Music Selection in Music Therapy

The effects of genre, danceability, and other audio features on music therapy

Problem Statement

How can music be selected by genre, danceability, or any of the other 10 audio features categorized by Spotify, to improve the effectiveness of music therapy sessions?

Context

Music therapy is a relatively new health profession that uses music to provide physical, emotional, cognitive, and social therapy. Activities can include performing music, listening to music, and dancing to music. Success varies depending on the music used during sessions. This could be the result of the genre, or other features of the music. Understanding this will allow therapists to narrow down music selections to provide the largest improvement.

Criteria for Success

Cases in which music therapy patients report improvement since beginning music therapy will increase past the current 74%.

Scope

- This initiative will focus on the impacts of genre and the 11 audio features categorized by Spotify on patient improvement.
- The other features include danceability, energy, key, loudness, mode, speechiness, acousticness, instrumentalness, liveness, valence, and tempo.

Constraints

- Despite being categorized and measured by Spotify, audio features are still subjective.
  - There is no data to confirm that, for example, a song with a high danceability score is perceived as being highly danceable by individuals.
- Specific tracks used by therapists during sessions are not recorded.
- In some cases, patients compose their own music.

Stakeholders

Music therapists from a particular medical group or office seeking to improve the satisfaction and results of their patients.

Key Data Sources

- [Music & Mental Health Survey Results](#)
  - Dataset containing self-reported responses to survey questions regarding mental health and music taste.
- [Spotify 1.2 million Songs](#)
  - Includes audio features, such as danceability, energy, and loudness of 1.2 million spotify tracks.