

Introduction :

WeRateDogs is a Twitter account that rates people's dogs with a humorous comment about the dog. These ratings almost always have a denominator of 10. The numerators, though? Almost always greater than 10. 11/10, 12/10, 13/10, etc. Why? Because "they're good dogs Brent." WeRateDogs has over 4 million followers and has received international media coverage.

Our goal :

Wrangle WeRateDogs Twitter data to create an interesting and trustworthy analysis and visualizations. The Twitter archive is great, but it only contains very basic tweet information. Additional gathering, then assessing and cleaning is required for the Data .



[Image via Boston Magazine](#)

The Data

Enhanced Twitter Archive

The WeRateDogs Twitter archive contains basic tweet data for all 5000+ of their tweets, but not everything. One column the archive does contain though: each tweet's text, which I used to extract rating, dog name, and dog "stage" (i.e. doggo, floofer, pupper, and puppo) to make this Twitter archive "enhanced." Of the 5000+ tweets, I have filtered for tweets with ratings only (there are 2356).

text	rating_numerator	rating_denominator	name	doggo	floofer	pupper	puppo
This is Phineas. He's a mystical boy. Only ever appears in the hole of a donut. 13/10 https://t.co/MgUWQ76dJU	13	10	Phineas	None	None	None	None
This is Tilly. She's just checking pup on you. Hopes you're doing ok. If not, she's available for pats, snugs, boops, the whole bit. 13/10	13	10	Tilly	None	None	None	None
This is Archie. He is a rare Norwegian Pouncing Corgi. Lives in the tall grass. You never know when one may strike. 12/10 https://t.co/0D36da7qLQ	12	10	Archie	None	None	None	None
This is Darla. She commenced a snooze mid meal. 13/10 happens to the best of us https://t.co/0D36da7qLQ	13	10	Darla	None	None	None	None
This is Franklin. He would like you to stop calling him "cute." He is a very fierce shark and should be respected as such. 12/10 #BarkWeek	12	10	Franklin	None	None	None	None
Here we have a majestic great white breaching off South Africa's coast. Absolutely h*ckin breathtaking. 13/10 (IG: tucker_marlo) #BarkWeek	13	10	None	None	None	None	None
Meet Jax. He enjoys ice cream so much he gets nervous around it. 13/10 help Jax enjoy more things by clicking below https://t.co/Zr4hWfAs1H https://t.co/tVJBRMnhd	13	10	Jax	None	None	None	None
When you watch your owner call another dog a good boy but then they turn back to you and say you're a great boy. 13/10 https://t.co/0D36da7qLQ	13	10	None	None	None	None	None
This is Zoey. She doesn't want to be one of the scary sharks. Just wants to be a snugly pettable boatpet. 13/10 #BarkWeek https://t.co/0D36da7qLQ	13	10	Zoey	None	None	None	None
This is Cassie. She is a college pup. Studying international doggo communication and stick theory. 14/10 so elegant much sophisticated	14	10	Cassie	doggo	None	None	None
This is Koda. He is a South Australian deckshark. Deceptively deadly. Frighteningly majestic. 13/10 would risk a petting #BarkWeek https://t.co/0D36da7qLQ	13	10	Koda	None	None	None	None
This is Bruno. He is a service shark. Only gets out of the water to assist you. 13/10 terrifyingly good boy https://t.co/0D36da7qLQ	13	10	Bruno	None	None	None	None
Here's a puppo that seems to be on the fence about something haha no but seriously someone help her. 13/10 https://t.co/0D36da7qLQ	13	10	None	None	None	None	puppo
This is Ted. He does his best. Sometimes that's not enough. But it's ok. 12/10 would assist https://t.co/0D36da7qLQ	12	10	Ted	None	None	None	None
This is Stuart. He's sporting his favorite fanny pack. Secretly filled with bones only. 13/10 puppered puppo #BarkWeek https://t.co/0D36da7qLQ	13	10	Stuart	None	None	None	puppo

The extracted data from each tweet's text

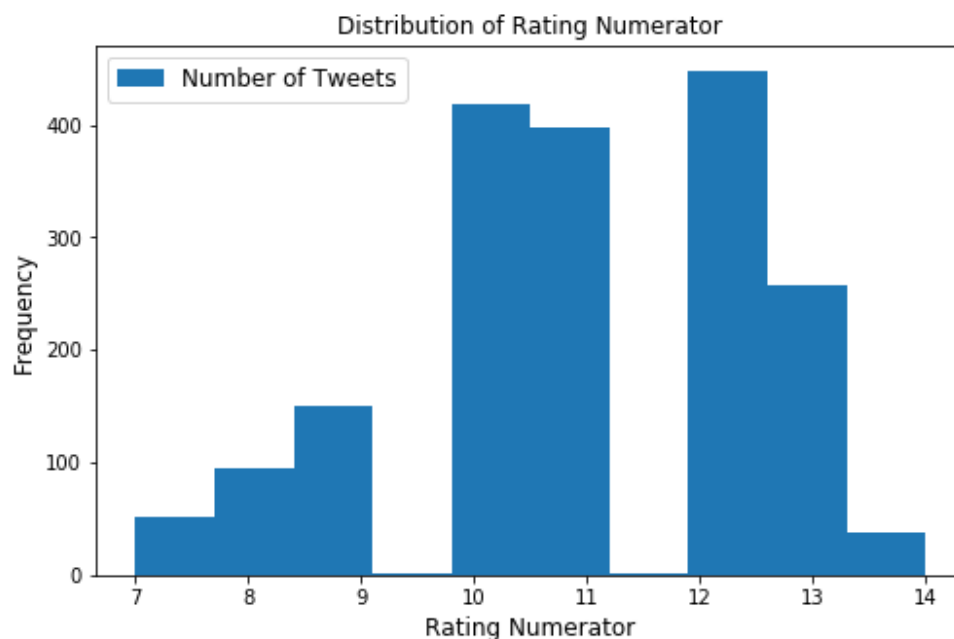
Results of the analysis:

The cleaned dataset contains 1993 tweets between November 15, 2015 and August 1, 2017. Each record of a tweet contains rating, and breed of the dog in the tweet image. Additionally, information such as retweet and favorite counts also exist. These are highlighted in this figure.

In this project, three research questions were raised. Each of these questions are explained along with the analysis results found.

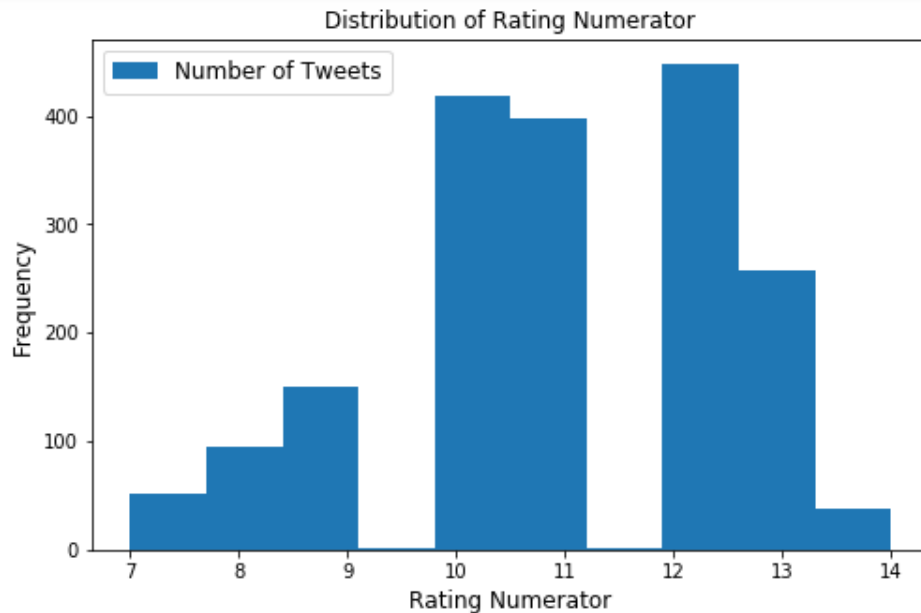
Are the Ratings on WeRateDogs More Positive, Negative, or Average?

From the collected tweets, it was observed that most of the ratings were between 7/10 and 14/10. What is interesting is that, the average rating is above 10.

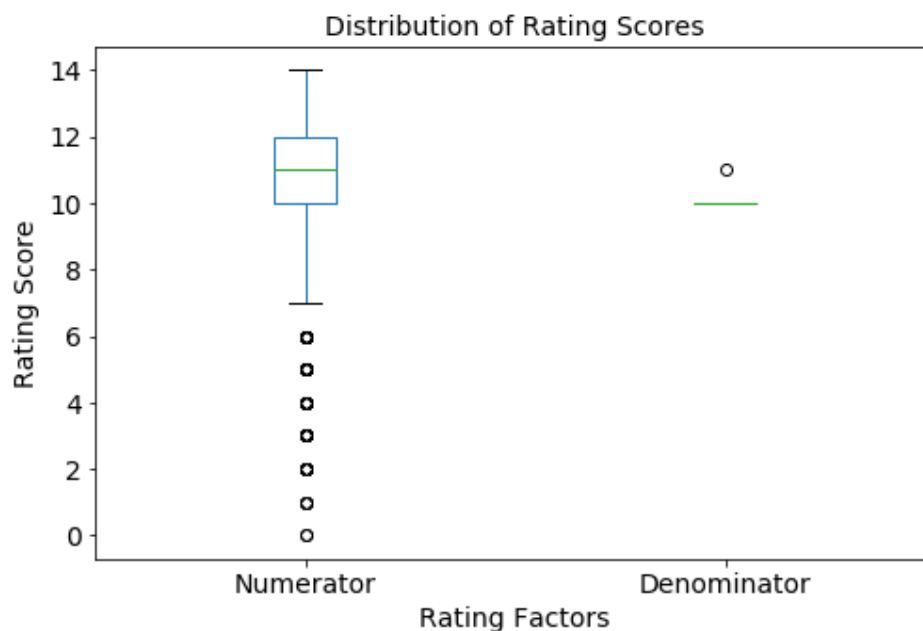


More than 1900 records have rating numerator below 250.

The following figure shows that there are exceptionally few records with a rating below 6.5. However; the lowest common rating for a dog seems to be 7. The figure also indicates that around 75% of the ratings are equal to or greater than 10. Furthermore; in most of the cases the rating denominators are 10.

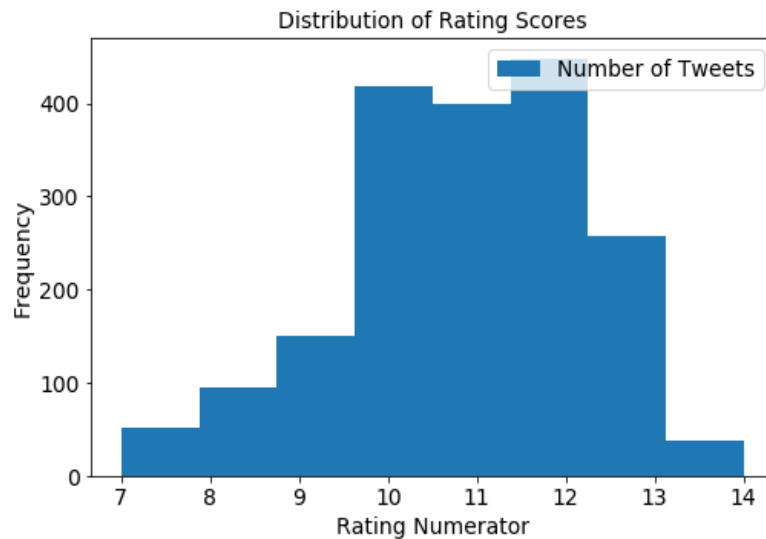


Still, more than 1900 records has rating numerator below 25.

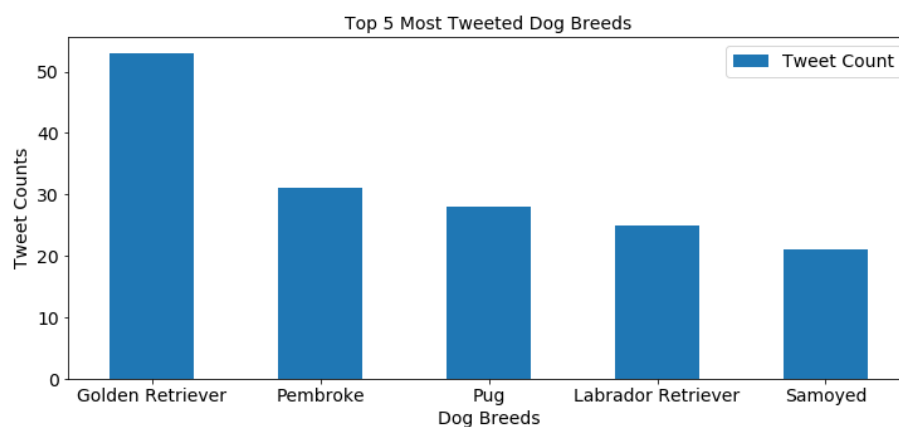


Rating numerator almost always has a value between 6.5 and 16.
Rating denominator almost always has a value 10.

The following figure shows that the most frequent ratings are between 10 and 13 (accumulated towards the right). In fact, around 84% of the ratings are above 10. This indicates that, ratings of WeRateDogs are more of positive.



Still, 1859 records has rating numerator between 6.5 and 16. The distribution seems left skewed. This indicates that their ratings are more positive. This is because, 83.92% of the ratings are above 10.



Based on number of tweets; Golden Retriever, Pembroke, Pug, Labrador Retriever, and Samoyed are the most popular.

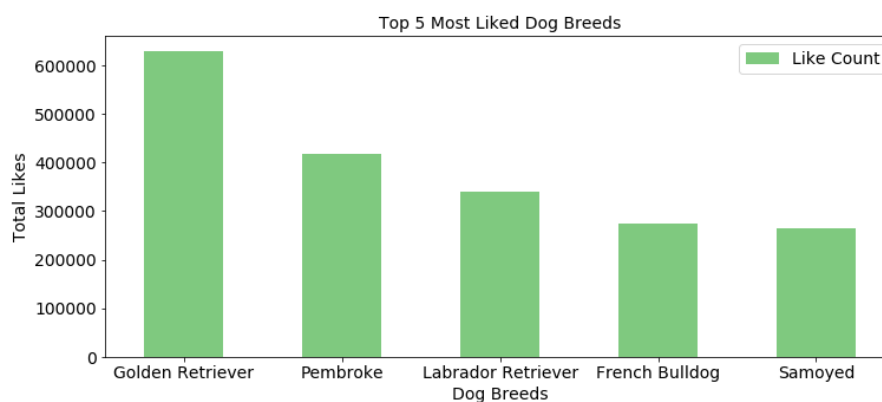
Which Dog Breeds are the Most Popular on WeRateDogs?

We have seen that ratings of WeRateDogs are positive, but which dog breeds are the most popular? Tweets may not contain information about the breed of a dog in the tweet. Hence; dog's breed was predicted from its picture in the tweet. As a result of this, tweets with prediction confidence greater than 85% were filtered. (371 tweets satisfy this criterion) Having said that, popularity can be defined from two perspectives

368 dog breed predictions have > 85% confidence level.

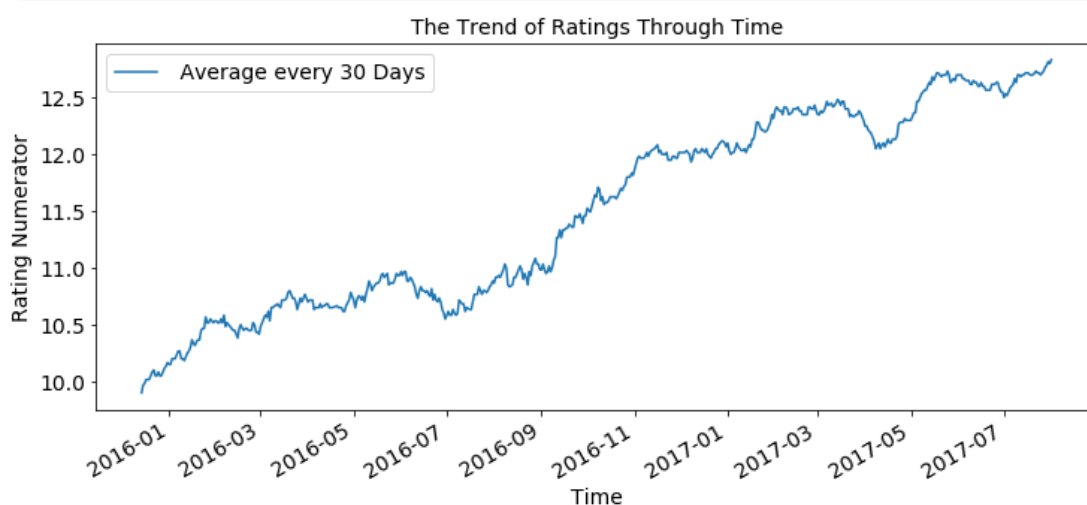
The number of tweets that are posted about a certain dog breed. The figure below shows that Golden Retriever is the most tweeted dog breed. Tweets about Golden Retriever take around 14% of the total tweets. Hence; from the number of tweets perspective, Golden Retriever is the most popular dog breed on WeRateDogs.

The number of likes a certain dog breed in a tweet gets. It is important to note that, this metric of popularity can be biased by the content of the tweeted text. This is because some of the tweets posted by WeRateDogs are funny, and the number of likes for a tweet may not necessarily be because of the dog in the tweet. As shown in the figure below Golden Retrievers are still the most popular breeds when considering the number of likes each breed got. The total number of likes that Golden Retrievers got is around 18% of the total likes. Hence; when considering the number of likes tweets get, tweets about Golden Retrievers are the most popular on WeRateDogs.



Based on favorite counts; Golden Retriever, Pembroke, Labrador Retriever, French Bulldog, and Samoyed are the most popular.

Have the Ratings of WeRateDogs Been Consistent Through Time?



Dogs ratings are positively increasing with time .

Besides being a positive rating platform, what does their ratings trend look like? This question is important because, it is important to know when this positive rating was started. If there is consistency in their ratings throughout the years, then they could be deliberately making their ratings positive.

As the figure below shows, their ratings were continuously increasing throughout the years. Hence; the higher positive ratings do not seem random; rather, seem to be deliberate as there is consistency.

Conclusion

The above analysis results indicate, the real reasons behind the popularity of WeRateDogs. Their ratings, in majority of the cases, were positive. The other finding was about the most popular dog breed. Results show that Golden Retrievers are the most tweeted and liked dog breeds.