Spotify Data Analysis*
Comparison of Audio Features Between Multiple Artists

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Using the `spotifyr` package, this paper analyzes audio data features `danceability`, `energy`, and `loudness` by comparing between three artists, `Coldplay`, `Radiohead`, and `The National`.

1 Introduction

This paper provides an analysis of music using the Spotify API

2 Data

For each artist, audio features of their tracks were downloaded, including `danceability`, `energy`, and `loudness`.

Table 1: Table of the cleaned dataset

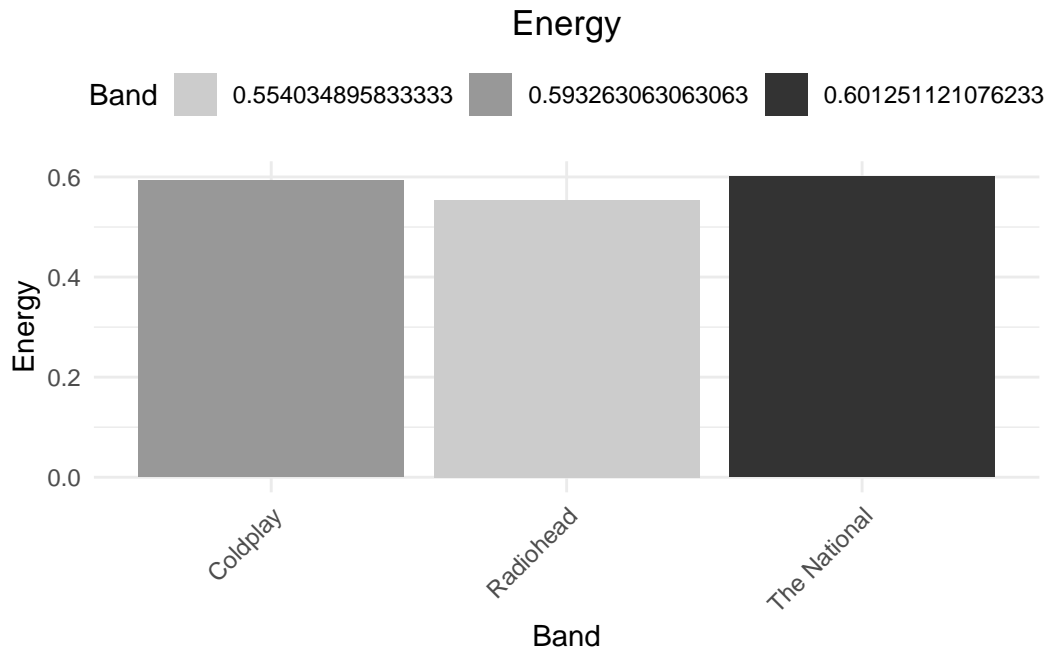| Band	Danceability	Energy	Loudness
Coldplay	0.4022716	0.5932631	-9.031563
Radiohead	0.4019417	0.5540349	-10.356078
The National	0.4932018	0.6012511	-10.081489

Energy

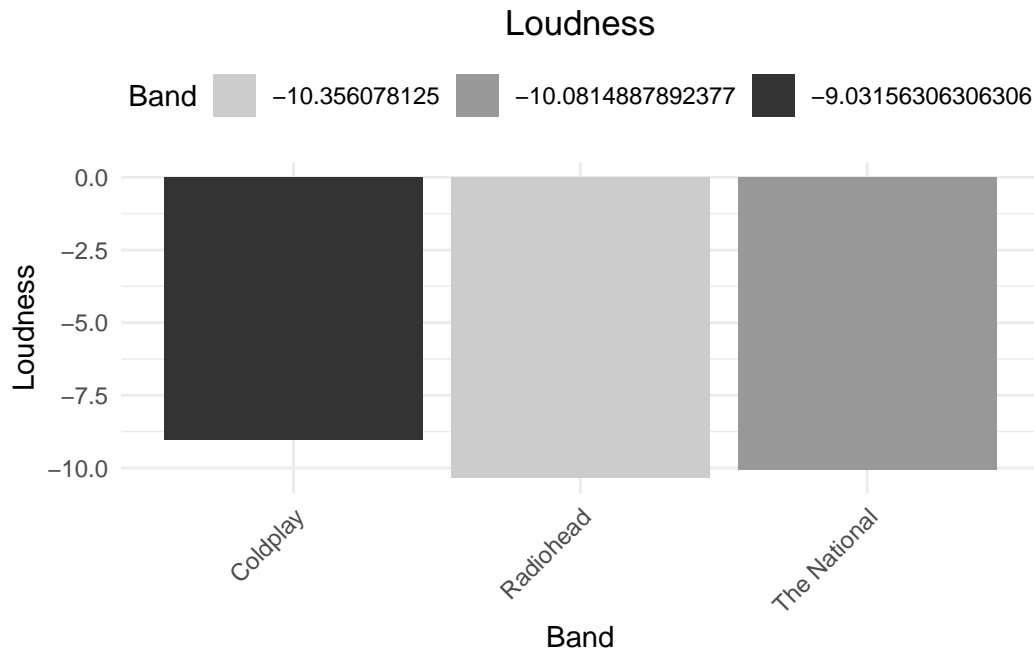Figure 1: Data summary of audio features for Coldplay

Loudness
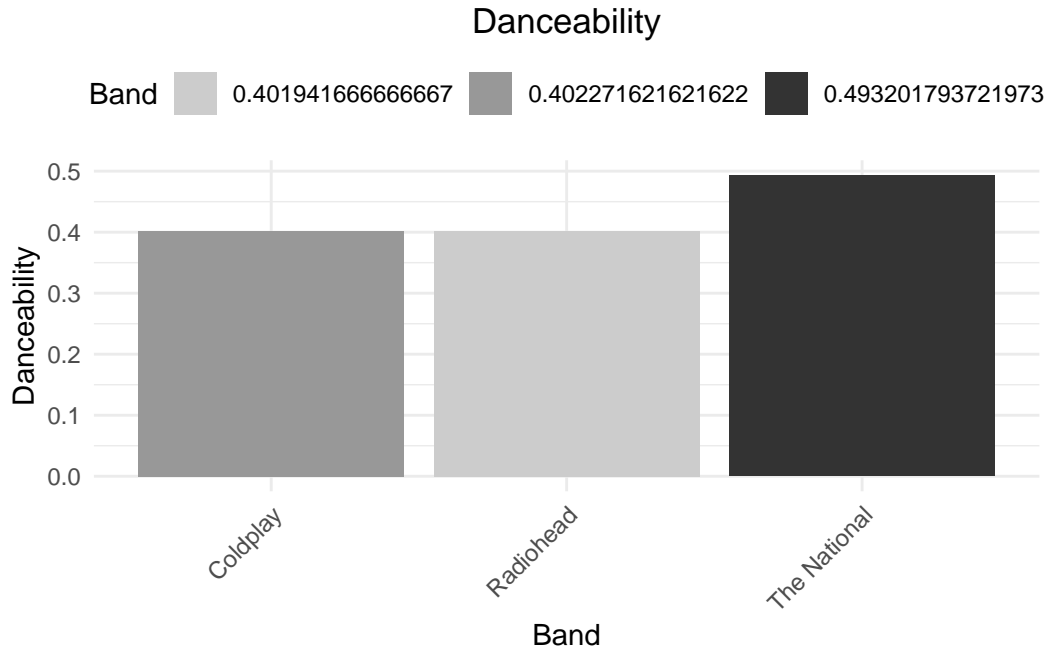

Figure 2: Data summary of audio features for Coldplay

Figure 3: Average Danceability for Coldplay, Radiohead, and The National

2.1 Data Overview

3 Results

4 Discussion

4.1 Trends

4.2 Implications

5 References

For data analysis, we used R (R Core Team 2023) and the `spotifyr` package (Thompson 2023). The data was obtained through the Spotify API ("Spotify Web API Documentation" 2023), and the analysis follows standard practices in music data analysis (**music-data-analysis?**).

R Core Team. 2023. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

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*Code and data are available at: https://github.com/DavidFJ207/spotify_analysis

"Spotify Web API Documentation." 2023. 2023. https://developer.spotify.com/documentation/web-api/.

Thompson, Charlie. 2023. *Spotifyr: R Wrapper for the 'Spotify' Web API.* https://github.com/charlie86/spotifyr.