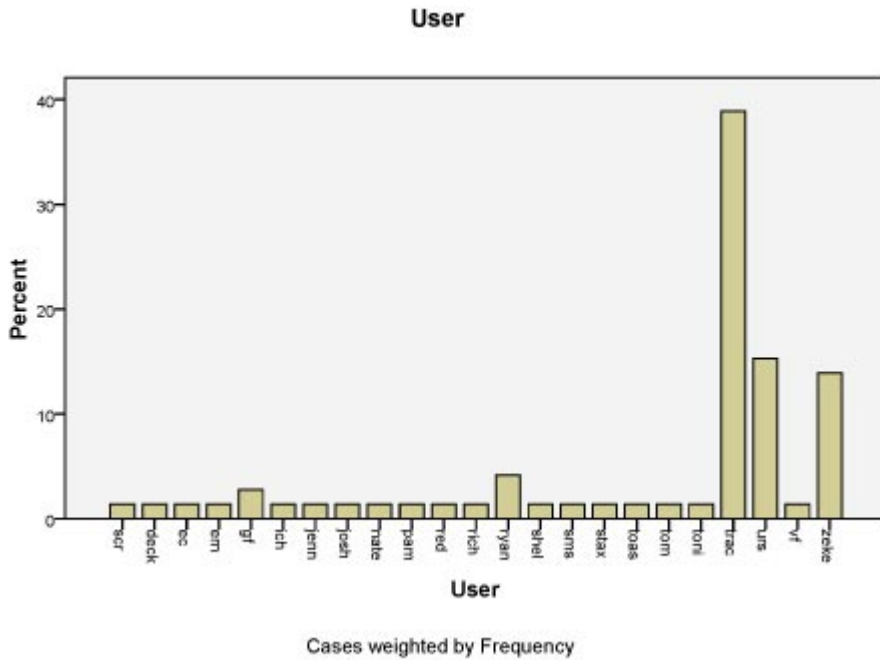


The Twitter Vote Report Analysis of Nevada's Post-Election Data

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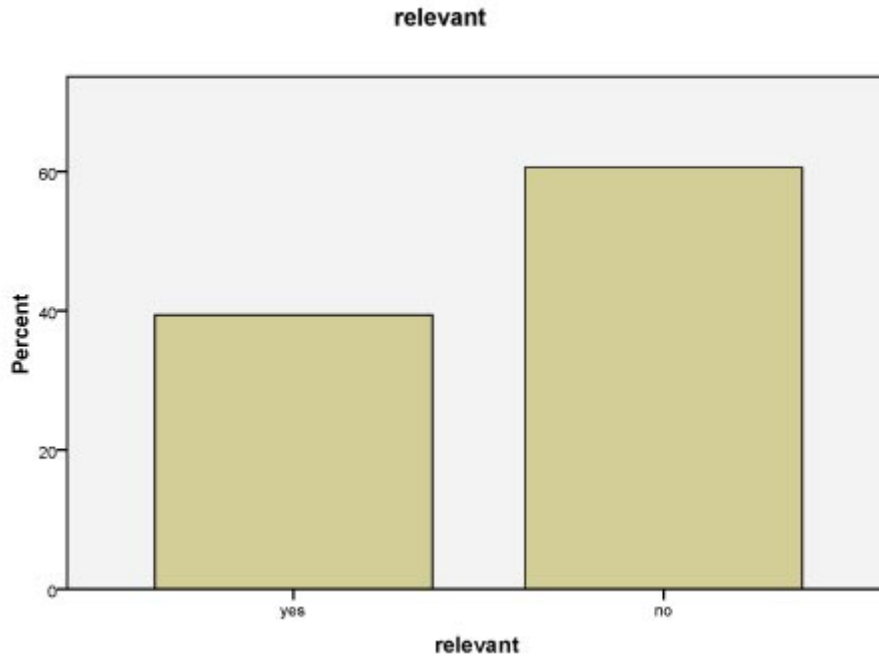
Results were taken from Nevada's data posted as of Nov. 7, 2008 from here:
<http://tvr.openideals.com:8080/list.jsp?state=NV&view=thumbnail>

Results #1



This first chart is frequency data of how many times each user had their vote report(s) publicly posted. The output is in percentages. As you can see, one user had 39% percent of the total while three users constitute 68.1% of the total. (Note: duplicates were counted in this run.) This indicates that there was disparity among users in terms of the amount of posts that went public. Therefore, no accurate conclusions can be garnered as to the average voter experience, and the data are skewed favoring a minority of users.

Results #2



The second chart is a binomial test between valid posts and invalid posts, as well as frequency data for the posts. I ran the data of those who met the following assumptions and those who did not (yes/no coded as 1 and 2, respectively).

Here are my criteria for considering posts to be relevant:

1. Posts with specific locations and "at least one other valid tag (#machine, #registration, #wait, etc.)" were automatically assumed to be meeting vote report criteria and coded as Yes
2. Duplicates were added but not coded as either Yes or No
3. Retweets (RT) were added but not coded either Yes or No
4. Retweets (RT) not relevant to Nevada were coded as No
5. Posts not relevant to Nevada voting conditions were coded as No even if they are posted with the "Nevada" data (e.g., the posts referring to voting conditions in another state)
6. Posts that were clearly off topic were coded as No.
7. Posts making general statements about the election and not identifying a specific voting location were coded as No.
8. Posts with directions on how to properly post were counted as Yes (repeat posts with similar instructions from the same user were counted as No, however).
9. Posts that were questionable were given the benefit of the doubt and were coded as Yes.

The frequency data show the irrelevant posts constituting 55.6 percent and the relevant posts being 36.1 percent -- by itself, a somewhat striking contrast in my opinion. 8.3

percent were not counted. The binomial comparison indicates that there is no statistical significance ($z = .109$) between the Yes and No categories. The probability of getting these results by chance is greater than 5 times out of 100 ($p > .05$). Essentially this means that there is no statistical difference between the amount of tweets that are considered relevant or irrelevant, according to my criteria above.

Binomial Test

	Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)	
relevant	Group 1	yes	26	.39	.50	.109 ^a
	Group 2	no	40	.61		
	Total		66	1.00		

a. Based on Z Approximation.

My opinion is that this second analysis means that the data are meaningless as to the relative success of the Twitter Vote Report if Nevada's posts are at all characteristic of the rest of the states in the country. An analysis of other states is probably warranted to see if these results are consistent elsewhere. If, following my criteria, the number of relevant posts was much greater, it would show up as statistically significant; conversely, if the number of irrelevant posts were much greater, they too would show up as statistically significant.

Were I to use TVR's expressed criteria strictly -- counting users who posted with both a vote report hashtag AND another recommended hashtag -- there is no doubt in my mind the vast majority of these posts would be statistically significant in the category of being irrelevant.

Because there is such a disparity between relevant and irrelevant posts – using either my criteria OR TVR's criteria – as well as the fact that a minority of users dominated the public Twitter stream, it is clear that few conclusions can be drawn other than that the data, and their criteria for acceptance, are essentially a mess.