

I took data "Music & Mental Health Survey Results" from kaggle.com. The dataset aims to identify what, if any, correlations exist between an individual's music taste and their self-reported mental health.

Dataset shows how frequently a person listens to some type of music genre, where do they listen music, their favorite genre, composer, if they have any mental health issues like anxiety, depression, insomnia, OCD, and etc. From this information we are able to analyze the data and show the correlations between music taste and mental health issues.

**Dataset includes 30 columns and about 800 rows.**

The dataset consists of following columns:

Age, Primary streaming service, Hours per day, While working, Instrumentalist, Composer, Fav genre, Exploratory, Foreign languages, BPM, Frequency [Classical], Frequency [Country], Frequency [EDM], Frequency [Folk], Frequency [Gospel], Frequency [Hip hop], Frequency [Jazz], Frequency [K pop], Frequency [Latin], Frequency [Lofi], Frequency [Metal], Frequency [Pop], Frequency [R&B], Frequency [Rap], Frequency [Rock], Frequency [Video game music], Anxiety, Depression, Insomnia, OCD, Music effects, Permissions.

## Importing Data:

for data analyzation we needed every column, except permissions.

**5 Nodes, all of them have at least 1 attribute:**

- Each row represents a respondent, Person with attributes:

``age``, ``while_working`` (Yes/No), ``instrumentalist`` (Yes/No), ``composer`` (Yes/No), ``exploratory`` (Yes/No), ``foreign_languages`` (Yes/No), `bpm`, ``hours_pre_day``, ``favorite_genre``, ``music_effects``

- Streaming service node, with attribute: name (Spotify, Pandora, YouTube Music)

- Working habit, with attributes: `exploratory_listener` (True/False), `listens_while_working` (True/False)

- Music Genre, with attribute: name (Rock, Jazz, Lofi, etc)

- MentalHealthIssue, with attribute: type (Anxiety, Depression, Insomnia, OCD), severity of the mental health issue is added to the relationship, could've been done here.

**4 Relationships, all of them have at least one attribute:**

- uses: a person uses streaming platform. A person listens to music on a certain music platform X amount of time in a day.

Attribute: `hours_per_day`.

- listens\_to: connects a user to a Genre. How often does this person listen to a music.

Attributes: Frequency levels (Very Frequently, Sometimes, Never, Rerally...).

`Frequency_score` from 1-5.

- has\_condition: connects person to a mental health issues.

Attributes: severity and severity level being high, low, medium.

Severity level: either high, low, or medium

has\_habit: shows if a person is either exploratory\_listener, or listens\_while\_working, connects person and working habit

Could add more relationships or nodes, but I think the amount of information given in the dashboards are achievable with these nodes and relationships, and I didn't want to overcomplicate the project.

**Used charts: table, bar chart, pie chart, line chart, grouped bar charts, parameter select, single value.**

**6 pages, each having more than 5 charts, except Graphs.**

## In the dashboard you can see the following:

1. First page consists of displayed general information about the dataset: (most of them are pie, and bar charts), called: **General Data Analysis (Analyzing Columns)**

- Shown respondent's ages by bar chart
- Primary streaming services
- Number of hours the respondent listens to music per day
- Does the respondent listen to music while studying/working?
- Does the respondent play an instrument regularly?
- Does the respondent compose music?
- Respondent's favorite or top genre
- Does the respondent actively explore new artists/genres?
- Does the respondent regularly listen to foreign language music?

2. Then, on second page, you can see the analyzed data, **tables only**, called: **General Data Analysis (Deeper Version)**

- We can see the relationship between ages and frequency of genres - Which age group listens to some type of genre more frequently.
- Most used streaming service for age groups
- What genres are most liked by instrumentalists
- What genres are most liked by composers
- Taking account persons age how many hours per day do they listen to music?
- What kind of genre of music do people choose to listen while it's their foreign language

All of this was to have some kind of idea about the dataset.

3. On third page you can see the data getting analyzed to get information about correlation between mental health issues and music, called: **Mental Health Analysis**

- How respondent's would rate music effects, has it got better, worsen or no effect
- Analyzing their response, and seeing their thoughts vs real results
- Different age groups and mental health issues
- using parameter select
- Composers and their mental health issues status
- Instrumentalists and their mental health issues status
- Does listening to music at work help with mental health issues?
- Does hours per day listening to music had any impact on mental health issues? Seeing this for < 2,5 hours,  $2.5 \leq x < 5$  hours, and more than 5 hours,

4. Next page shows few music genres that are listened frequently and listeners mental health issues, called: **Frequency of Listening**

- Favorite genre and mental health issues, if music genre listeners have any mental health issues (anxiety, depression, insomnia, OCD, separately)
- using parameter select

5. Next one shows, how popular are other genres for a specific genre listeners, called: **Genres**

- Favorite genre and other frequently listened genres
- Favorite genre and other top 3 genres for that person
- using parameter select

6. Lastly 3 graphs are shown, called: **Graphs**.

- A Person Nodes
- USES Relationship
- HAS\_CONDITION Relationship