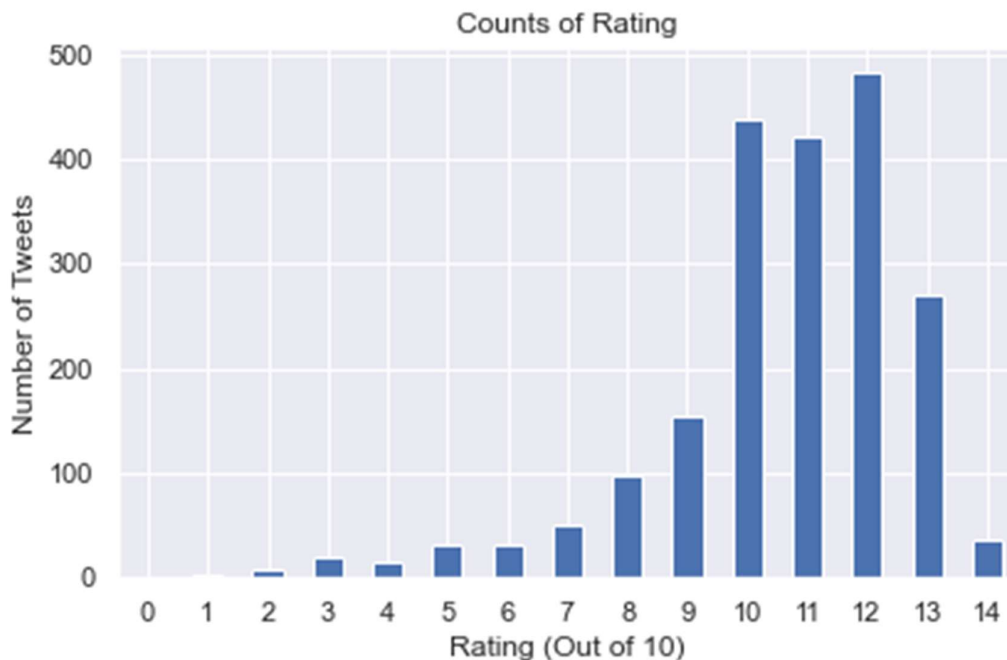


## Analysis on Tweets From WeRateDogs

Looking at the adorable animals from all over the world is undoubtedly the best use of the internet, and I'm sure everyone can agree with that! There are thousands of pages dedicated to just sharing cute animals, and WeRateDogs is one of them. Not only they share the pictures of a dog, but they would also give a rating along with some captions. The account has been active since late 2015 and has tweeted more than 5000 times. I was presented with the data of all the tweets by WeRateDogs and had a pleasure of investigating them. In this report, I would like to share some of the findings.

### 1) Rating Trend

When one looks at the ratings from WeRateDogs, one thing you would immediately notice is its unique rating system. They rate dogs out of 10 but many of scores higher than 10, because 'they're good dogs Brend', as the account once famously tweeted (link). The following plots show the characteristic of the rating. The first plot is the count of tweets with each rating out of 10. The second plot is the average rating (given in decimal) per month since the creation of the account, and it was below 1 until the beginning of 2016.

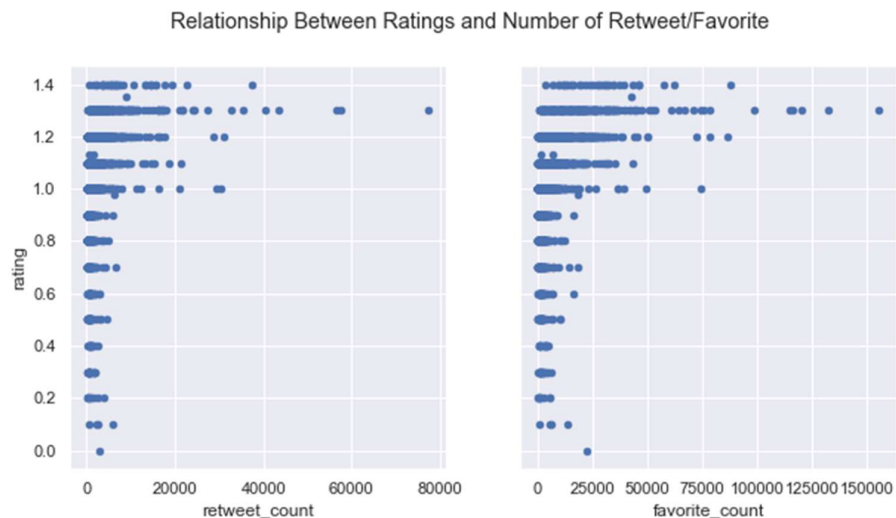




From these plots it can be said that the majority of tweets (59% to be more precise) has rated a dog(s) higher than 10. This figure jumps to 80% when ratings of 10/10 are included as well. This, however, has not always been the case, and it seemed that the account had the usual rating system at the start. The plot reveals the inflation of the rating system since the creation of account and it has been increasing steadily.

## 2) Rating vs Number of Retweets/Favorite

Let's look at the relation between the given rating and the number retweet/favorite the tweet has received. One would expect highly rated dogs to receive a higher number of retweets or favorites. The relation is summarised in the scatter plot below.

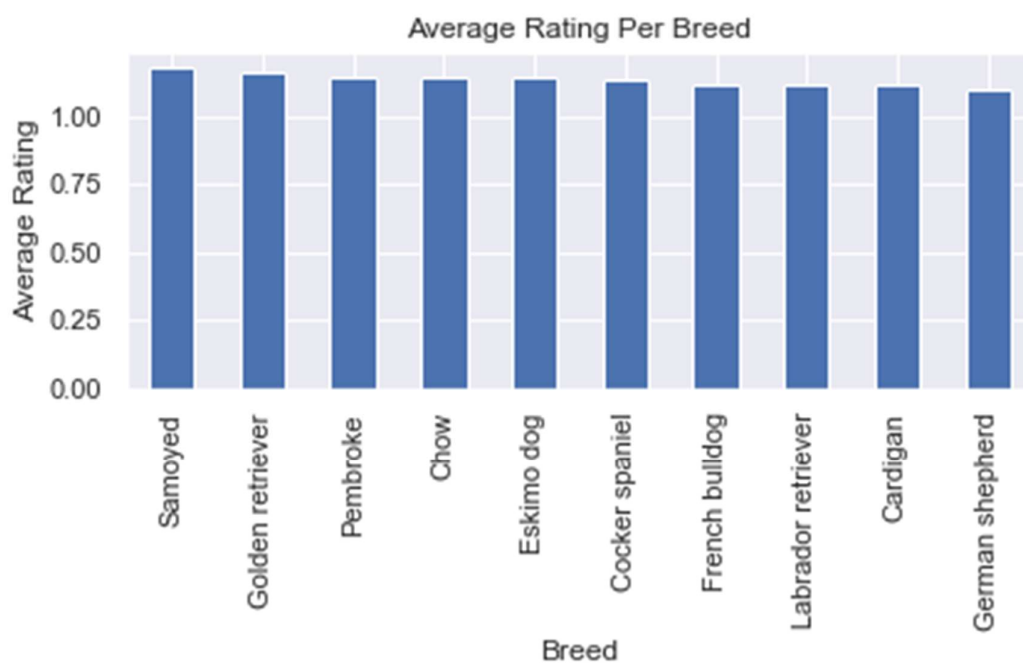
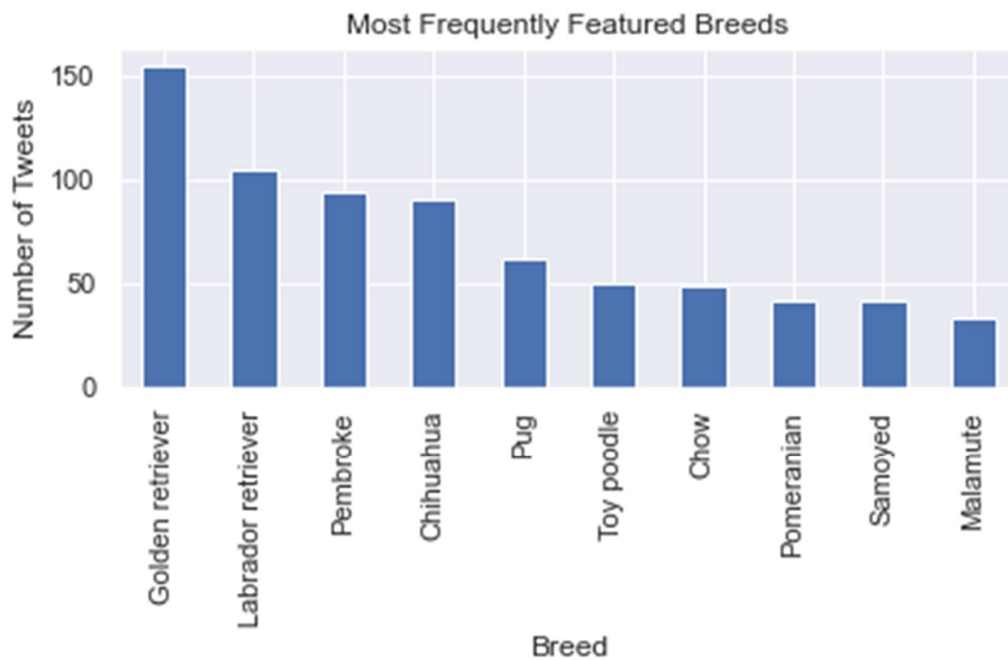


There is definitely a positive correlation between ratings and public reaction. However, it is not the strongest

correlation (0.30 and 0.39 for retweet and favourite, respectively). As it has been pointed out in the first section, many of the tweets has high ratings. This might have caused the some of non public favorite to be rated in the upper end of ratings, leading to the lower correlation.

### 3) Effect of Different Breed

Lastly, let's look into how different breed of a dog affects the rating. With the use of machine learning, the breed of a dog was identified from the images. The graphs below shows the frequency of each breeds' appearance, and the average rating per breed (only breeds with more than 20 appearances are considered).



The retrievers seem to be favoured by WeRateDogs account, as both golden retriever and Labrador retriever taking the first and the second place in the total number of appearance respectively. Also they are listed in the top 10 highest average rating list. However, the difference in the average rating is small, and no particular breed seem to score higher than the others.