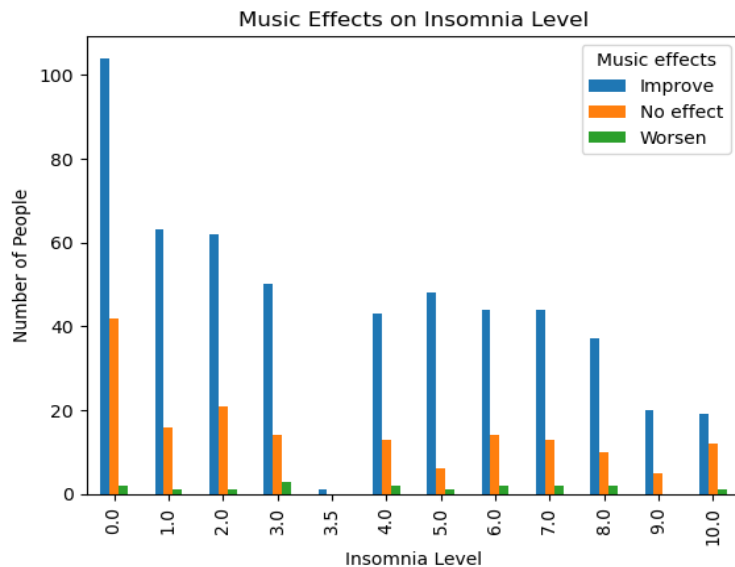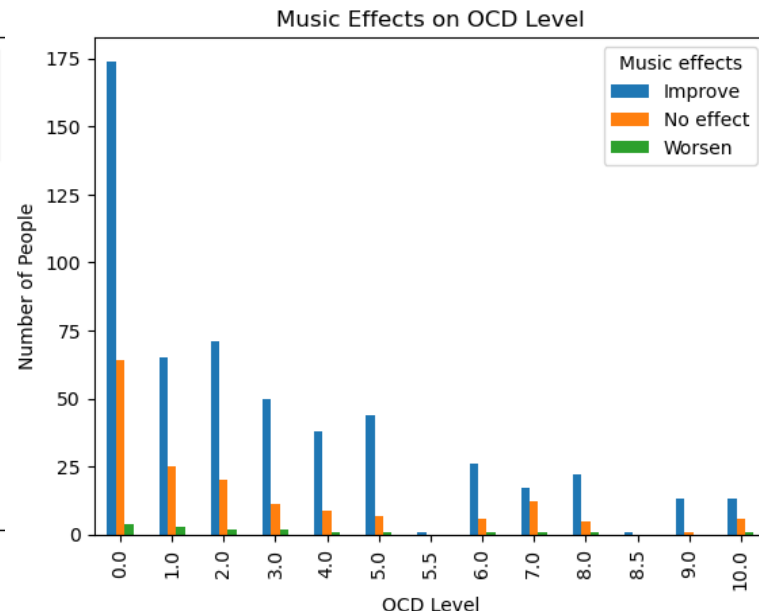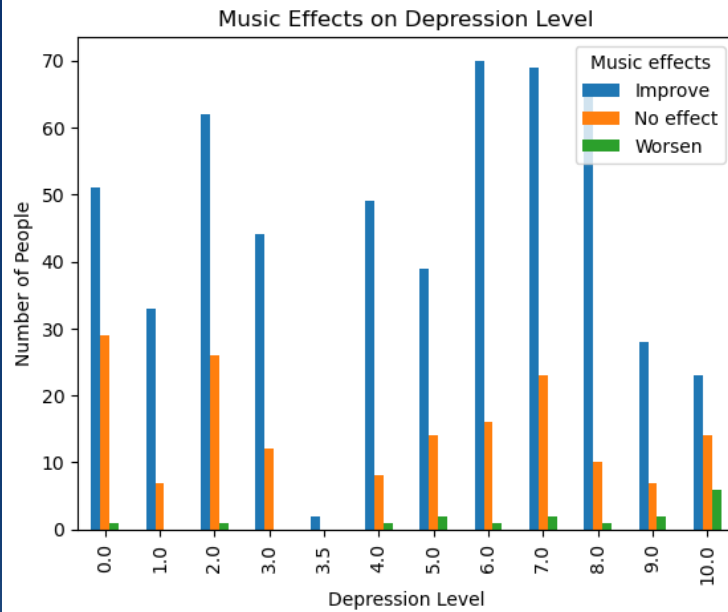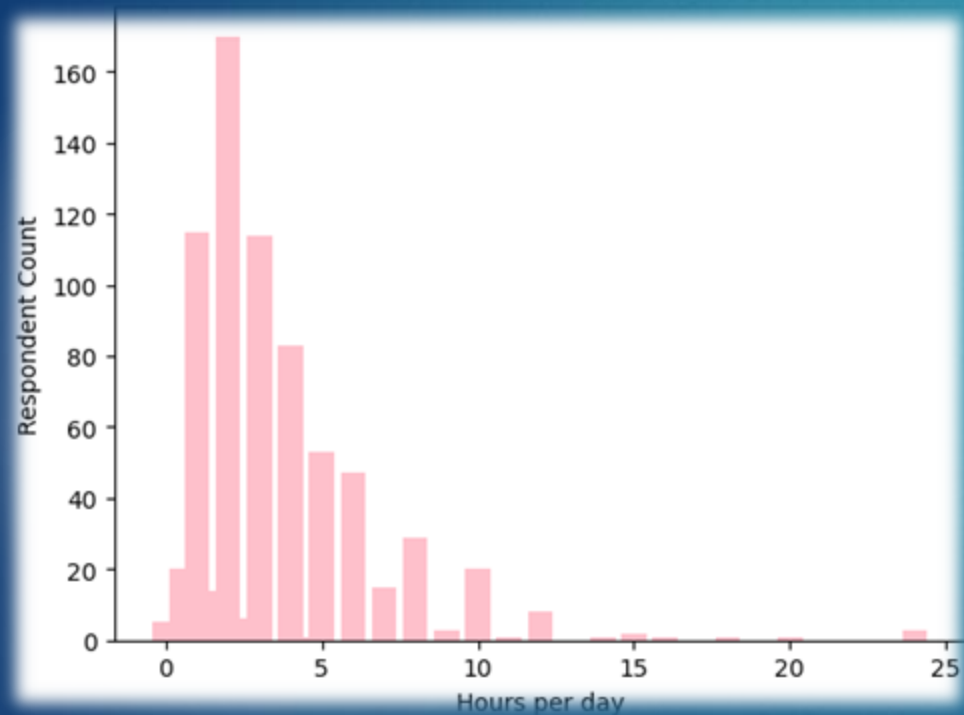Streaming Service Usage and Mental Health

Impact of Favorite Genre on Mental Health

Music Effects on Mental Health Conditions

Hours Spent on Music and Mental Health

	Hours per day	Anxiety	Depression	Insomnia	OCD
hrs/day group					
0 to 5 hrs/day	2.47	5.82	4.74	3.59	2.51
6 to 10 hrs/day	7.42	6.00	4.94	4.11	3.16
11 to 15 hrs/day	12.58	5.50	6.92	5.83	3.00
16 to 20 hrs/day	18.00	6.67	6.67	6.67	8.00
21 to 24 hrs/day	24.00	4.00	2.00	3.00	1.33

The r value is: 0.04547606486214143
The r^2 value is: 0.0020680724753456945

Hours per day vs Anxiety

The r value is: 0.09725860809806652
The r^2 value is: 0.009459236849173292

Hours per day vs Depression

The r value is: 0.13549301536320302
The r^2 value is: 0.01835835721221317

Hours per day vs Insomnia
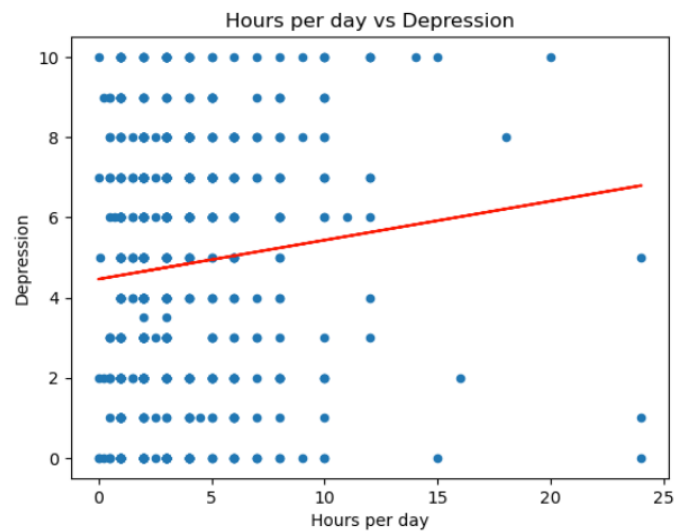
The r value is: 0.11358354898678025
The r^2 value is: 0.012901222600432308

Hours per day vs OCD
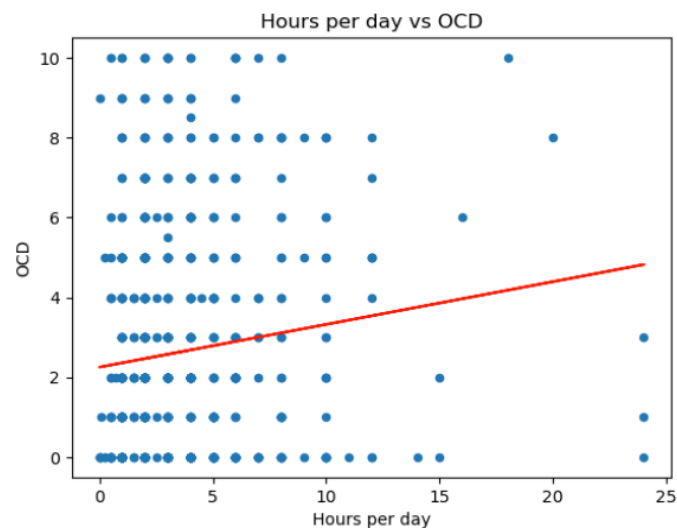
Hours Spent on Music and Mental Health

Conclusions

- The analysis of the MxMH dataset uncovers specific correlations between music preferences, streaming habits, and mental health conditions, offering targeted insights for music therapy.

- Notably, users of Pandora report lower levels of depression, anxiety, insomnia, and OCD compared to those using Spotify and Apple Music, where higher levels of anxiety and depression are prevalent.

- Additionally, genres like Jazz and Classical are associated with lower OCD and insomnia scores, while genres such as Lofi and EDM are linked to higher levels of anxiety and depression.

- There is no significant relationship between the hours spent on music per day and the level of the four types of mental health issues based on the r value and r-squared value calculated.

- These findings emphasize the importance of personalized music therapy that takes into account the type of music and streaming service, enabling more effective treatments and innovative approaches within the music therapy industry.

QUESTIONS?