



Social Media Junk News on Erosion of Trust in Public Health Experts

Coronavirus Misinformation Weekly Briefing 15-06-2020

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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 10-06-2020 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 nearly 8,000 users, while the average article from mainstream sources reached over 4,000 users and the average junk health article reached over 3,000 users.
- Similarly, all content from all mainstream sources gets the largest amount of total user engagement. But on a per article basis, junk health news gets almost over 100 engagements, state-backed content gets over 75 engagements, and average articles from mainstream sources get under 25 engagements.
- In total, 55% of the engagement with non-mainstream information last week was with state-backed content, and 95% of engagement with state-backed content was made up of engagements with Chinese and Russian media content.
- Thematically, junk health news sources (a) sought to undermine trust in public health experts, (b) used the George Floyd protests to fuel misinformation and racist messages, and (c) advanced false claims about President Trump's success in managing unemployment and economic recovery in the US.

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 June 3rd to June 10th 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, 55% of the engagement with non-mainstream sources we observed this week was from state-backed sources. Further to this, 95% of social media user engagement with state-backed media was with Chinese and Russian media content. It is very likely that there are Chinese and Russian sources of which we are unaware, and of course other regimes may also have sources we have not yet identified. These minor sources, however, are likely to receive little attention and not be as influential as the sources we have already catalogued.

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 double 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 nearly 8,000 users, whereas average mainstream new articles reach just over 4,000 users.

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 around 1 million whereas mainstream news sources achieved nearly 9 million engagements. Junk health news has reached over 6 million total engagements in previous weeks.[2] On average, junk health news generated the most engagement this week, reaching over 100 engagements per article, overtaking state-backed news that has consistently achieved most average engagement in previous weeks.

As noted last week, Figures 1 to 4 now contrast the top fifteen sites from each category, instead of the previous selection of five mainstream news sources. See our [Methodology FAQ](#) for further details. This week, we are able to provide a view of engagement trends over the last two weeks. Figure 5 displays the engagement trends for the last two weeks since the shift to comparison between top 15 sites in each category was made. Mainstream news sources typically achieved over 1 million engagements on most days, whereas junk health news and state-backed media seldom reach that threshold. On a per-article average, however, mainstream news sources struggle to generate the same engagement junk health news and state-backed outlets do.

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

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

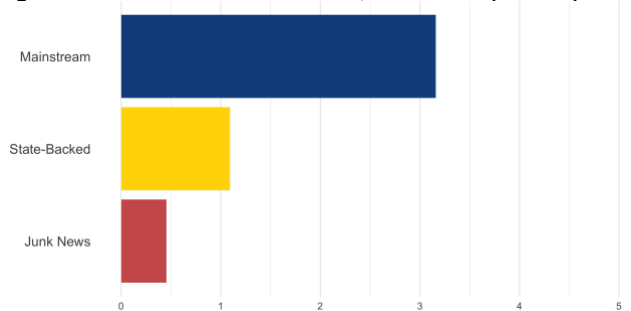


Figure 2: Distribution Networks, Average per Article

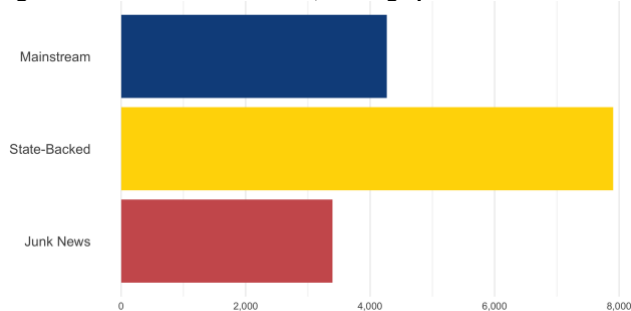


Figure 3: Total User Engagement, All Articles (Millions)

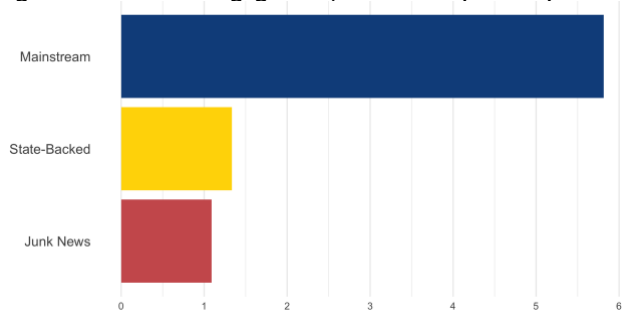


Figure 4: User Engagement, Average per Article

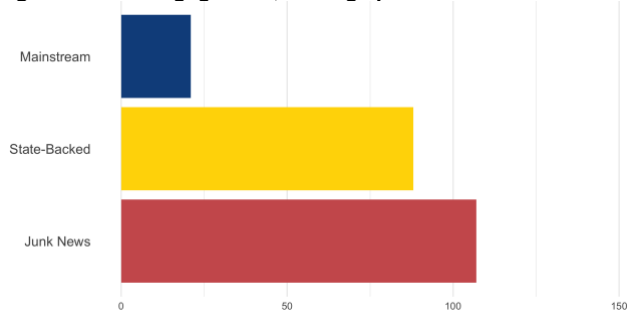
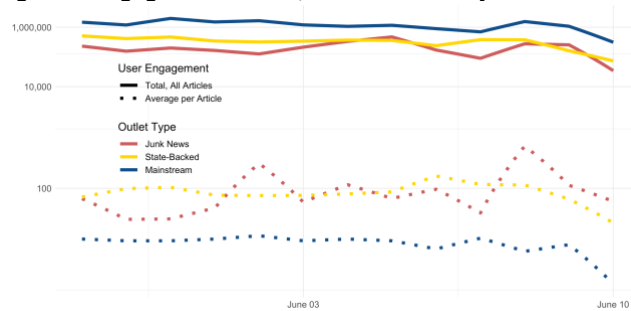


Figure 5: Engagement Trends, for the last 14 days



Source: Based on authors' calculations using data collected 03/06/2020-10/06/2020.

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.

junk health news sources generally politicize health news and information by criticizing democracies as corrupt and incompetent.[1] Last week, misinformation centered on using the George Floyd protests to fuel existing narratives.

This week, the key themes amongst top junk news stories (a) sought to undermine trust in public health experts, (b) used the George Floyd protests to fuel misinformation and racist messages, and (c) advanced false claims about President Trump's success in managing unemployment and economic recovery in the US.

On the first theme, junk health news disseminated a misleading comment from WHO officials that claimed asymptomatic carriers were less likely to transmit the virus. The WHO clarified the remarks in a live Q&A session the next day. Some junk health news articles relayed this clarification, but the top article that did so achieved only 14,000 engagements.[9] The original articles, however, achieved many more engagements. An article from *The Blaze* with nearly 28,000 engagements used the opportunity to undermine trust in public health experts, asking "what will [they] discover next?"[10] Meanwhile, a *Daily Wire* article with over 25,000 engagements accused the WHO of fearmongering.[11]

On the second theme, a *Daily Wire* article with nearly 73,000 engagements defended President Trump's actions and tweets in response to George Floyd's death, claiming that he had not stoked racial tensions, and that his use of force to remove protestors for a photo opportunity at St John's Church was both innocuous and justified.[12] An article published by *PJ Media* with over 32,000 engagements described George Floyd's death as a pretext for a dangerous socialist agenda, and that protestors were wrong about a "racist core of the American story".[13]

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On the final theme, many articles centered around the US Department of Labor jobs report for May, released Friday June 5th, that initially showed a significant drop in unemployment rate from 14.7% in April to 13.3% in May.[3] This was soon corrected by the Department of Labor to 16.3%, and accompanied by a statement that the inaccuracy stemmed from incorrect labelling during interviews.[4], [5] Nevertheless, this report served as a basis for Trump to immediately attack political opponents, and although this statistic was corrected, articles quoting and echoing Trump were already collecting large numbers of engagements. A *Daily Wire* article with over 87,000 engagements—nearly 8% of all engagements of junk health news sources received last week—celebrated Trump's false claims of success.[6] An article from *The Blaze* with nearly 29,000 took a very similar line.[7] The *Daily Wire* published a correction article the next day, though that only received 5,700 engagements.[8]

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](#).

[13] T. O'Neil, "Coronavirus Gave America 'a Small Foretaste' of the Poverty and Tyranny of Socialism, Dinesh D'Souza Warns," *pjmedia.com*.

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ABOUT THE PROJECT

The [Computational Propaganda Project](#) (COMPROP), 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. COMPROP articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.