Congressional Tweet Analysis

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30000 ft overview   Two AB Tests   The most popular user on Twitter?

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1. 30000 ft overview

2. Two AB Tests

3. The most popular user on Twitter?

some high level statistics

There are 1243370 total tweets.

There are 545 different screen names among the data.

The earliest tweet is indexed at 2008-08-04 and the latest tweet is indexed at 2017-06-06.
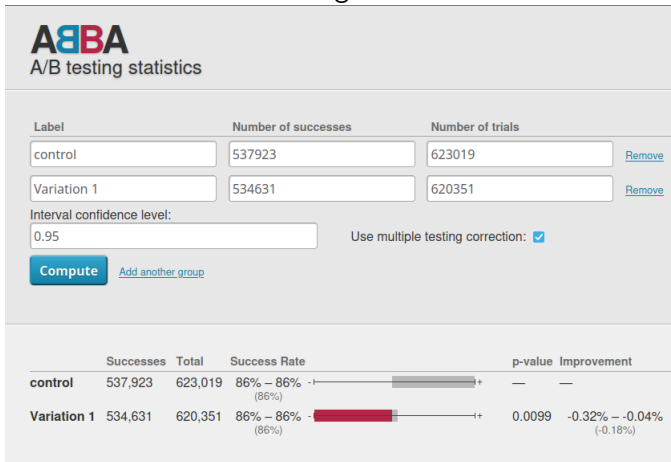
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1 30000 ft overview

2 Two AB Tests

3 The most popular user on Twitter?

What makes a tweet more retweetable?

• We ran multiple AB tests on the impact of the sentiment score on a tweet getting retweeted.

• We considered the impact of scores higher than 0.1, 0.2, 0.3, ..., 0.9, and the answer was decidedly no. In each case, we failed to reject the null hypothesis that the sentiment score had a slightly negative impact on a tweet being retweeted.

• We also considered the presence of a #hashtag in the tweet as an indicator of a tweet getting retweeted. The answer was overwhelmingly yes.
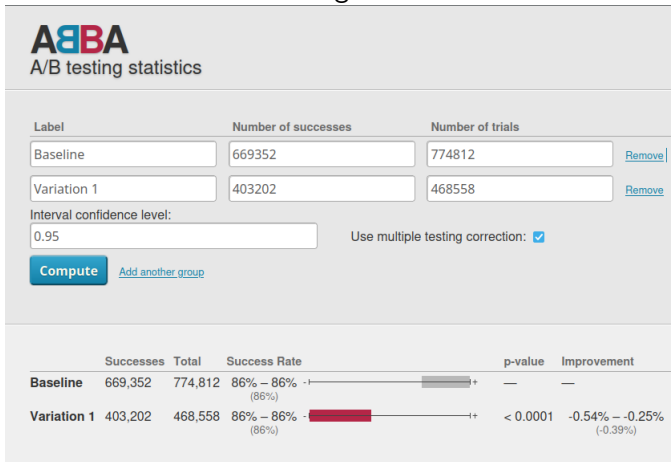
Does emotionality make a tweet more retweetable?

Not for sentiment score of greater than 0.1.

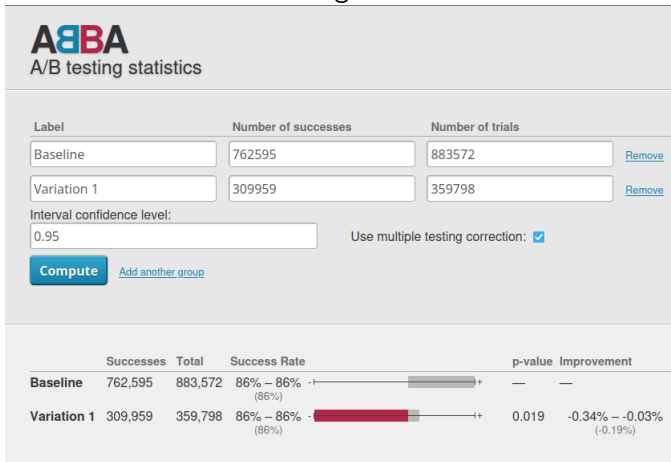# Does emotionality make a tweet more retweetable?
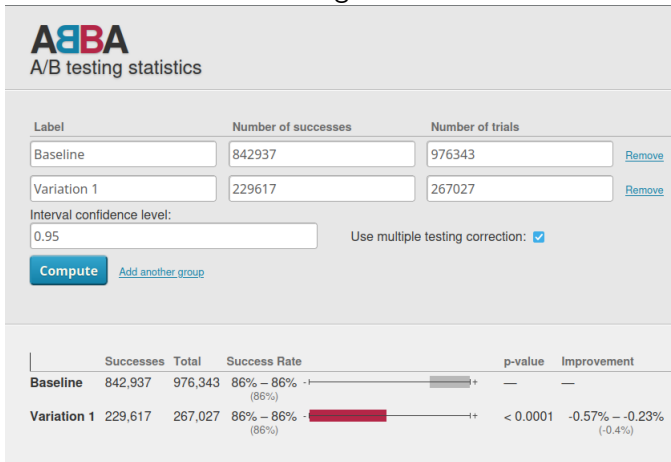
Not for sentiment score of greater than 0.2.

	Successes	Total	Success Rate		p-value	Improvement
Baseline	669,352	774,812	86% − 86% (86%)		—	—
Variation 1	403,202	468,558	86% − 86% (86%)		< 0.0001	-0.54% − -0.25% (-0.39%)

Does emotionality make a tweet more retweetable?

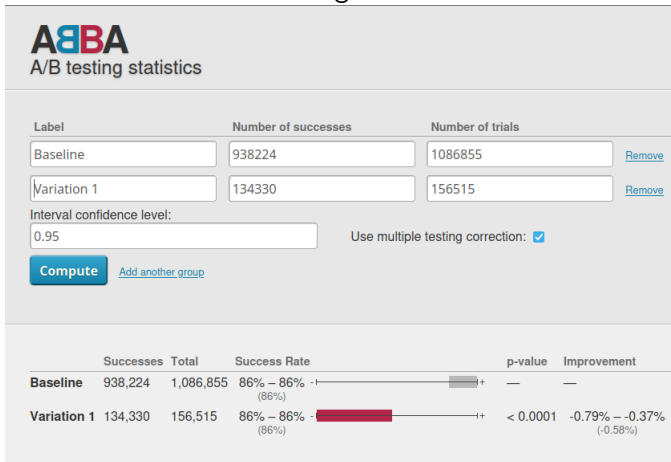Not for sentiment score of greater than 0.3.

Does emotionality make a tweet more retweetable?
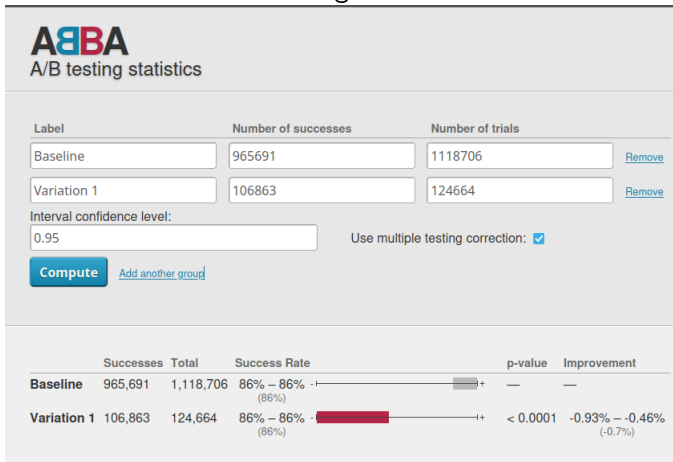
Not for sentiment score of greater than 0.4.

Does emotionality make a tweet more retweetable?

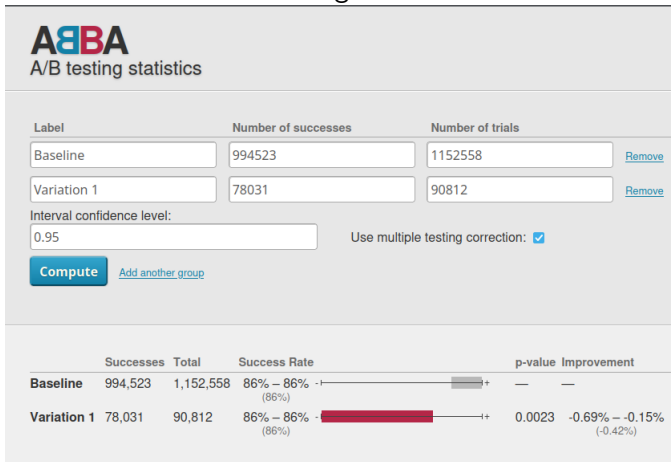Not for sentiment score of greater than 0.5.

Does emotionality make a tweet more retweetable?

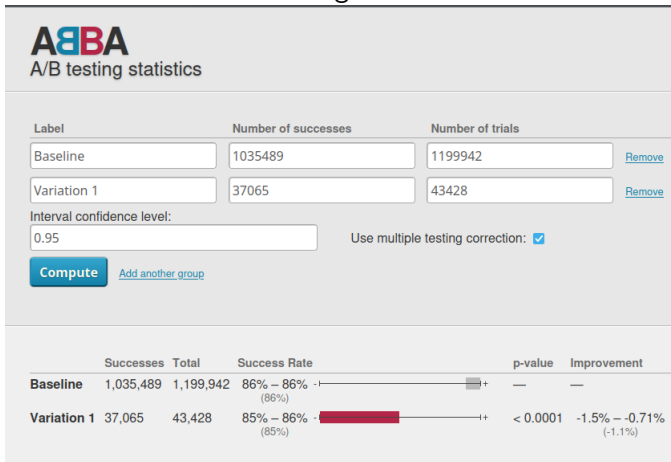Not for sentiment score of greater than 0.6.

Does emotionality make a tweet more retweetable?
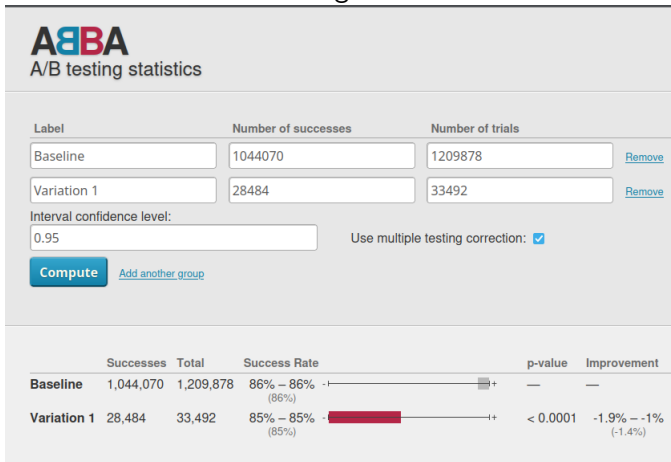
Not for sentiment score of greater than 0.7.

Does emotionality make a tweet more retweetable?

Not for sentiment score of greater than 0.8.

Does emotionality make a tweet more retweetable?

Not for sentiment score of greater than 0.9.

Do #hashtags make a tweet more retweetable?

Yes, they do!

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It depends on how you count it

First, a heatmap matrix of the Pearson correlation coefficients of some user data.
This illuminates which popularity measures are related to which.
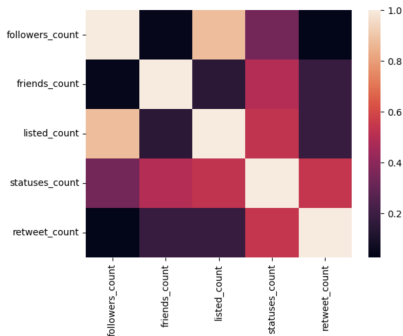
It depends on how you count it

We focus on retweets. We could have counted friends, etc..
Here are the top 20 accounts, sorted by number of retweets, in
descending order.

| | retweet_count |
screen_name	
realDonaldTrump	40852446
SenSanders	13332027
POTUS	5855933
marcorubio	4964220
RepKihuen	4896177
RepDonBeyer	4809746
CoryBooker	4019408
RepMarkTakano	3827581
SenCortezMasto	3722421
RepKevinYoder	3681614
GovSandoval	3672595
RogerMarshallMD	3662501
RepAdamSchiff	3658373
RepAnnieKuster	3504108
SenWarren	3420202
RepRickLarsen	3208792
brianschatz	2942370
jahimes	2598640
RepEBJ	2543544
SenSchumer	2536109

It depends on how you count it

We build a directed graph where a directed edge from one node to another means that a Twitter user tweeted at another twitter user. Here are the top 20 nodes according to the number of edges directed toward those nodes.

```
('POTUS', 505)
('WhiteHouse', 438)
('realDonaldTrump', 419)
('SpeakerRyan', 417)
('HouseGOP', 391)
('cspan', 382)
('thehill', 378)
('washingtonpost', 369)
('BarackObama', 356)
('VP', 342)
('CNN', 337)
('SpeakerBoehner', 337)
('USArmy', 332)
('USMC', 325)
('EPA', 324)
('nytimes', 322)
('USNavy', 322)
('WSJ', 313)
('FoxNews', 303)
('DeptVetAffairs', 299)
```

Thank you!

• In any timezone! •