

Analyzing the duality of comments under Joe Biden dropping out of the 2024 election on Reddit (1445 words)

Background

On July 21st, 2024 Joe Biden who was and still is the current president of the United States, stated that he was dropping out of the 2024 US Presidential Election. Biden at the time had already started his reelection campaign trail, as well as participating in a debate with the Republican nominee Donald Trump. Biden, per common knowledge, had won in 2020 against Donald Trump to reclaim the presidency for the Democratic party. The reaction to him dropping out of the election caused quite a stir on social media.

According to Ariel Hassell, who was reached out to by Teveah Platt, says Americans in particular use social media to gather and understand current information. However Hassell claims, “much of the content they see in their feeds is hostile, uncivil and attacking.” (Platt). Hassell and his fellow colleagues then continued research to see if the political attacks could be related to anger/anxiety issues. They, “found that people who were exposed to more political attacks on social media were more politically cynical, and that perceived exposure to these attacks was associated with more anger about the state of the U.S.” (Platt). In regards to Joe Biden dropping out, people perhaps displayed toxicity due to the state the U.S had been during his presidency. According to Richard Wilke who ran a survey on questions regarding social media politics, in the US noted that 74 percent of people said that social media led to more political division (Wilke). He also noted from his survey that 69 % of surveyors noted that they feel politics is talked about less civilly on the internet and social media (Wilke). When it comes to Joe Biden dropping out, there is a chance the negative emotion in the comments exceeds the

positivity, proving Wilke's hypothesis true. According to Judy Woodruff and Frank Carlson, in their series, they try to explore "what responsibility do social media companies bear for our divided political climate?" (Woodruff and Carlson). In that series, Woodruff talks with many people and discovers that a person's opinion can be swayed by the social media they see (Woodruff and Carlson). With regards to Joe Biden dropping out of the election, there is a good chance most comments would be negative due to social media's algorithm to show a person what they like and show comments they agree with.

Research Question

How is the perception of Joe Biden dropping out of the 2024 election different in terms of positivity and negativity?

Method

Data

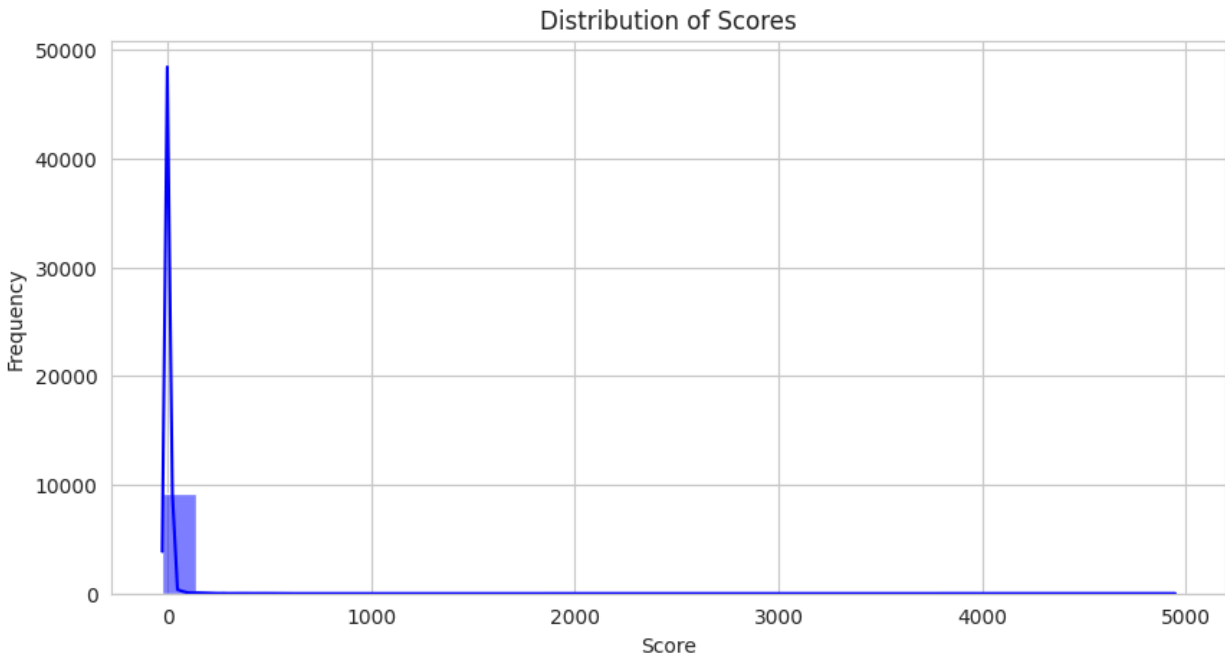
In order to collect data from Reddit, I used the code provided from Professor Ghazinejad to access the Reddit API. I then installed praw to get access to Reddit(Python Library) and used that script (praw.models) to gather a specific number of comments under a specific post. The post ID that I will be using is 1e8slr4, named Joe Biden drops out of election, which is a post under the GenZ subreddit channel. I am using this reddit post as it is the most commented under post when I searched up "Joe Biden drops out of election". Initially I was planning on gathering 1000 comments using the code provided. However, once I was setting up the codebase to gather the data, I couldn't find a way to stop the API from only gathering 1000 comments, so I ended up gathering 9,288 comments which was what the code allowed me to scrape from Reddit. I believe this is a justified way to gather data as this post had the most comments under it and is a generalized post which will include comments from both sides making the data quality much

better. There is no true timeframe for this dataset as this event occurred in late July of this year, so I decided to grab every single comment from the day that reddit post was created (4 months ago) to today's date, November 15th, 2024.

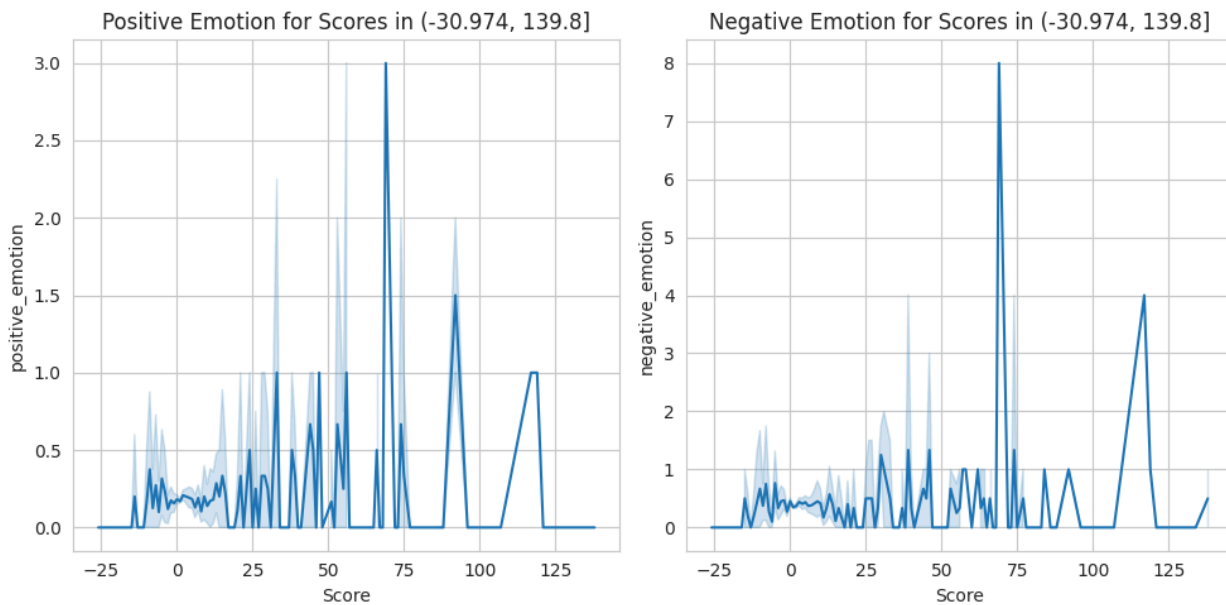
Analysis

For the methodology of this analysis, I will be using sentiment analysis using the Python library, EMPATH. After gathering the data from Reddit using the python code provided by Professor Ghazinejad, I used the EMPATH python code provided to analyze the amount of positive emotion and negative emotion among the comments. However I did make a few tweaks to the codebase to give me the visualization that I was looking for. Since the reddit post was made three months ago, it does not make sense to categorize the amount of positive and negative emotion by month as we don't really have a timeframe, so instead I categorized the analysis by reddit score. This will allow us to truly see if the comments that are based on score show more positive or negative emotion due to the amount of upvotes or "score" that they have. On top of that I decided in order to really go in depth of the analysis, I needed to separate the distribution of the scores into much closer ranges. This allowed me to really get a better look at the ranges that had more data points. From there I will analyze the positive and negative emotion of the ranges that have the most data points as well as any outliers I find interesting to answer my question.

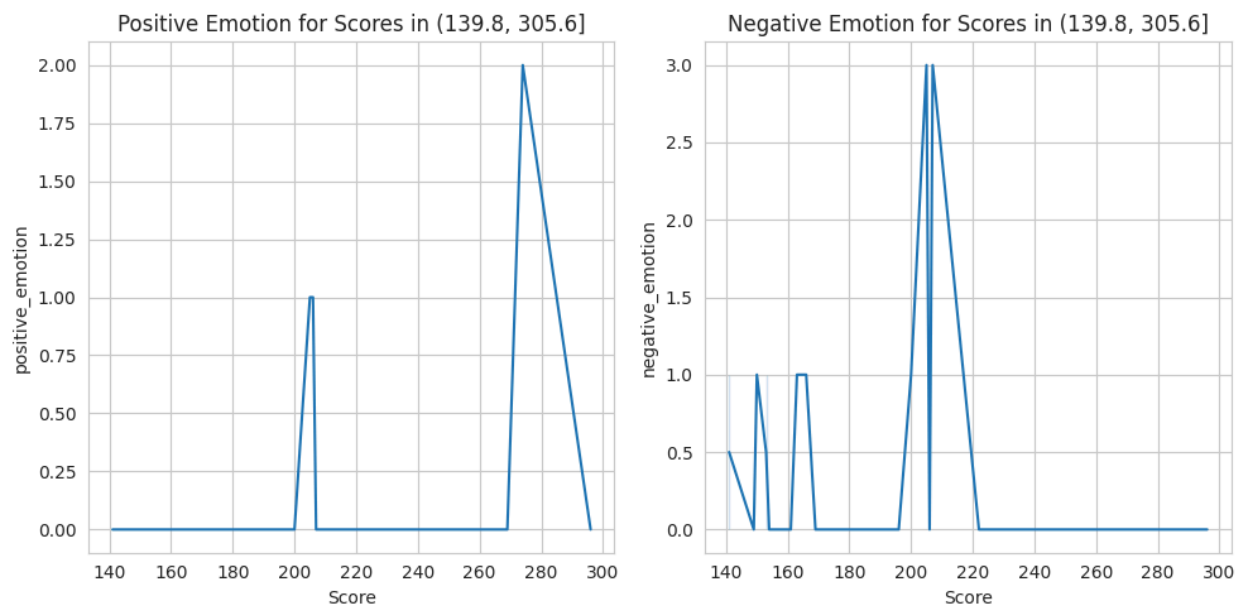
Results



The first visualization I created was to see where I needed to go more in depth and analyze the positive and negative emotion. Quite clearly, I felt the need to dive in depth within the range of -30 to 300 to get some quality analysis.

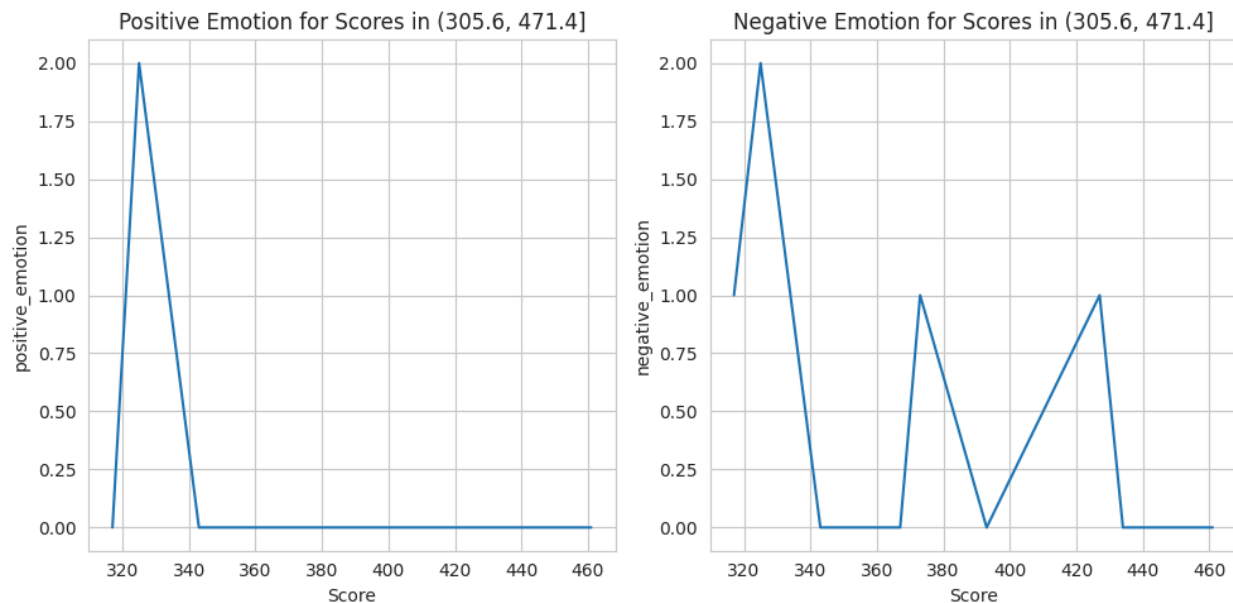


The second visualization I created was an analysis of Reddit comments within the range of -30 to 140 shows a lot of interesting details. The positive emotions line has a few spikes, meaning there were some comments that sounded supportive or happy. But for the most part, positive feelings were pretty rare, and most comments didn't show much excitement or positivity. The comments that did get a lot of upvotes (above a score of 50) were a little more positive, but this wasn't very common. On the other hand, negative emotions were much more noticeable. The line for negative emotions has more big spikes, especially for comments with higher scores (like those around 75 to 100). This shows that many of the most popular comments were critical or unhappy about the decision Biden took to step down during election season. Overall, the discussion had negativity that was a lot more common than positivity.



The third visualization I created was a graph showing comments with higher scores with a range of 140 to 305 (the ones people liked the most). For positive feelings, there's only one big spike near a score of 280, meaning very few of the popular comments were happy or supportive. On the other hand, negative feelings showed up more than the positive, with some big spikes

starting around a score of 160 and the largest one near 200. This tells us that even the most liked comments were more negative within this range, with people showing more negativity about the news.



The fourth visualization I created was a graph showing how Reddit comments with even higher scores ranging from 305 to 471. For positive feelings, there's only one big spike around a score of 320, and after that, it drops to zero, meaning there weren't many positive comments among the highly upvoted ones. Negative feelings are more spread out, with a large peak near 320 and a few smaller spikes around 380 and 420. This tells us that even among the most liked comments, people mostly expressed frustration or criticism, with very little positivity in the discussion.

Conclusions and Limitations

The comments under the Joe Biden dropping out of the election post shows a clear difference in the amount of negativity compared to the amount of positive comments. We can see that there were more spikes of negativity with comments that had low scores and this continued

as scores increased as well. This shows that not many people were happy or showed frustration and anger due to Biden dropping out of the election. Some of it could be hate shown due to people being of the opposite party as well. And not as many positive emotions were shown, probably due to this being a hit for the Democrats as their party was in disarray looking for another candidate to run for president.

There are limitations to this study. I wish that it would be easier to determine if people commenting were a part of a specific political party so then we could analyze the data by the political demographics. This would have allowed us to really analyze the comments in even more depth.

Citations

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