

Descriptive Statistics

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Data, concepts and measures

First, I describe the data used and how I prepared it. I use a dataset published online by Chen, Deb and Ferrara (2021) that collected all tweets related to the 2020 US Presidential election from early 2020 until the summer of 2021. These tweets were collected through keyword search using Twitter's API.

From this data, I sample all tweets posted in June 2020. In total, this represents 67,181,551 tweets related to the election (in English).

The goal of this report is to show preliminary results related to my term project. In this project, I seek to describe the persuasive efficiency of extremist content on social media. Using complex contagion, I hope to demonstrate that extremist behavior requires less exposure to adopt relative to other types of political behavior. My hypothesis is that holding exposure constant, users on Twitter are more likely to adopt extremist behavior than moderate behavior.

Exposure and adoption

In this project, I measure the exposure of tweets and subsequent adoption of #qanon. This hashtag is meant to conceptualize extremist behavior. I consider users who use #qanon in one of their tweets as adopting extremist political behavior. I consider users exposed to #qanon when they retweet, quote tweet or reply to a tweet using #qanon. Ideally, exposure would be measure implicitly, in which we measure exposure when a user follows another that used the hashtag previously. Instead, I use an explicit measure of exposure where we know a user is consciously exposed to #qanon since they engaged with the tweet in some capacity. A user adopts an extremist behavior when they use #qanon in a tweet they authored.

To model complex contagion, I count the number of exposures a user had of #qanon before themselves using the hashtag. Out of the 67,181,551 tweets posted in June 2020 related to the US Presidential election, 351,108 tweets contained #qanon without 83,867 unique users. Out of these tweets, only 4024 tweets were original, meaning that 4024 tweets demonstrate the adoption of extremist behavior.

Data visualization