# Data Analysis and Visualization report



In this report we tackle key insights form our WeRateDogs dataset problem. Each insight would be delved into with theory behind the insight and supporting graphs to enhance understanding.

The following insights would be addressed:

1- Tweet numbers
2- Algorithm prediction
3- Dog stages
4- Ratings

## Tweet numbers

How did the number of tweets fare with time? To be able to keep engagements high, we need to know which periods had the most tweets and which had the least so we can target marketing activities such as campaigns and giveaways during the low periods. We check the number of tweets by month and by year. First, by month;
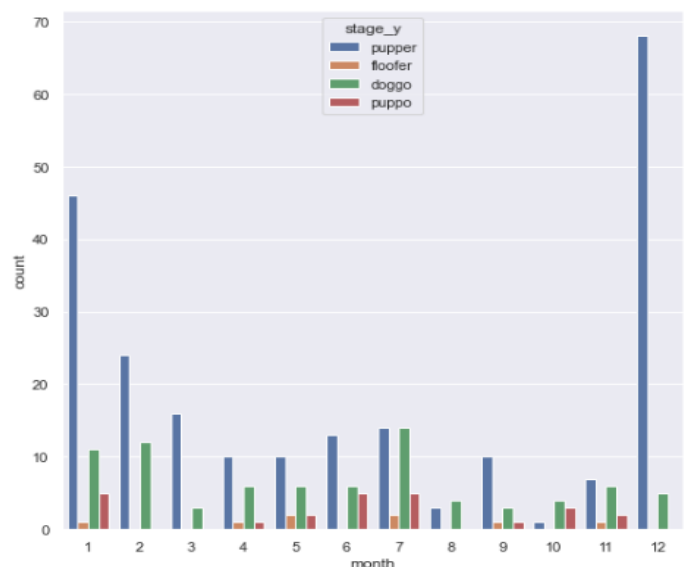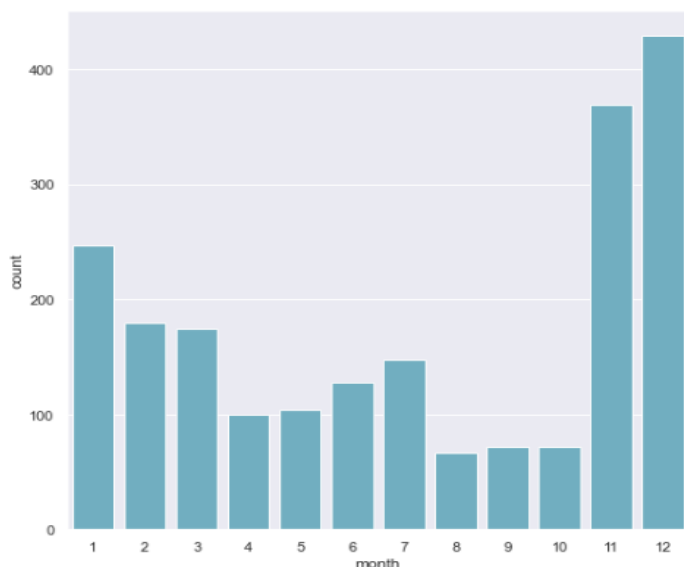
We can see that November and December have the most tweets by month. However when we categorize it by stages, relatively all the tweets were targeted at puppers. Checking number of tweets by year also gave us interesting insights;
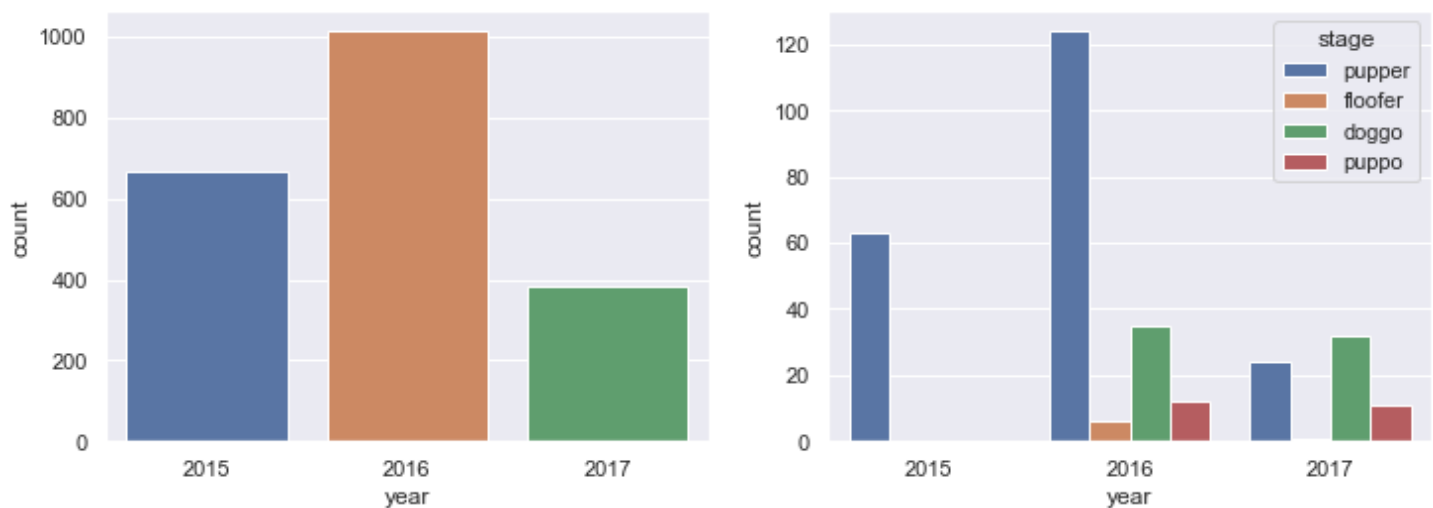


We can see here that 2016 had the highest number of tweet count. However, 2017 data ended at August with the doggo stage tweets more than half it was the previous year.

## Algorithm Prediction

We need to be able to determine which algorithms have the best prediction rate so we can further tune them to produce better results. We accomplish this by plotting the mean prediction accuracy as a percentage of the total means of all the algorithms. So far it is evident that Algorithm has the best chance of predicting the right breed.
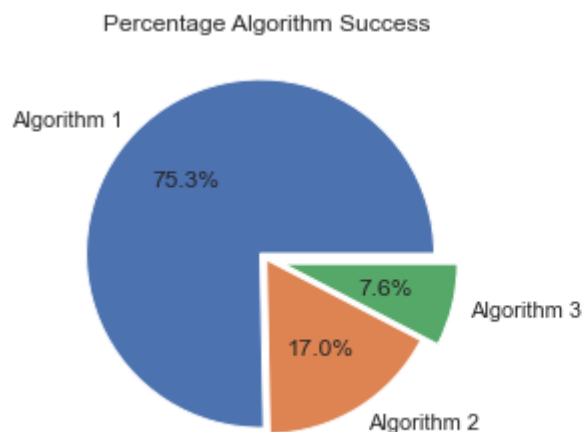


## Dog Stages

In order to execute targeted giveaways, we wouldn't want to for example print more t-shirts for a dog stage which is not duly represented. We need to know which dog stages have the most counts so we could target these markets. Puppers remain the most represented dog stage in the tweets.

Count of Dog Stages
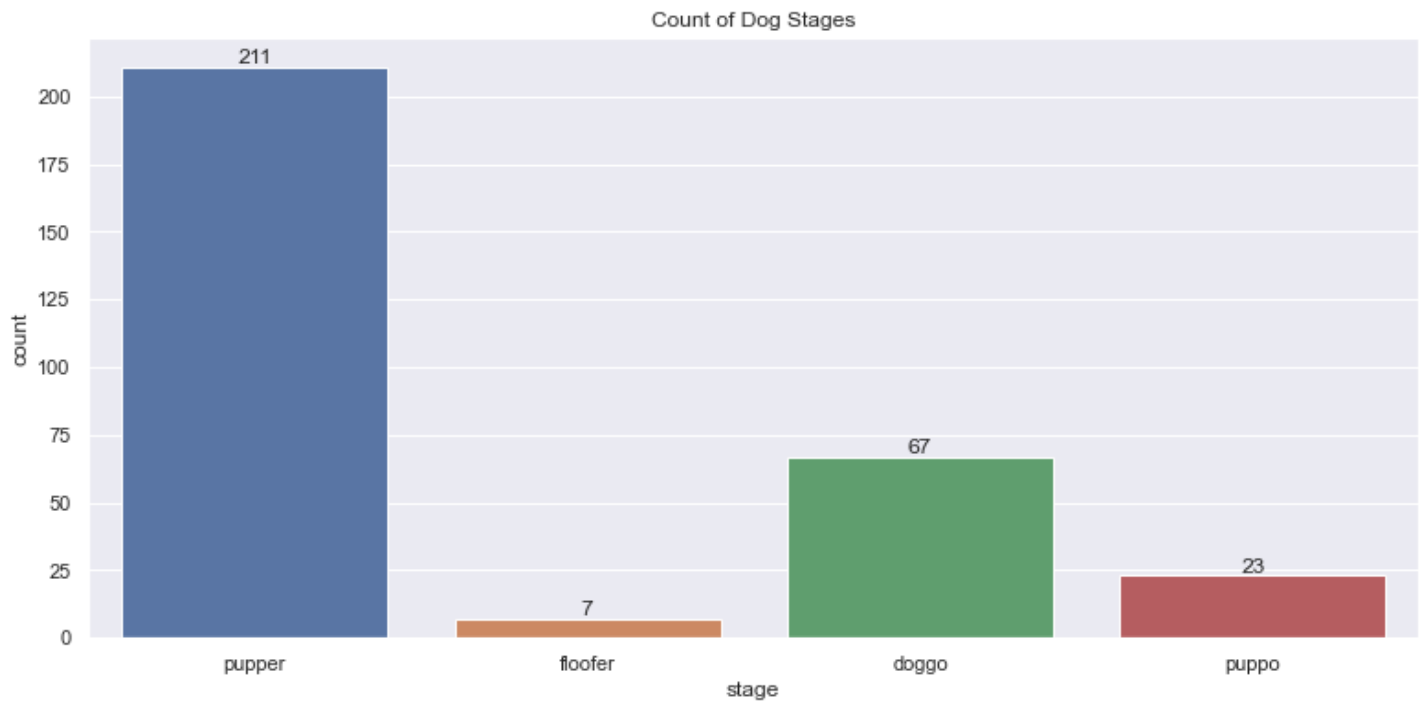
## Ratings

Ratings could also be used as a means of targeted marketing. However the different individual ratings are into the thousands as shown by the next to images


Distrubition of Ratings

Count of Ratings
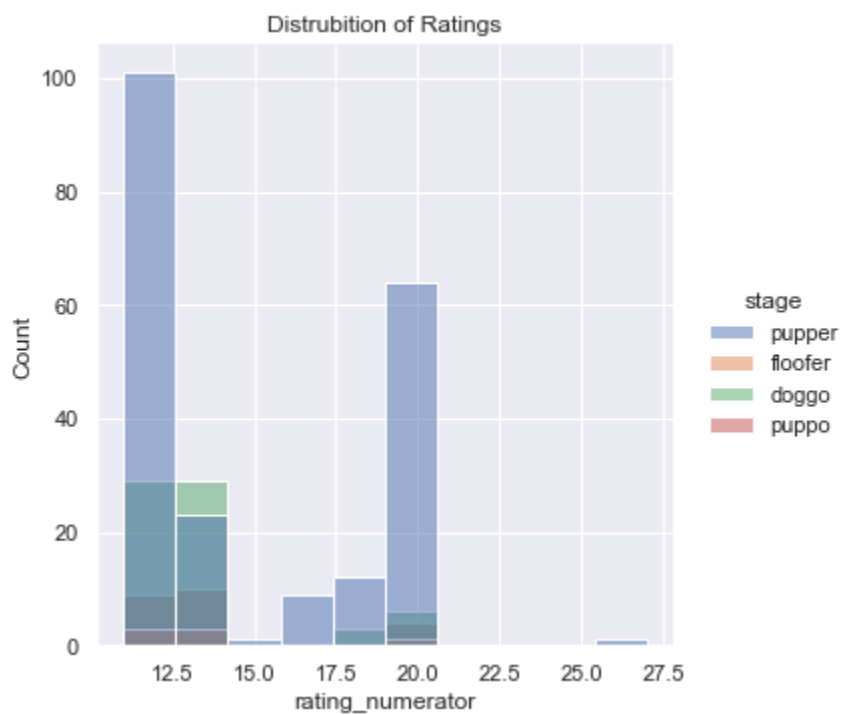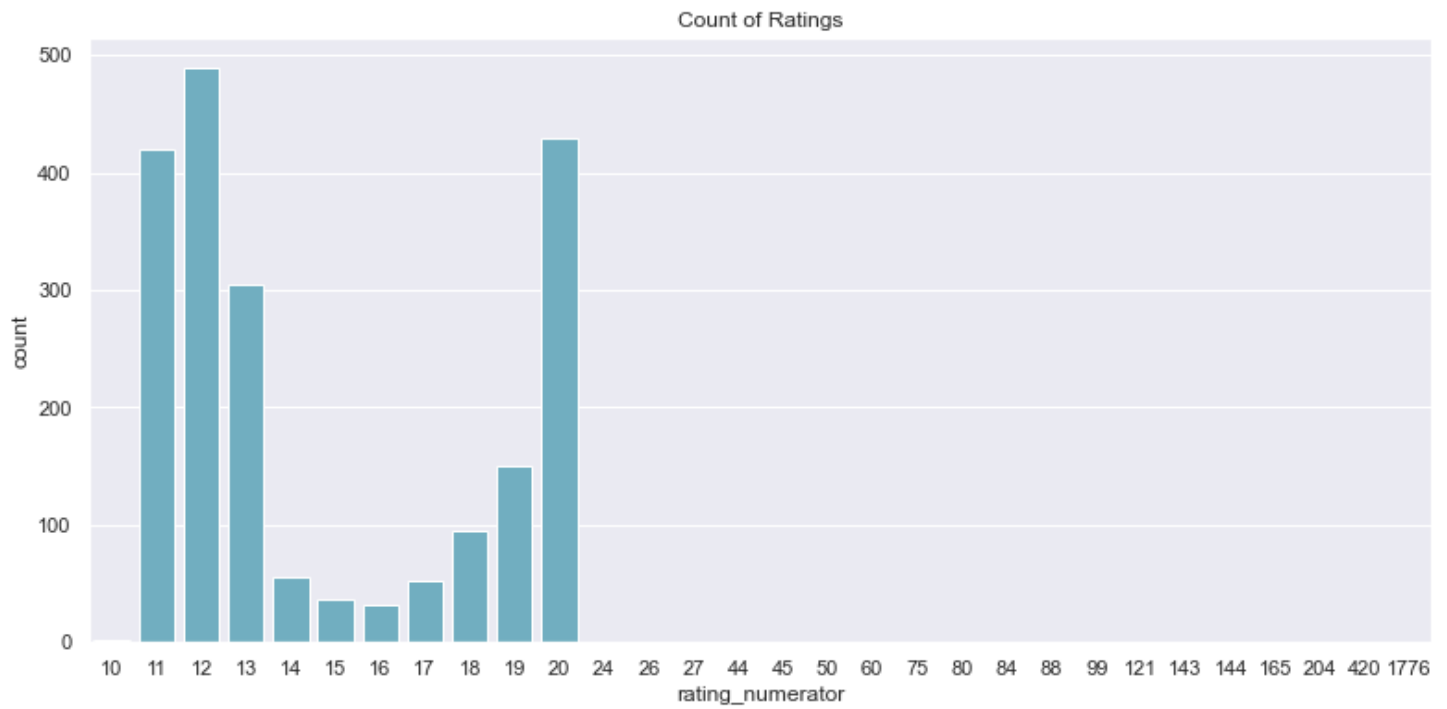
The rating counts has one of its values to be 1776. The count for this is insignificant compared to others. We therefore only focus on the top 10 total ratings in general then we focus on the top 10 by stage category.



Top 10 Highest Ratings

Top 10 Ratings by Dog Stage
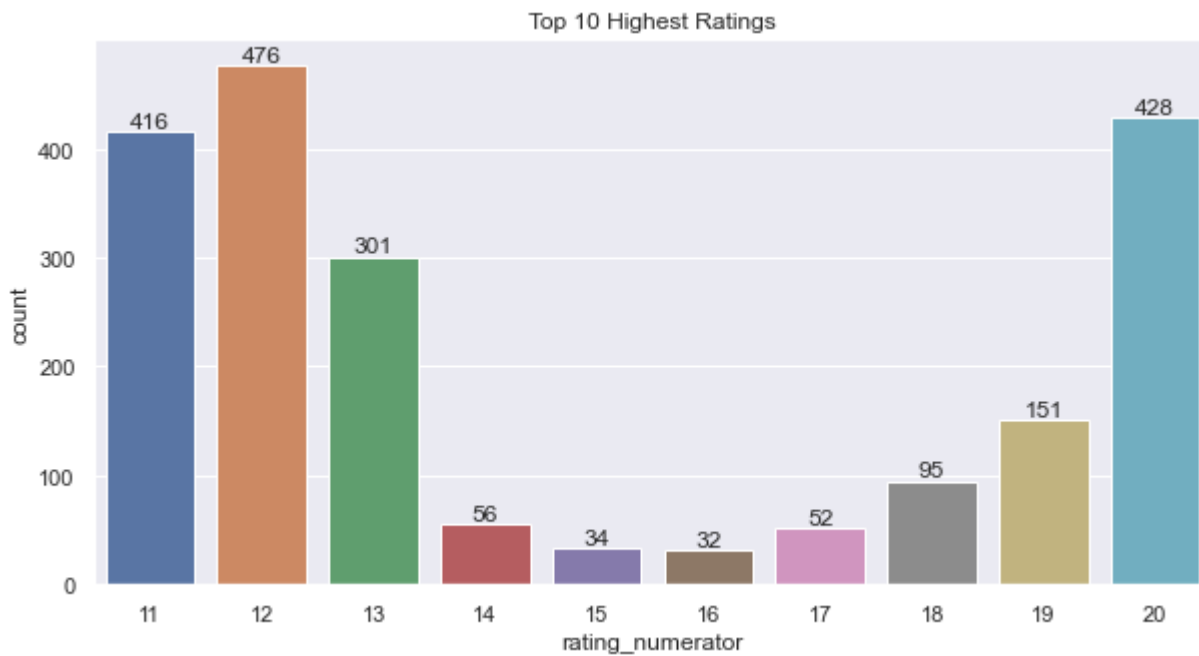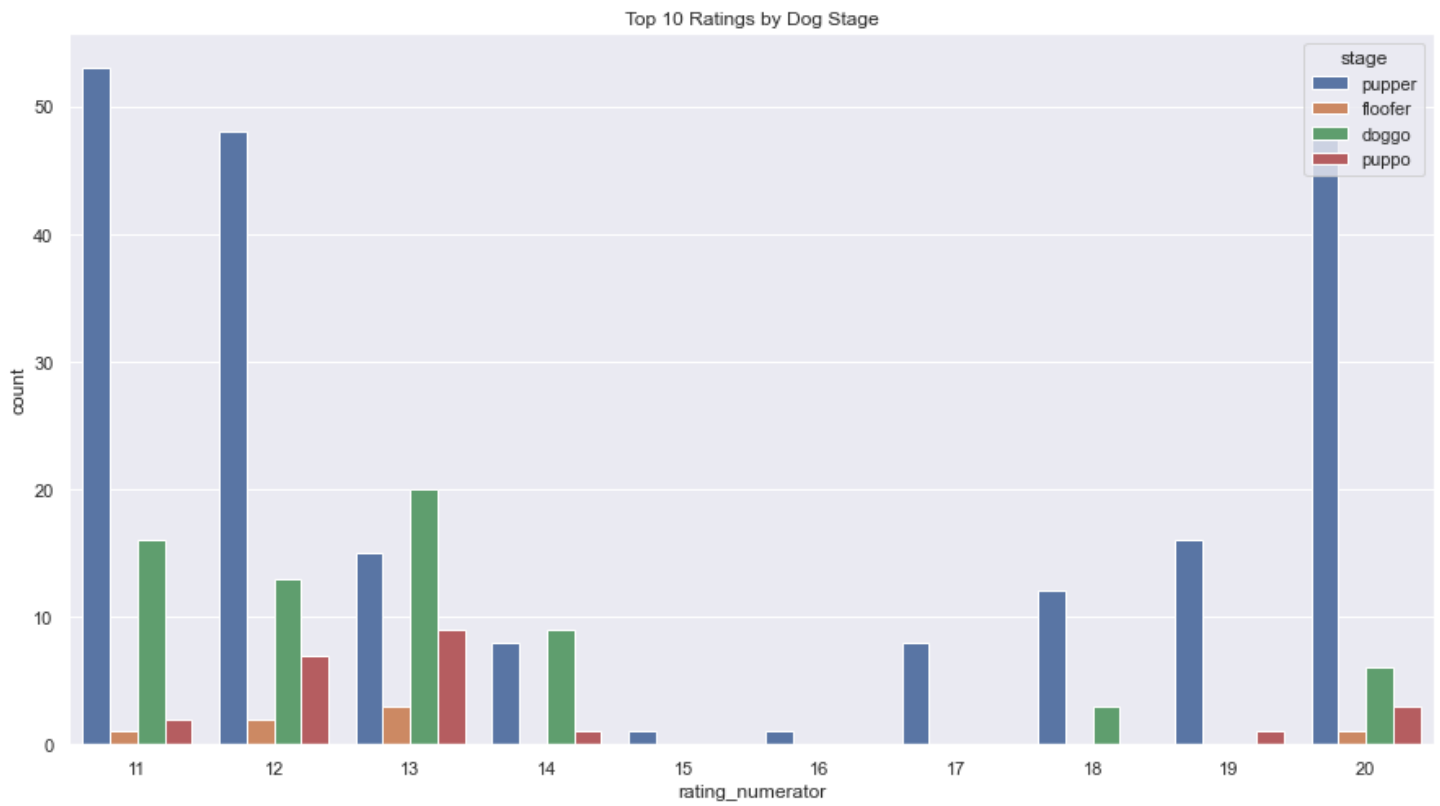
# Congratulations to Pupper!!!

For being the most popular dog stage.