Vaccines, COVID & The Cure for Mistrust:

Linguistic Analysis of Anti-vax on Social Media

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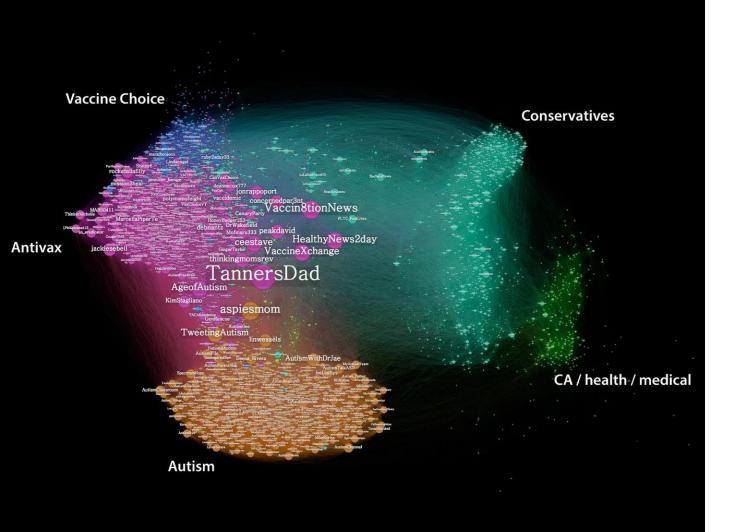
OVERVIEW

<u>Research Question:</u> How does the COVID-19 pandemic changed conversations about anti-vaccination on social media?

<u>Initial Hypotheses:</u>

- People who would generally be inclined to trust vaccinations harbor more skepticism when it comes to the COVID-19 vaccine.

- People express more hostility toward those who question or deny the efficacy and safety of the COVID-19 vaccines than they would prior to the pandemic.

- A higher number of celebrities join the anti-vaccination conversation concerning the COVID-19 pandemic.

Vaccine Choice

Conservatives

Antivax

CA / health / medical

Autism

Antivax Twitter network graph from WIRED

DESCRIBING THE DATA

Tweets retrieved using snscrape on popular anti-vax associated hashtags.

- 6,013 Pre-COVID Tweets (2015-16).

- 6,182 Post-COVID Tweets (2020-21).

- Tweets selected from the following hashtags:
  - **#sb277**
  - **#cdcwhistleblower**
  - **#vaccineswork**
  - **#antivaccine**
  - **#antivax**
  - **#vaxxed**
  - **#vaccines**

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PRELIMINARY ANALYSIS

Conducted Keyness and Concordance Analyses between the two sets of tweets.

Results

- The frequency of **question marks increased by 45%** since the pandemic.

- Differences in the way the word **hope** is used in KWIC lines.

Next Steps

- Sentiment analysis on tweets to compare polarity scores and measure them across vaccination timelines.

- Identify celebrity Tweets that are relevant to the conversation.

- Do more with word and n-gram lists find key phrases I might have overlooked.