

An Analysis on the 2023 Spotify Music Landscape

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Introduction

Sound (or hearing) is one of the five basic human senses (Harvey et al., 2022). It helps us to detect danger, ensure our safety, support our cognitive health, communicate with others, and most importantly, it connects us to the world (All Ears Hearing & Tinnitus Clinic, 2026). One of the most profound ways this connection manifests is through music. Music is essential for human well-being, acting as a powerful tool for emotional regulation, cognitive enhancement, and social connection (Peralta, 2021). The International Federation of the Phonographic Industry (IFPI) describes music as a “cornerstone” to our culture, being with us while we celebrate our biggest highs and the toughest of our lows (IFPI, 2025). To better examine how these influences appear in real-world listening trends, this analysis addresses the following key questions:

- Which genres produced the most tracks in 2023?
- Who were the most popular artists in 2023?
- Has music gotten sadder over the decades?
- Have songs become more explicit over time?

Methodology

This analysis was conducted on Jupyter Notebook using Python for data preparation, SQL for data querying, and Power BI for visualisation and insight generation.

The dataset was first gathered from [Kaggle](#), and subsequently cleaned and transformed prepare it for analysis. This was process involed:

1. Removing unnecessary columns,
2. Fixing certain columns so that their data types are optimised for Power BI, which included:
 - o converting the “release_date” column to panda’s datetime,
 - o cleaning the “artist_genres” column by removing the unnecessary symbols including “[\\]”,
 - o replacing empty strings with NaN.
3. Replacing any Null values in “artist_genres” with “Unknown”
4. Dropping the Null values in “audio_feature”

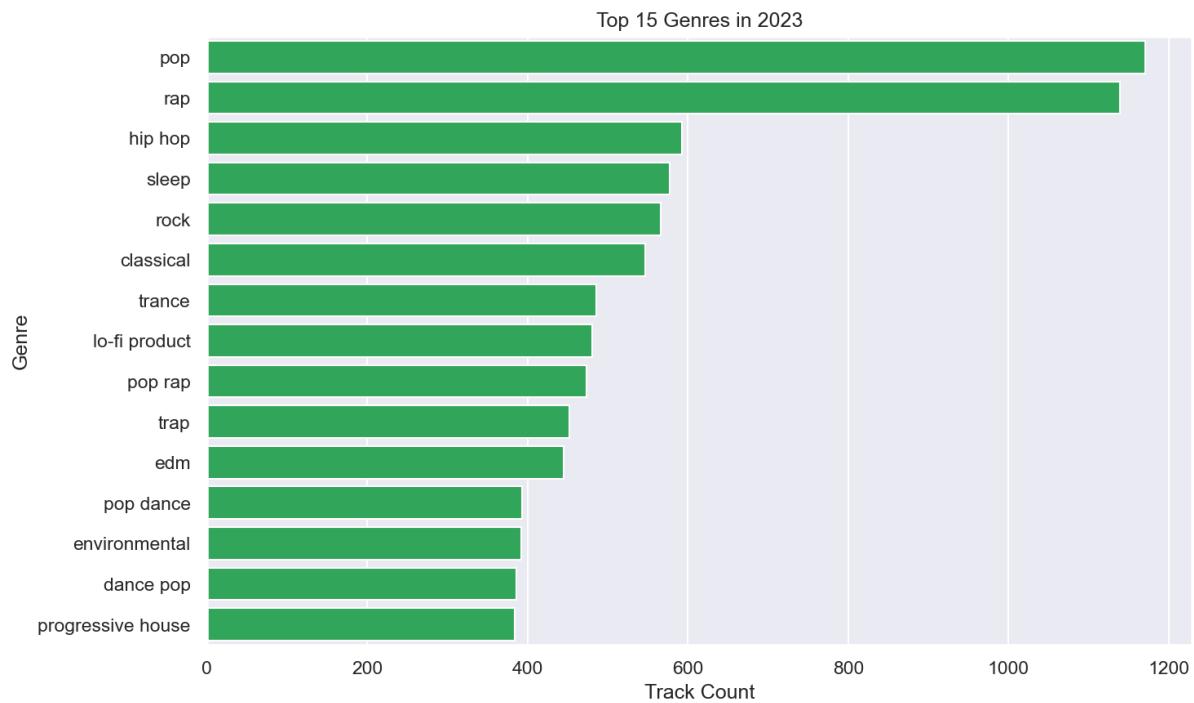
After the dataset had been transformed and saved, it was then imported into a SQLite database, where a python-based connection allowed the data to be queries and analysed using SQL.

Finally, Power BI dashboards were developed using the saved SQL queries to visualise patterns and communicate insights effectively.

Analysis

Genres Producing the Most Tracks in 2023

To identify which genres produced the most tracks in 2023, the dataset was filtered by released year and grouped by artist genre.

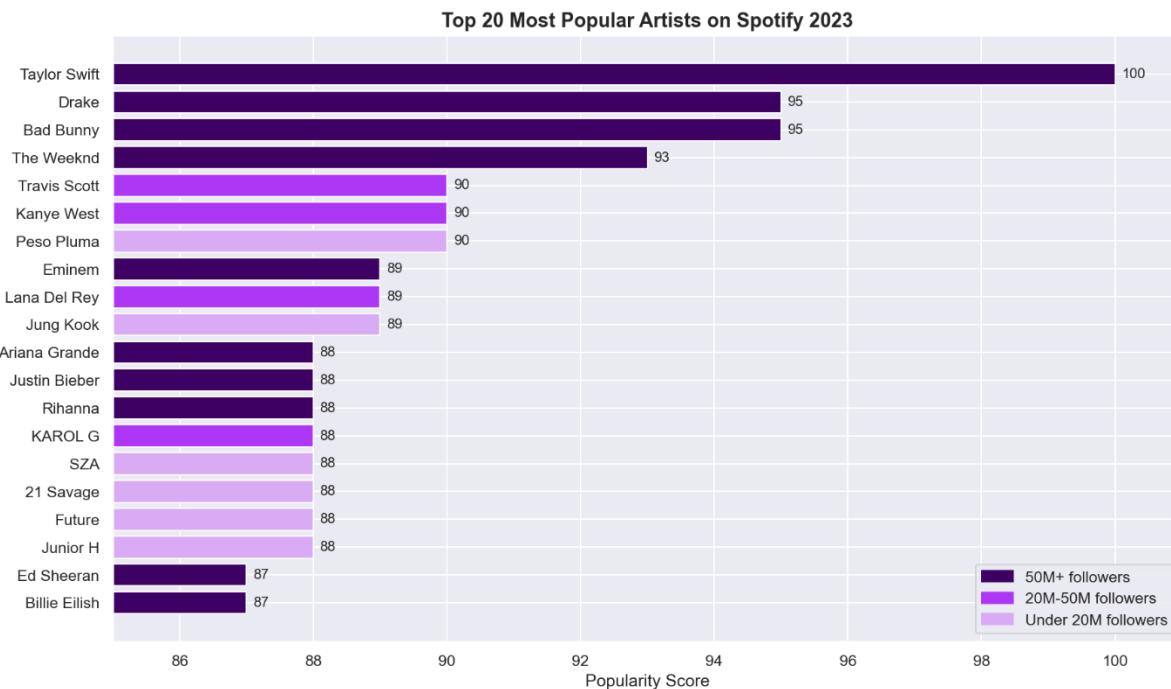


The results show that pop and rap dominated production in 2023, significantly exceeding other genres. Pop music's popularity can be attributed to multiple factors.

On one hand, pop described as a genre in its own right, with classifying traits such as its refined production, catchy hooks, and universal themes (Picken, 2023). These elements, including others such as its repetition and simple structures, means that pop songs are able trigger memory recall, making songs stick in listeners' minds after just one or two plays (Storm, 2025). On the other, "pop music" is also defined as "the mainstream musical genre that applies to songs you hear on the radio over and over again" (Vocabulary, 2026). This means that the genre is ever-changing and adapting based on the musical landscape, allowing it to stand the test of time.

Most Popular Artists in 2023

To identify which artists were the most popular in 2023, the dataset was filtered by popularity score and sorted in descending order.



The results show that an artist's popularity isn't necessarily determined by their amount of followers.

Although the top 4 - Taylor Swift, Drake, Bad Bunny, and The Weeknd - each boast more than 50 million followers, the rest of the top 20 don't follow the same pattern, with several highly-streamed artists having significantly fewer followers.

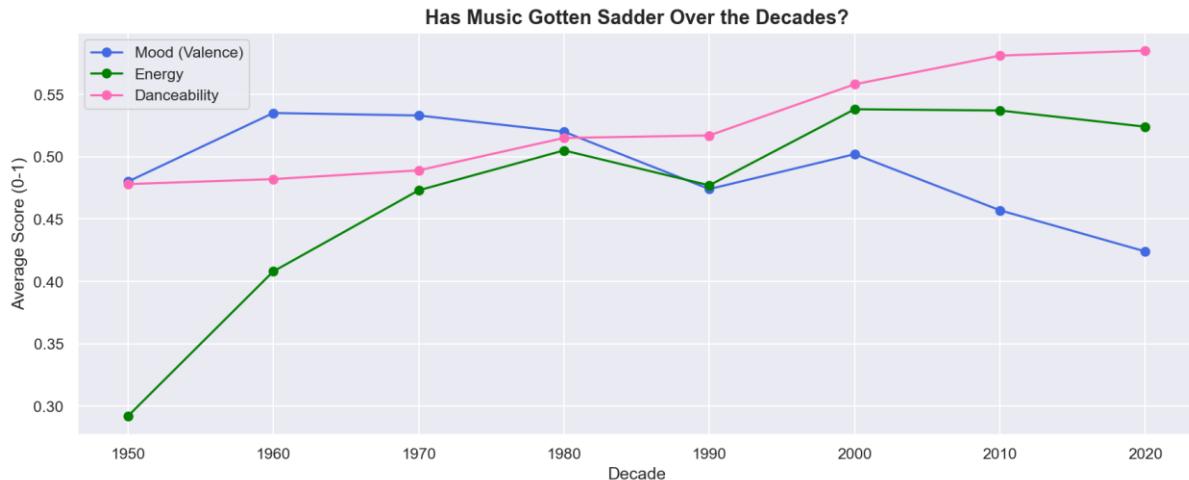
An artist's popularity can be attributed to multiple factors, but it is first important to define what a popularity score is. According to music website Groover (2026) the Spotify popularity score "is a hidden 0–100 rating assigned by Spotify to every artist and track. A higher score means the artist or song is currently receiving more attention compared to others on the platform" with 0 being "under the rader" and 100 being "superstar level".

This is perhaps best illustrated by Peso Pluma and Jung Kook, two of the lowest-followed artists on the list with 9,775,920 and 11,781,450 followers respectively, who still ranked 7th and 10th overall.

Upon further research, Jung Kook is a member of Korean boy band BTS (BIGHIT MUSIC, 2026). His placement on the top 20 list was due to several factors, including the release of his highly anticipated debut solo album, *Golden* (2023), and his collaborations with American artists Jack Harlow, Major Lazer, Latto and DJ Snake (BIGHIT MUSIC, 2026).

Has Music Gotten Sadder Over Time?

To identify whether or not music has gotten sadder over time, the dataset was filtered by decade, with the average valence, energy, and danceability scores calculated for each decade and plotted over time.



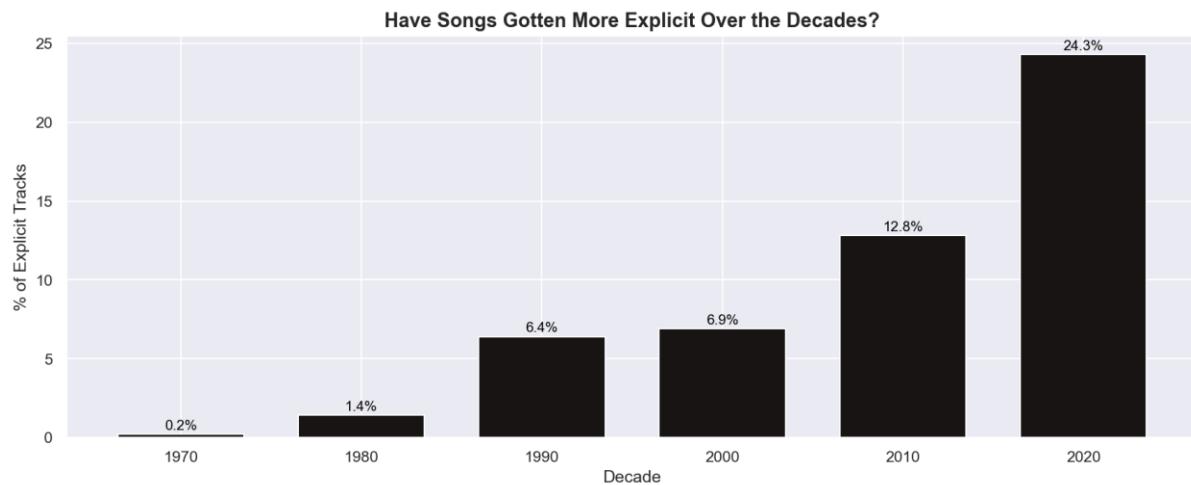
While the results show that the average mood (valence) has decreased over time, the average energy and danceability have increased. “‘Happiness’ is going down, ‘brightness’ is going down, ‘sadness’ is going up, and at the same time, the songs are becoming more ‘danceable’ and more ‘party-like,’” (Kennedy, 2018).

One such reason is that this is due to the political and economic state of the world. As shown in the above graph, the mood of the average song has been on a steady decline since the 2000s, reflecting the turbulent events of that era, such as the 9/11 attacks and the 2008 financial crisis.

In the aftermath of the 9/11 attacks, Halperin and Christman (2011) argue that music played a pivotal role, suggesting it would be 'important in the process of grieving and healing and the eventual return to normalcy', fostering a shift toward more introspective and mournful lyrics. Similarly, following the 2008 financial crisis, “recession pop” - categorised by its high-energy and escapist dance music with narratives about clubbing and feeling positive during hard times - rose to prominence (Miyashita, 2024). This may explain why despite a steady decline in valence, energy and danceability have continued to rise as audiences have historically turned to upbeat, danceable music as a form of escapism during times of hardship (Rohani, 2024).

The Explicitness of Songs Over Time

To identify whether or not music has increased in its explicitness over time, the dataset was filtered by decade and grouped by whether or not it was labelled as 'explicit'.



As shown in the graph, the proportion of explicit tracks has risen dramatically over the decades, from just 0.2% in the 1970s to nearly a quarter with 24.3% in the 2020s.

This increase can largely be attributed to the rise of hip-hop and rap as dominant genres of popular music, both of which are characterised by profane and unfiltered lyricism (Monk-Turner & Sylvertooth, 2008).

While cultural attitudes towards profanity and self-expression have been slowly shifting, the introduction of explicit content warnings in 1985, may have inadvertently normalised and even encouraged more explicit music as though it once was a tool for censorship, it quickly "became a cultural icon that amplified music, fuelled rebellion, and shaped the modern music industry" (The WrightyMedia , 2022).

Conclusion

Popular music has changed significantly over the decades, shaped by cultural shifts, global events, and the evolving tastes of listeners.

View the interactive dashboard here: [Dashboard](#)

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