

Explanation of Findings Insights and Visualization

1. Mental Health Conditions vs. Age

- Music serves as a tool for alleviating symptoms of anxiety, depression, insomnia, and OCD across all age groups.
- Adults aged 68 experience higher mental health challenges due to the aging process and its associated emotional impacts.
- Younger individuals (12-44 years) report high prevalence rates of mental health challenges, reflecting developmental and stress-related challenges.

2. Emotions vs. Favorite Genre

- Anxiety levels are notably high for fans of Rock, Jazz, K-pop, and other similar genres.
- Insomnia is more prevalent among fans of Metal, Lofi, and Gospel music.
- Depression levels are pronounced among Lofi, Hip-hop, and Rock enthusiasts.

3. Music Streaming Habits

- **Spotify** dominates as the preferred streaming platform, with users logging significantly higher listening hours compared to competitors like YouTube Music and Apple Music.

4. Musical Background

- The majority of respondents identify as composers or instrumentalists, highlighting a potential bias in favor of individuals with a deeper connection to music.

5. Beats Per Minute (BPM) and Mental Conditions

- Music with around 60 BPM promotes relaxation and aligns with the brain's alpha waves, while faster tempos elicit energetic and uplifting emotions.

6. Average Mental Health Self-Rating and Music Effects

- Respondents with chronic mental health conditions often report less positive effects of music on their well-being compared to those with milder conditions.

Recommendations and Implications

1. Healthcare and Therapy

- Incorporate music therapy tailored to individual mental health conditions in treatment plans.
- Use findings to create BPM-specific playlists targeting relaxation or energy-boosting.

2. Marketing and Advertising

- Leverage insights for targeted campaigns promoting wellness products or music-based therapies.

3. Workplace and Productivity

- Employers can integrate music-based wellness programs to enhance employee productivity and reduce stress.

4. Streaming Platforms

- Enhance personalized playlists and features for stress relief, focus, and relaxation.

5. Further Research

- Address dataset bias by incorporating a broader demographic sample.
- Investigate how specific genres influence emotional states more deeply.

6. Educational Applications

- Use insights to develop programs emphasizing music's role in mental well-being for different age groups.