



PROJECT

SPOTIFY MUSIC ANALYSIS

DATE

14/11/2019

CLIENT

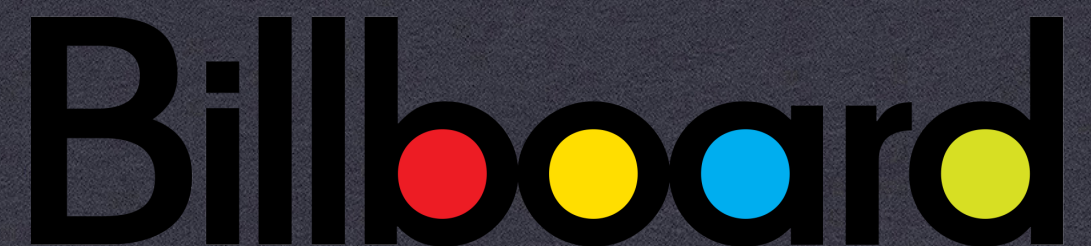
ASHRAY SHETTY & FADI SARRAF

STAKEHOLDERS

RECORD LABEL EXECS

SOURCES

- SPOTIFY
- BILLBOARD END OF YEAR
HOT 100 CHARTS 1969 - 2018



HYPOTHESIS

1.HYPOTHESIS 1:

NULL: THERE IS NO CHANGE IN THE ENERGY OF SONGS WHEN THE ECONOMY IS DOWN

ALTERNATIVE: SONGS BECOME MORE ENERGETIC WHEN THE ECONOMY IS DOWN.

2.HYPOTHESIS 2:

NULL: THERE IS NO CHANGE IN ENERGY OF SONGS BETWEEN SUMMER AND WINTER

ALTERNATIVE: SONGS HAVE MORE ENERGY DURING THE SUMMER SEASONS.

3.HYPOTHESIS 3:

NULL: THE SEASON HAS NO AFFECT ON THE RELEASE OF MORE ACOUSTIC SONGS

ALTERNATIVE: ARTIST RELEASE MORE ACOUSTIC SONGS DURING WINTER.

4.HYPOTHESIS 3:

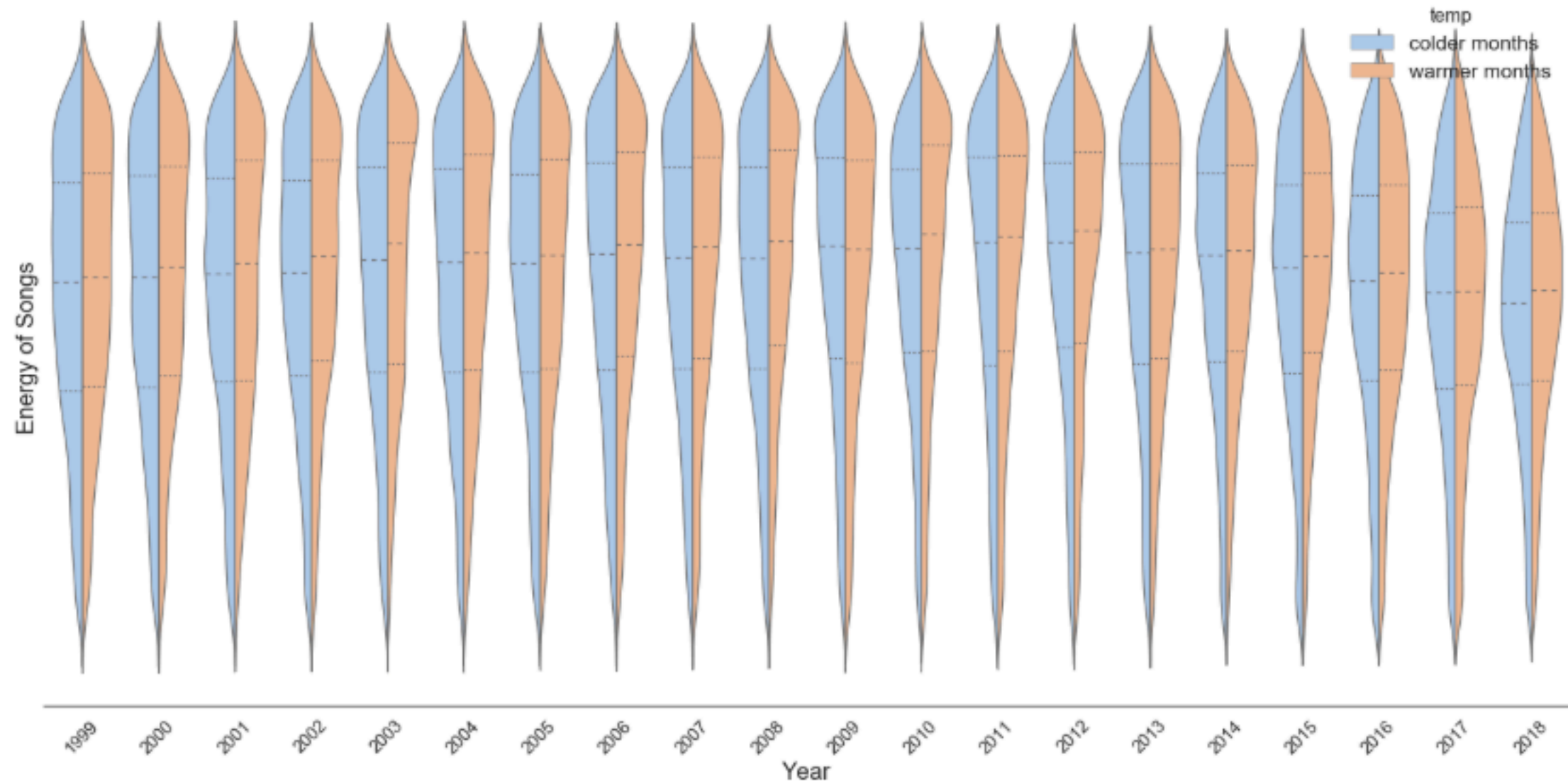
NULL: SONGS ARE NOT BECOMING MORE DANCEABLE

ALTERNATIVE: SONGS IN 2018 ARE MORE DANCEABLE THAN SONGS IN 1999.

HYPOTHESIS 1:

NULL: THERE IS NO CHANGE IN ENERGY OF SONGS BETWEEN SUMMER AND WINTER

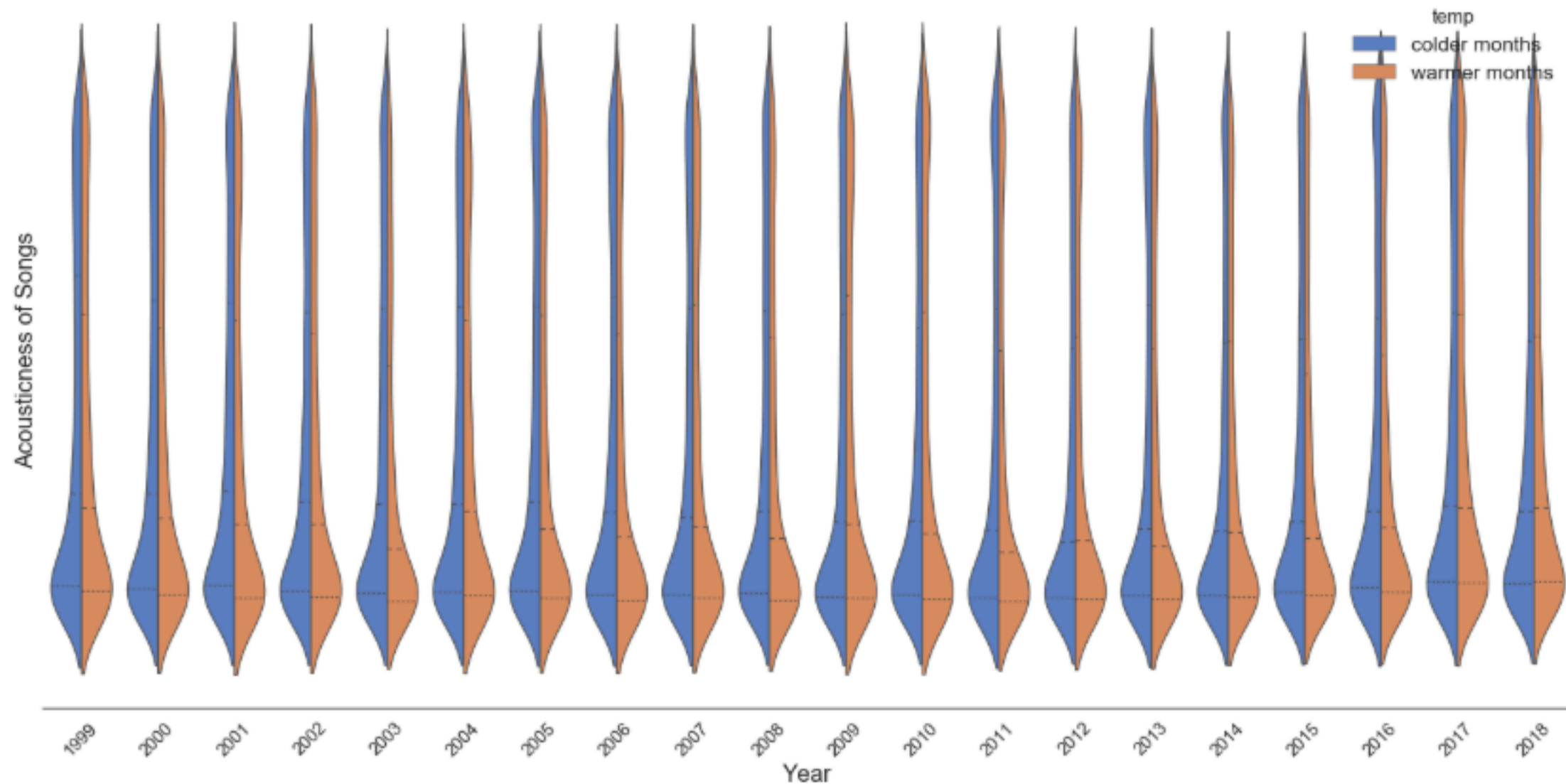
ALTERNATIVE: SONGS HAVE MORE ENERGY DURING THE SUMMER SEASONS.



HYPOTHESIS 2:

NULL: THE SEASON HAS NO AFFECT ON THE RELEASE OF MORE ACOUSTIC SONGS

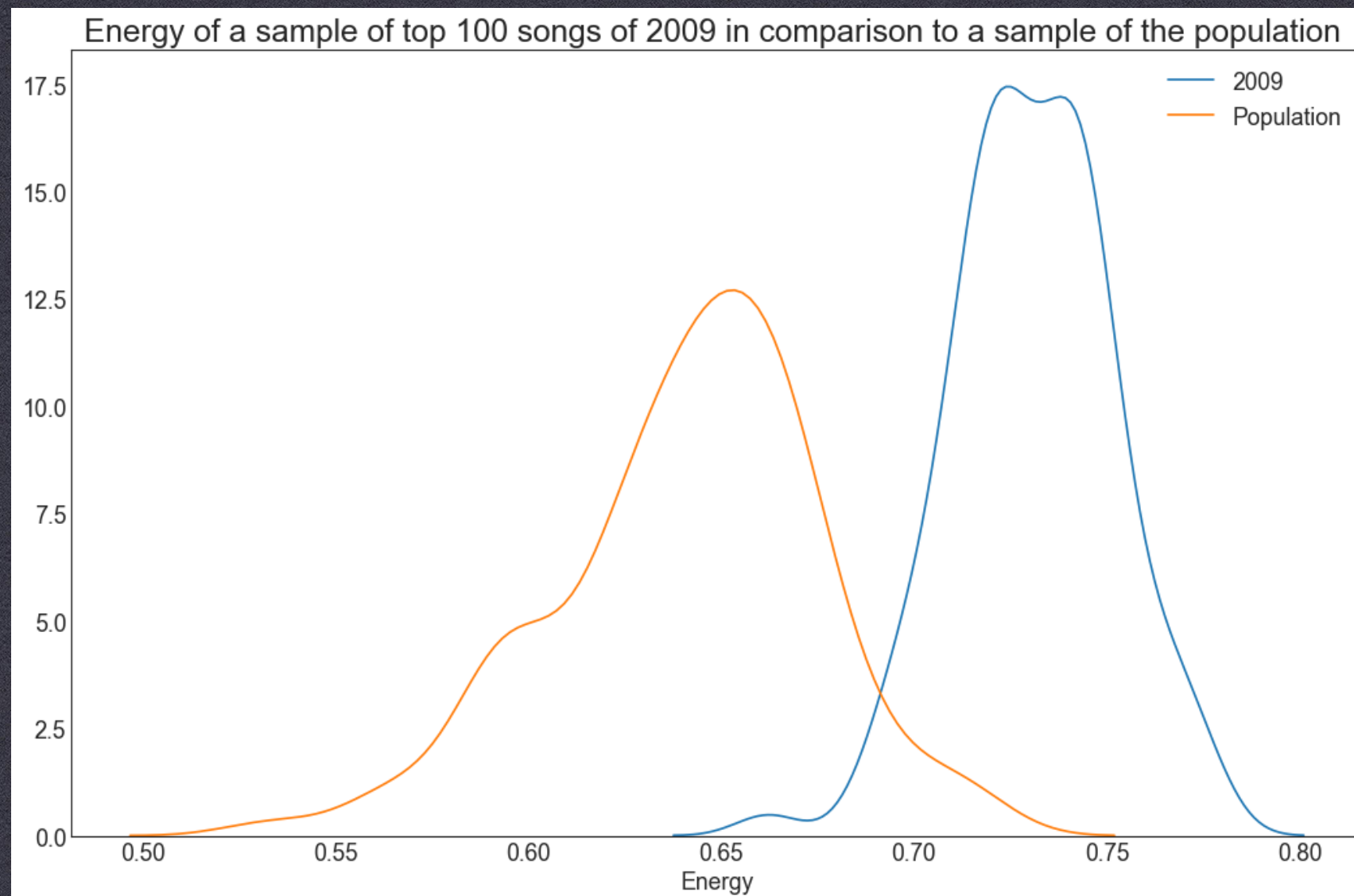
ALTERNATIVE: ARTIST RELEASE MORE ACOUSTIC SONGS DURING WINTER.



HYPOTHESIS 3:

NULL: THERE IS NO CHANGE IN THE ENERGY OF SONGS WHEN THE ECONOMY IS DOWN

ALTERNATIVE: SONGS BECOME MORE ENERGETIC WHEN THE ECONOMY IS DOWN.

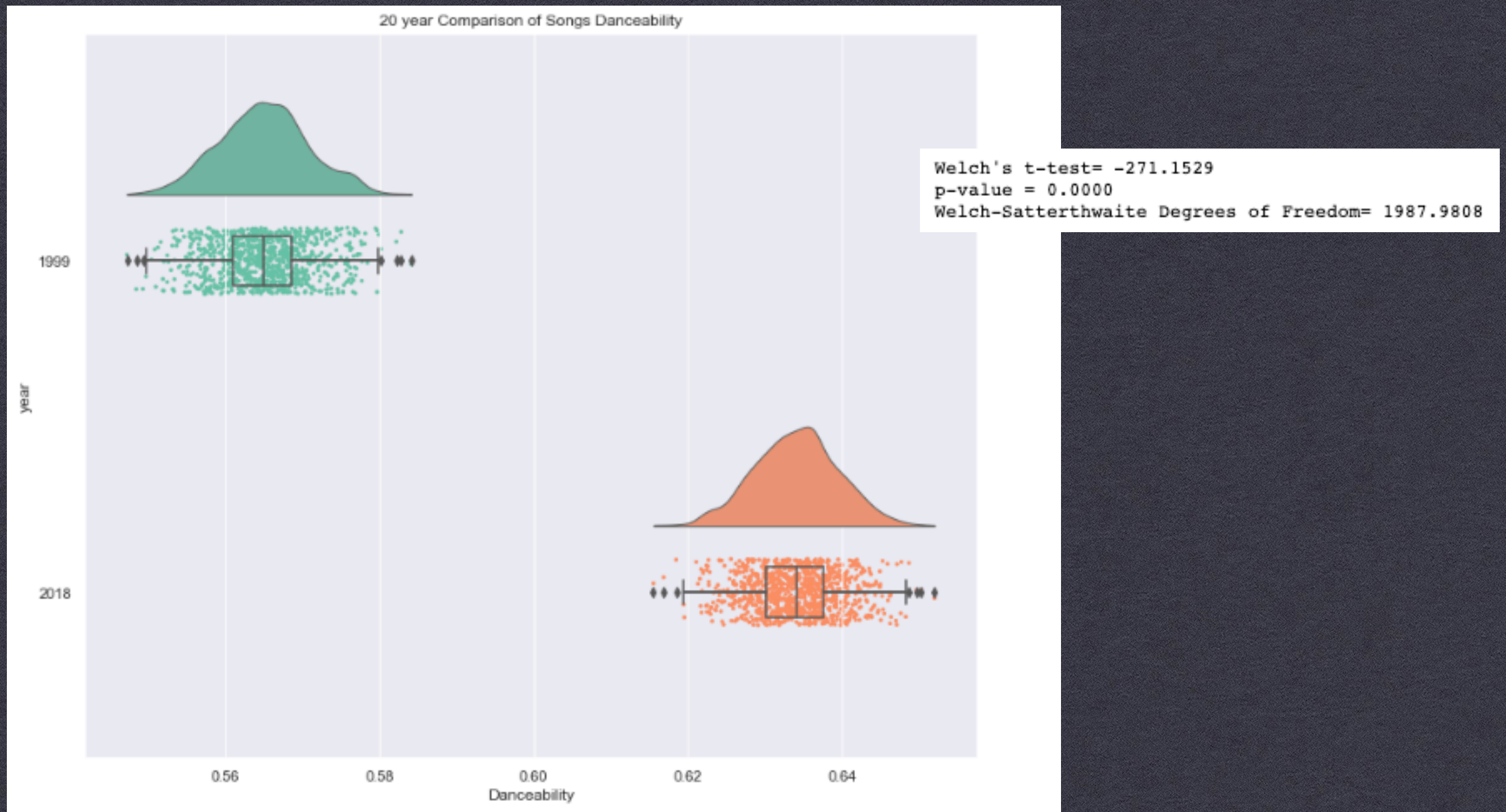


p-value 5.870779433419815e-67
we reject null hypothesis

HYPOTHESIS 4:

NULL: SONGS ARE NOT BECOMING MORE DANCEABLE

ALTERNATIVE: SONGS IN 2018 ARE MORE DANCEABLE THAN SONGS IN 1999.



CONCLUSIONS

- **IF THE ECONOMY DIPS INCREASE THE ENERGY OF THE SONGS PRODUCED**
- **ENERGY OF SONGS ARE NOT SEASONAL**
- **ACOUSTICNESS OF SONGS IS NOT DEPENDANT ON THE TEMPERATURE**
- **SONGS ARE MORE DANCEABLE NO THAN THEY WERE IN 1999**

THANK YOU

GLOSSARY

Energy:

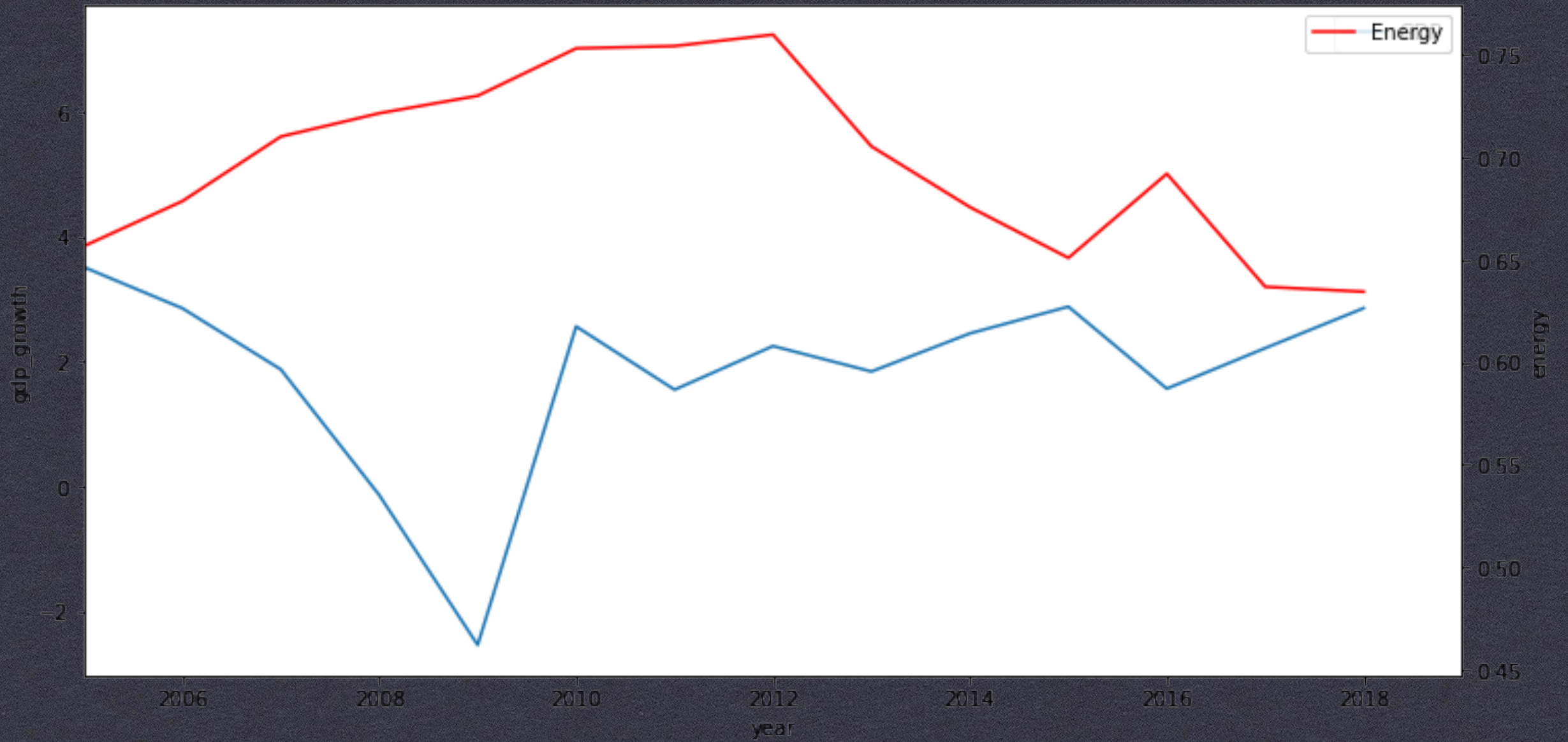
Energy is a measure from 0.0 to 1.0 and represents a perceptual measure of intensity and activity. Typically, energetic tracks feel fast, loud, and noisy. For example, death metal has high energy, while a Bach prelude scores low on the scale. Perceptual features contributing to this attribute include dynamic range, perceived loudness, timbre, onset rate, and general entropy.

GLOSSARY

Danceability:

Danceability describes how suitable a track is for dancing based on a combination of musical elements including tempo, rhythm stability, beat strength, and overall regularity. A value of 0.0 is least danceable and 1.0 is most danceable.

Comparison of Energy to GDP



DANCEABILITY OVER 20 YEARS

20 year Comparison of Songs Danceability

