



Social Media Junk News on Ocular and Prison Transmission

Coronavirus Misinformation Weekly Briefing 20-07-2020

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SUMMARY

Given the evolving nature of the coronavirus pandemic—and public understanding of the crisis—we provide a weekly briefing about the spread of coronavirus misinformation across multiple social media platforms. For the seven days prior to 16-07-2020 we find:

- The social media distribution network of all coronavirus articles from the top fifteen mainstream news outlets reached over three billion social media users this week, achieving much greater distribution than state-backed and junk health news sources. But the average article from state-backed sources reached over 9,000 users, while the average article from mainstream sources reached slightly below 4,400 users and the average junk health article reached just above 3,400 users.
- Similarly, all content from all mainstream sources gets the largest amount of total user engagement. But on a per article basis, state-backed news receives 100 engagements and junk health news receives 70, and average articles from mainstream sources get just above 25 engagements.
- In total, 53% of the engagement with non-mainstream information last week was with state-backed content. Furthermore, 28% of such engagements were with Chinese content, whereas 70% were with Russian content.
- Thematically, key junk health news themes were (a) discrediting other news sources on coronavirus, and (b) prison releases due to coronavirus in California.

INTRODUCTION

Using an actively curated list of major sources of junk health news and state-backed sources, we track the spread of misleading, polarizing, and inflammatory coronavirus content on social media. Sources from state-backed media include information operations and editorially controlled national media organizations. Other domestically and independently-produced sources also act as politically motivated sources of misinformation.[1] All such media sources play a major role in the online information ecosystem and generate engagement from millions of social media users. We define junk health news and information sources by evaluating whether their content is extremist, sensationalist, conspiratorial, or commentary masked as news. See our [Methodology FAQ](#) for further details.

We currently track 142 junk health news websites and 22 state-backed media outlets that are actively publishing misleading information about the coronavirus pandemic—164 in total. From these we select the top fifteen most engaged state-backed and junk news sites respectively for comparison. We examine how successful they are in terms of distributing their content on social media and generating engagement and compare this to several major sources of credible health news and information. Our data comes from the APIs of Facebook, Instagram, Reddit, Twitter, and YouTube. Facebook and Instagram are accessed through the CrowdTangle platform. Additional analytics allow us to benchmark and track how users spread and engage with misleading information.

DISTRIBUTION & ENGAGEMENT

Understanding the flow and impact of coronavirus misinformation requires measuring how users distribute and engage with that content over social media. We analyze such patterns for the period from 9th of July to 16st of July and offer comparisons between the trends for junk health news and state-backed sources, and the trends for fifteen prominent English-language sources of credible news and information.

The “social distribution network” of an outlet is the sum of follower counts of the Facebook groups and pages, subreddits, Instagram and Twitter accounts that have shared at least one of the sources’ articles over the previous week. On YouTube, this distribution network is counted as a channel’s number of subscribers. This provides an impression of the capacity that sources have for distributing its content. It is important to emphasize that not all of these followers may have been reached by this content—only the social media firms themselves could confirm this. We use “engagement” to refer to the sum of actions that users of social media took in response to content shared by the distribution network. On Facebook, users may comment on content, share it, and react by signaling like, love, laughter, anger, sadness, or amazement. On Twitter, users can retweet, comment, and signal their favorite tweets by clicking on the heart button. On Reddit, this is the sum of comments, cross posts, scores, and awards on posts containing the links to articles from our watch list. On Instagram, this is the sum of likes and comments. On YouTube, this is the video view count as well as comment and like reactions. Our overall engagement

measure is the sum of all these actions. Again, we are not able to distinguish between genuine and inauthentic accounts or acts of engagement.

We can offer some broad observations about how English-language social media users interact with content from junk news health sources and state-backed agencies. Overall, 53% of the engagement with non-mainstream sources we observed this week was from state-backed sources. Further, 28% of engagements with state-backed media were engagements with Chinese content, whereas 70% was with Russian content. Finally, 2% was with Turkish content.

Figures 1 and 2 reveal the distributional reach for the published content from mainstream, junk health news, and state-backed sources, both in total for the week and as an average per article. This week, again the top fifteen mainstream sources achieved over triple the total distribution of state-backed and junk health news sources, respectively. However, the average article from state-backed sources still has a larger distribution network, this week reaching a potential audience of over 9,000 users, whereas average mainstream new articles reach slightly below 4,400 users. Junk news articles reach an average audience of just above 3,400.

Figures 3 and 4 reveal the levels of engagement that sources receive for their articles. Both junk health news and state-backed news achieved low total engagement of just below and above 2 million respectively. By contrast, mainstream news sources achieved over 18 million engagements. Junk health news has reached over 6 million total engagements in previous weeks.[2] On average, state-backed media generated the most engagement this week, reaching 100 engagements per article, whereas junk health news achieved an average of 70 engagements per article.

Figure 5 displays the trends over the last four weeks. Mainstream news sources typically achieved over 1 million engagements on most days, reaching above 7 million on some. Junk health news and state-backed media seldom reach that threshold. On a per-article average, however, mainstream news sources struggle to match the engagement generated by junk health news and state-backed outlets.

KEY NARRATIVES

We also conduct a thematic review of articles published by both these junk health news and state-backed sources. Previously, we found that state-backed and junk health news sources targeting English speakers generally politicize health news and information by criticizing democracies as corrupt and incompetent.[1] We have also found that Russian outlets, targeting French and German speakers, have consistently emphasized the flaws of Western democratic institutions, and Turkish outlets, targeting Spanish speakers, have promoted their global leadership in battling the pandemic.[3]

Figure 1: Total Distribution Network, All Articles (Billions)

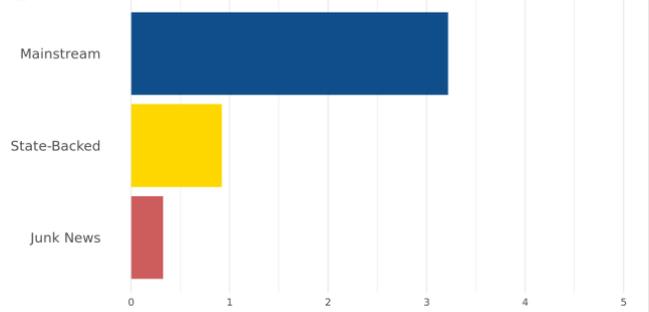


Figure 2: Distribution Networks, Average per Article

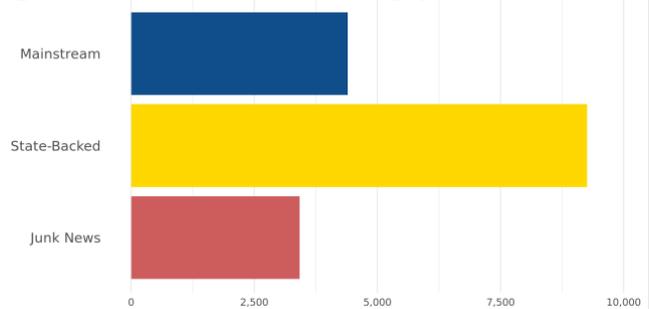


Figure 3: Total User Engagement, All Articles (Millions)

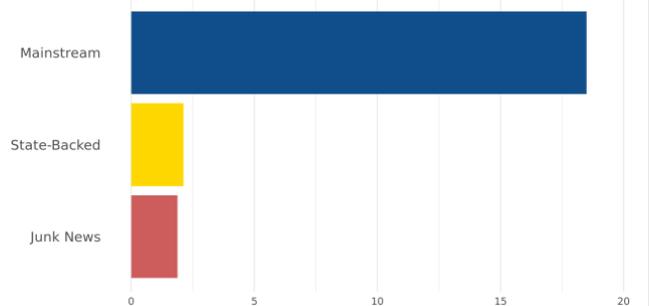


Figure 4: User Engagement, Average per Article

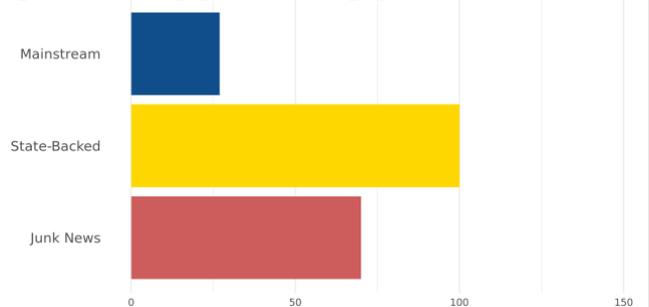
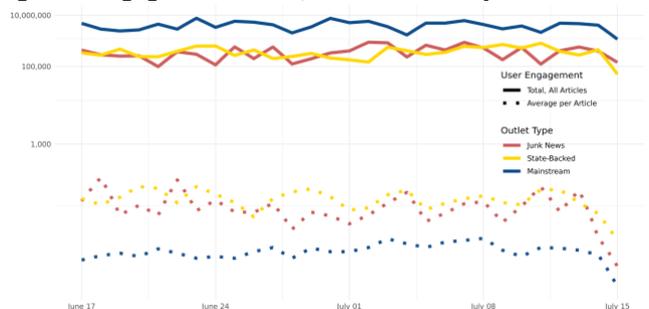


Figure 5: Engagement Trends, for the last 28 days



Source: Based on authors' calculations using data collected 09/07/2020-16/07/2020.

Note: Distribution refers to the sum of the subscriber count of YouTube channels and follower count of Twitter and Instagram accounts, subreddits, and Facebook groups/pages sharing content. Engagement refers to the sum of all reaction types on Facebook, Instagram, Reddit, Twitter, and YouTube.

Last week, the key junk health news themes were (a) misleading reports of the epidemic status of coronavirus in the US and (b) recent increases in violence in Chicago. This week, key junk health news themes were (a) discrediting professional news sources on coronavirus, and (b) prison releases due to coronavirus in California.

On the first theme, a *Daily Caller* article with over 124,000 engagements attacked NBC News. Specifically, the article attacked the admission of its science contributor and virologist Dr. Joseph Fair that he had not actually tested positive for the disease, despite NBC News reporting on Dr. Fair's coronavirus-like symptoms over several weeks. The article cites Dr. Fair's argument that whilst he had received negative test results for the disease, as well as antibody test results, on multiple occasions, he had been severely unwell and suggested that tests are not always reliable.[4][5] In addition, the article also cites his claim that he believed he caught the virus through ocular transmission. A *Daily Wire* article with over 73,000 engagements took a very similar line to the *Daily Caller* article.[6] While NBC and Dr. Fair may not have done professional reporting in this instance, the *Daily Caller* and *Daily Wire* articles promote controversial sources for health information, and effectively discourage caution when it comes to health protection.

Both the *Daily Caller* and *Daily Wire* articles referenced a newsletter circulated by *Fourth Watch* founder Steve Krakauer, which asserted that coronavirus could not be transmitted through the eyes.[7] Moreover, the articles cited Krakauer's additional claim that, as such, NBC News had been actively peddling dangerous information to their viewers by broadcasting that ocular transmission was possible. In fact, the science and understanding of coronavirus transmission is continually evolving, but the Center for Disease Control (CDC) and a number of publications indicate that ocular transmission is at minimum possible.[8]–[10] In summary, both of these articles, generating almost 200,000 engagements together, continue to perpetuate narratives discouraging adequate caution with regards

to coronavirus. Both articles tried to discredit coronavirus information from news sources such as NBC News.

On the second theme, a number of articles focused on the release of prisoners in California in response to coronavirus. A *Daily Wire* article with nearly 78,000 engagements attacked California Governor Gavin Newsom on the announcement on Friday 10th of July that an additional 8,000 prison inmates would be released by the end of August.[11] An article from *The Blaze* with over 23,000 engagements reported along similar lines, though it recognized that the coronavirus situation in prisons is severe.[12] Another article from *The Blaze* with over 58,000 engagements, however, called the releases a “perverted sense of justice” and a “coronavirus jailbreak”. This same article attacked the decision by claiming that in California the mortality rate is lower in prison than outside prison, though, it curiously cites a source using Tennessee prison data.[13] Further, they ignore that at minimum demographics of prisoners differ greatly from the general population, and that the latest proportion of confirmed cases per 1,000 people in Californian prisons is over seven times the rate in the general Californian population.[14]

CONCLUSION

We measure the social distribution networks of Facebook, Instagram, Reddit, Twitter, and YouTube and the levels of engagement with content related to the coronavirus pandemic. Sources of junk health news and information have distribution networks reaching hundreds of millions of social media users. Junk health news websites generate huge amounts of content that is widely disseminated and receives significant engagement.

RELATED WORK

Read [our review of state-backed English language media reporting](#) on Coronavirus. Find our previous weekly briefings [here](#).

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ABOUT THE PROJECT

The [Computational Propaganda Project](#) (COMPPOP), based in the [Oxford Internet Institute](#) and University of Oxford, involves an interdisciplinary team of social and information scientists researching how political actors manipulate public opinion over social networks. This work includes analyzing how the interaction of algorithms, automation, politics, and social media amplifies or represses political content, disinformation, hate speech, and junk news. *Data Memos* present important trends with basic tables and visualizations. While they reflect methodological experience and considered analysis, they have not been peer reviewed. *Working Papers* present deeper analysis and extended arguments about public issues and have been collegially reviewed. Our *Coronavirus Misinformation Weekly Briefing* provides regular reports on the most prominent social media trends from the prior week. COMPPOP articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.