## **ACT Report**

## Insights from Twitter WeRateDogs™

## Look at this picture:



And now read the text that comes with this picture:

"This is Louis. He just had a big dinner. Ready for bed now. Hoping you could tuck him in. 13/10 yes sir right away Louis"

If you think that this is nerdy I'll take you on a journey where I will give you some insights about some hard facts that can be extracted from the analysis of a ton of Twitter WeRateDogs™ data. Curious?

(But who is nerdy enough to voluntarily analyze WeRateDog<sup>™</sup> tweets statistically?) Anyway!

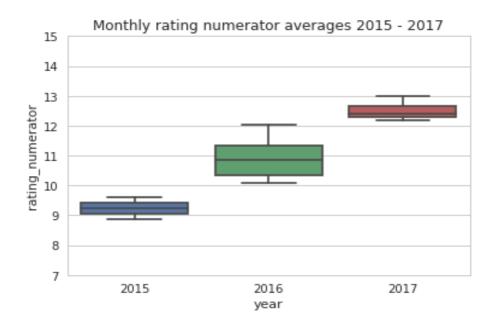
## About WeRateDogs™

The heart of WeRateDogs<sup>™</sup> consists of cute photos and a brief text with sometimes the dog name, some more or less funny description and the rating with a rating numerator which in most cases exceeds the scale from 0-10. We also know why this happens: "Because they are all good dogs Brent".

But wait a moment. Can we asume that this was the case since the beginning of WeRateDogs™?

Let us see how the dog ratings developed from 2015 to 2017:

Fig 1:

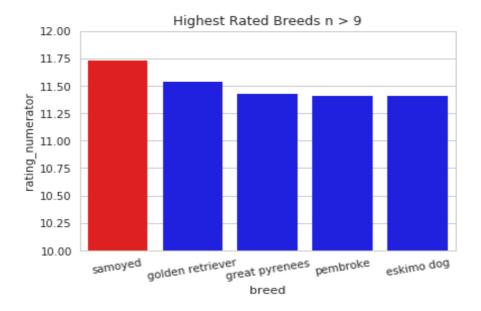


And here we are. The habit of outnumerating the scale i.e. giving a rating constantly above the upper bounds of the scale developed gradually over time. In Fig. 1 it can be clearly seen that in 2015 when WeRateDogs™ started the dog ratings were within the limits of the scale. 2016 in contrast was already constantly out of the scale limits and even more so in 2017. Very nice! Followers demand a show but we have to take this effect into account for getting other insights!

A question that comes imediately into ones mind is how do Twitter raters rate? Which dog breeds forinstance get the highest Twitter WeRateDogs™ rates? Here we have to take the time rating bias into account and we will analyze only dog breeds which have more than 9 ratings so that we can asume a distribution of these ratings over several years.

So how did Twitter raters rate:

Fig 2:



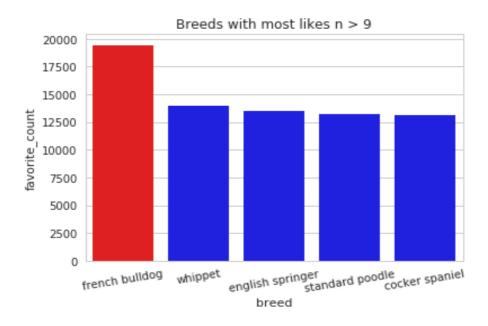
Here we see that the raters have a tendency for upvoting rather exotic breeds, beside Golden Retrievers who are all time favorites.

Is this rating behavior reflected by the followers of WeRateDogs<sup>™</sup> and their likes (here called favorite count)?

What's your guess?

What ever your guess was, here is what the numbers tell us:

Fig 3:



So the followers of this Twitter account seem to be more conservative than the raters as they seem to favor more commonly known breeds like bulldog, whippet, poodle and spaniel. Interestingly the alltime favorite Golden Retriever did not make it to the top 5.

WeRateDogs<sup>™</sup> also developed it's own vocabulary for dog stages with doggo being some kind of adult dog and puppo some kind of very young dog, pupper a dog somewhere inbetween and a floofer being a floofy (hairy, smooth, cute) dog.

Do you think that there are preferences for certain stages among the raters?

Again let's ask the data:

Fig. 4:

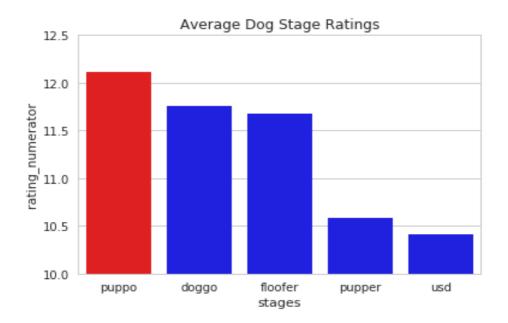
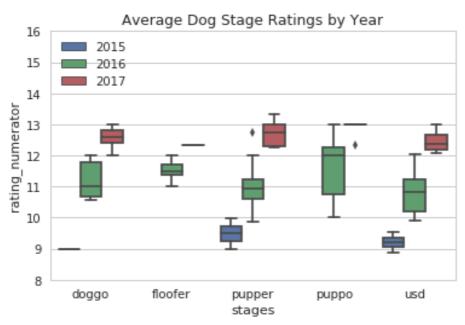


Fig 4 confirms our gut feeling – at least mine. The sweet young dogs get the highest ratings. I would have thought though that floofy dogs will be higher rated than adult dogs. You never know till you ask the data. USD by the way means unstaged dog. These are all the tweets with no staging attribute. These seem to be less interesting photos for the raters therefore no staging therefore lower ratings - but this is gut feeling again.

Let's take a look at the stage ratings from 2015 – 2017.

Fig 5:



In 2015 we had no floofers, but in 2016 floofers where rated according to what I would expect. In 2017 though they were outnumbered by doggos. Puppers and usds have lots of ratings in 2015 and because we know that in this year the ratings were very low they have a lower average over the years.

Again as a comparison let's see how many likes from followers the different stages get?

Fig 6:

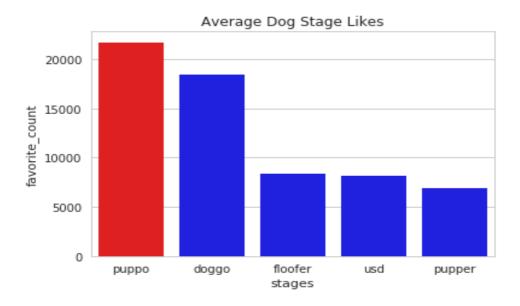
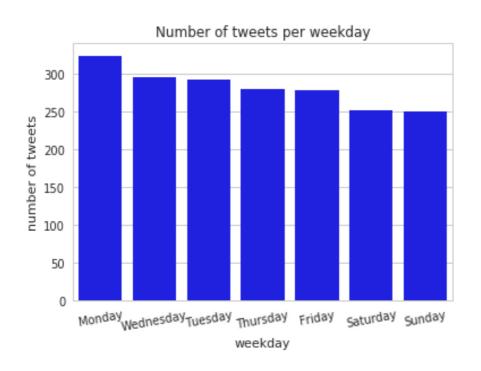


Fig 6 shows us that for the stages followers and raters seem to be more synchronized as the favorite stages are the same. Only the fourth and fifth place are exchanged between  $WeRateDogs^{TM}$  raters and followers.

By the way 7 out of 10 names in the highest rated dog breeds are female names whereas only 4 out of 10 in the overal data set are female names. Maybe another hint that females are in general considered more beautiful and/or cute and/or handsome than men? Who knows.

The number of tweets almost exactly correlates with weekdays. Fig 7 shows us that most of the tweets are produced on Mondays and going all the way down to the lowest numbers on weekends.

Fig 7:



This might be seen as a remedy for the harsh start of yet another week of work and might sooth the beaten souls of the working class dog owners removed from their pets.

These dog owners and followers of this twitter account by the way like the tweets most that get also the highest retweet numbers. Retweet counts and like counts are highly positive correlated for this account.

We can also predict the year in which a tweet was generated through the analysis of the rating numerator and the number of likes. It's still far from perfect and we can only predict 73% correctly. But nevertheless we can. Why should we do it? Because we might need it but most of all because we can do it. Can we do it better? For sure, but this will be another project.

Do we miss something. Probably! Maybe data that show us the influence of the full moon on rating and liking. So we can integrate some kind of lunatic factor! But this again will be another project.

I do hope that you enjoyed the numerical analysis of WeRateDogs™ and hope to see you again.

