

Insight into Anime Data

Group C6 Kert Karsna, Jako Aimsalu, Kristofer Klassen

Introduction

In recent years, the number of anime released annually has risen to 200 animated films/series per year. Some releases are very successful, but not all are well-received by viewers. To understand some of the reasons that make an anime "highly rated" or, conversely, less appreciated, the provided dataset can be analyzed.

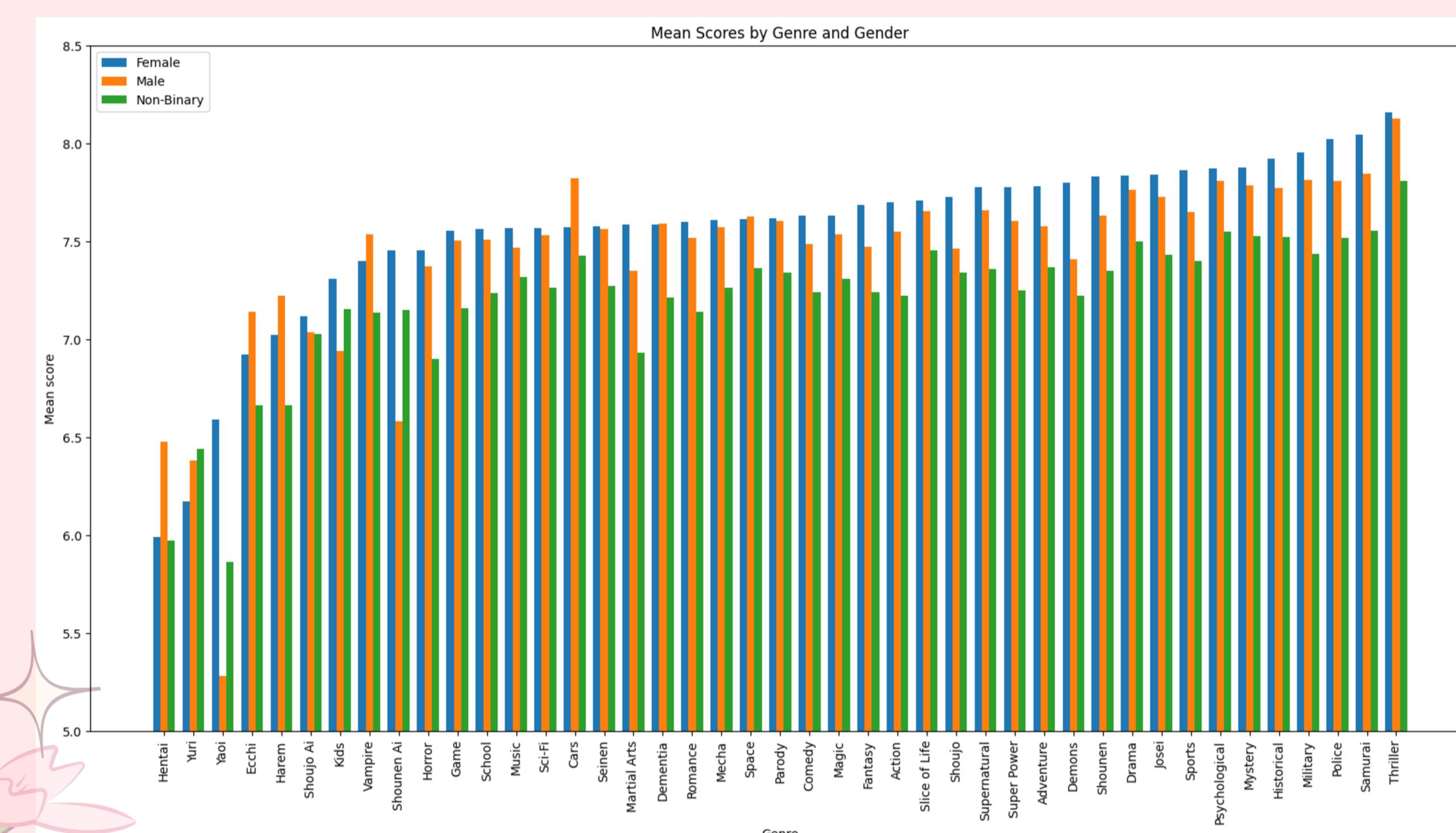


Figure 1. Genre scores by gender

User ratings and preferences

Anime titles were grouped by their genres and analyzed based on user ratings. In Figure 1, we can see clear genre preferences between genders, where women tend to prefer Yaoi and Shounen Ai, while men show a stronger preference for Hentai and Cars. In Figure 2, movies and music are ranked the highest, which may indicate superior production quality. The most reviewed platform is TV, suggesting that it might be the most popular and widely watched media platform.

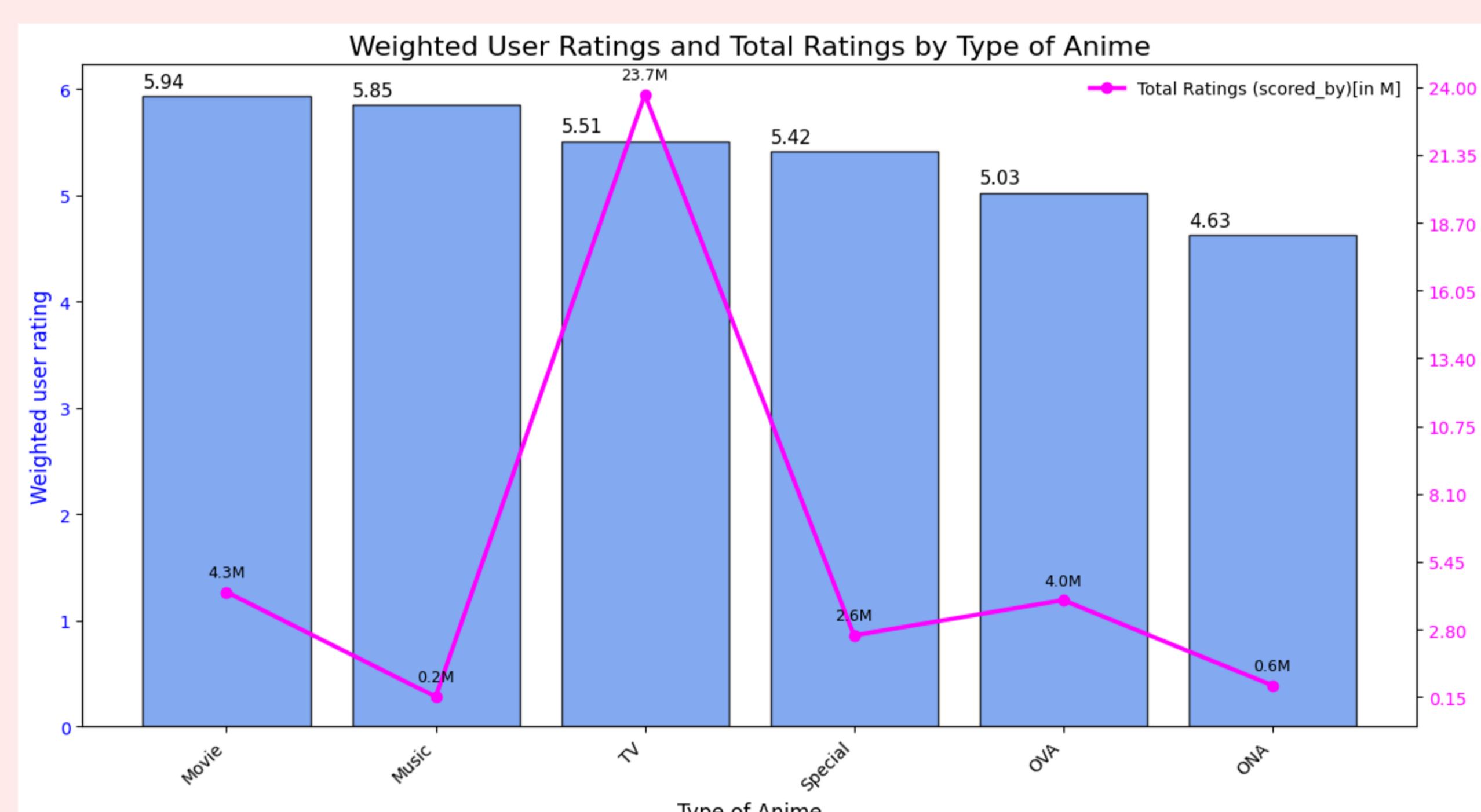


Figure 2. Weighted and total amount of ratings by type

Dataset & (pre-)processing

The steps are as follows: choosing the data, refining aims, filtering the data to fit our needs, making a lot of basic statistics about users rankings, defining objects of interest to us, formatting data/graphs for display.

This dataset from 2023 includes public scores, rankings and 35M+ user feedback entries among 8746 different anime with some background information about users and anime, like gender, anime type and genres.

The dataset is very large, so extra care must be taken to process it in an optimal and correct order. Computational power and data storage were significant limiting factors and one of the biggest problems we had to overcome by optimizing the computations.

Popularity and rating

As seen in Figure 3, higher scores tend to be more popular. The dataset includes many ratings with values of "zero", which are considered as non-rated anime by users. Additionally, we can observe that ratings tend to be either really high or really low, indicating that people tend to rate anime that they have strong negative or positive opinions about.

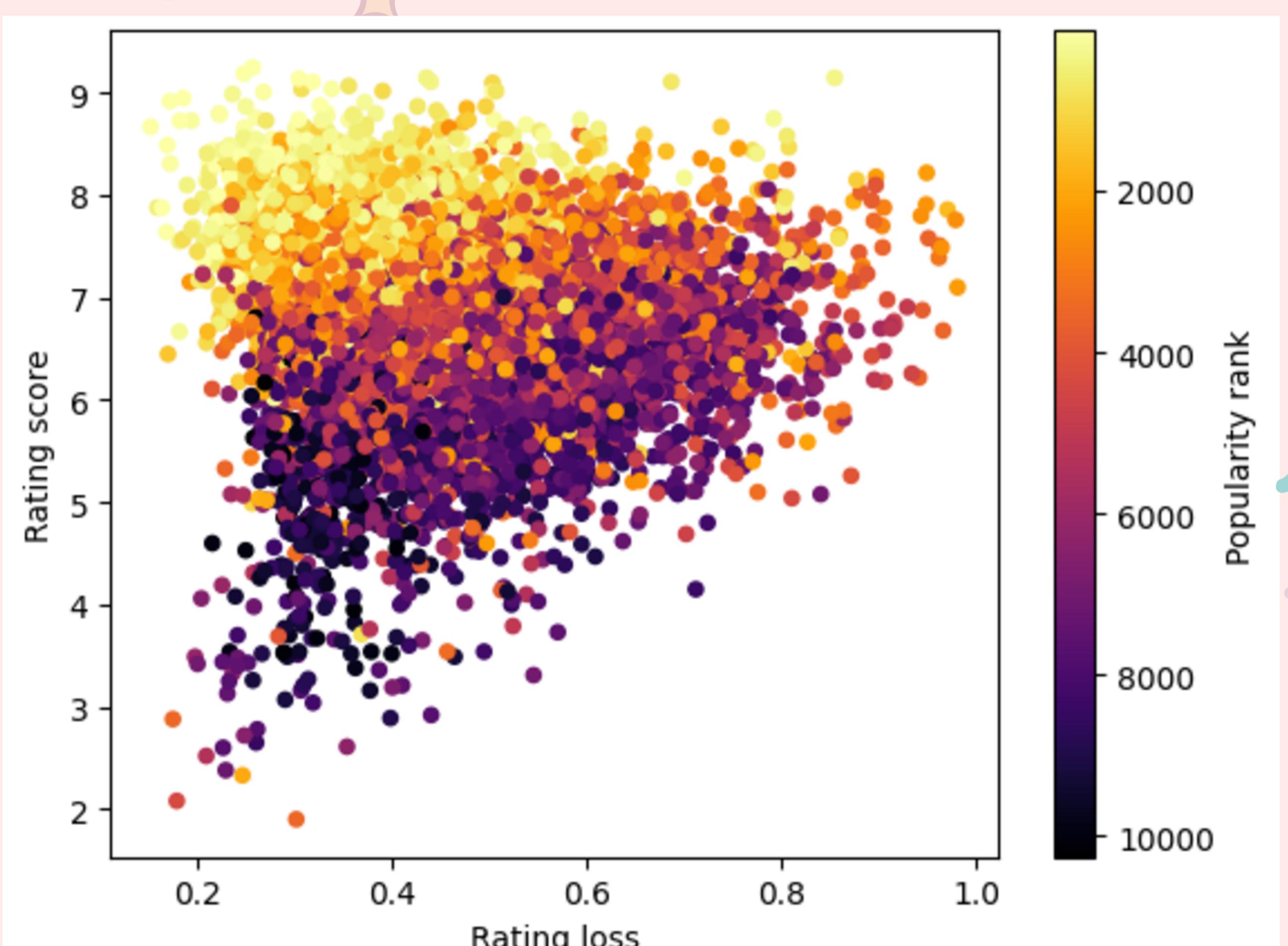


Figure 3. Popularity, user rating and non-rated anime loss

Conclusions

We found visibly positive correlations between popularity and anime rating scores. Viewer numbers through Movies and TV also rank higher which makes it more popular and higher amount of rating also confirms that claim. Even so, genre preferences distribution differs between genders.