



JUNK NEWS DISTRIBUTION ON TELEGRAM:

The Visibility of English-language News Sources on Public Telegram Channels

Aleksi Knuutila, Aliaksandr Herasimenka, Jonathan Bright, Rasmus Nielsen, Philip N. Howard

SUMMARY

Messaging platforms such as Telegram are key channels for the dissemination of misinformation and junk news. So far there are very few large-scale studies of how news and political content circulates on these platforms. We use a large open access dataset to analyze which English-language news sources are prevalent on public Telegram channels, the scale of their audience and how information spreads on the platform. Our key results are:

- Junk news sources received a third of all the views on Telegram for the most prominent twelve news sources we examined. Mainstream news sources receive a lot of attention, but two of the junk news sources received more views on Telegram than some well-known mainstream news outlets, including the Guardian or Daily Mail.
- There is a fairly large audience for junk news sources, but articles from these sources rarely circulated widely outside of channels dedicated to these sources.
- The audiences of junk news channels are on average significantly more engaged than the audiences of mainstream news channels. However, with a relatively small user base and no algorithmic timeline, these channels struggle to build a larger audience on Telegram.

INTRODUCTION

Telegram is one of the most popular messaging platforms in the world. Though smaller than WhatsApp, Telegram has 400 million users worldwide.[1] In particular it is widely used in Iran and Russia, though it has a growing user base in the EU and the US.

Telegram is commonly used by political groups and social movements to disseminate information. They often choose Telegram because it applies few restrictions to political content and it preserves the privacy of its users. For instance, the protestors in Hong Kong widely adopted the platform in 2019.[2] Telegram has also become an important organizing and dissemination channel for the far-right.[3] Some of these groups have broken the guidelines of platforms such as YouTube or Facebook, and have had their channels and pages removed. For example, in the UK, Tommy Robinson and Britain First were recently blocked by key platforms, while the groups and channels related to these organizations remain available on Telegram.[4]

Users of Telegram can communicate on both channels and groups. Groups allow many users to send messages to each other, while channels are focused on one-to-many broadcasting to channel subscribers. Telegram also encourages content from one channel to be forwarded to another, allowing content to spread through the platform. Unlike most other social media platforms, Telegram does not have algorithmic timelines or content recommendation systems.

Despite their large user base and use by political groups, messaging platforms such as Telegram have

been studied much less than social media platforms such as Twitter. This data memo is the first one known to the authors to attempt a large-scale study of which English-language news sources are prevalent on Telegram channels. In the first section we examine which English-language news sources have the largest visibility across thousands of Telegram channels. The second section analyzes the functioning of individual Telegram channels maintained by those news sources.

DATA AND METHOD

The study is based on an open access dataset that includes 317 million Telegram messages sent to 28,000 public Telegram channels between 2015 and 2020.[5] Telegram does not have a central directory of all channels. The researchers who created the dataset used a snowball method; they started with a list of 250 English-language channels and identified more channels by looking at the channels from which messages had been forwarded.

We focused on messages shared during the most recent 12 months available in the database, covering the period from 1st of October 2018 to 30th of September 2019. The open access dataset contained 24.7 million messages from this period. For our analysis we extracted all messages that contained hyperlinks to any website, which was 7.7 million messages from 19,605 channels.

From this dataset we identified English-language news sources that had received at least 2 million views.

This was done by examining internet domains that passed the 2 million views threshold and selecting the domains that focus on publishing news, and that publish primarily in English. The internet domains we examined with this threshold cover 92% of all views in the dataset. We additionally identified news organizations that publish in several languages above a threshold of 5 million views, and where possible differentiated links to English-language content based on features of their URLs. We identified sources as junk news using criteria developed during earlier work. See the [Data Supplement](#) for more detail on URL patterns for these English-language sources and our inclusion criteria. About 180 thousand URLs, or about 2.4% of all hyperlinks in the dataset, contain English-language news domains. Overall news some other languages, such as Farsi and Russian, received more views than English-language news through Telegram channels, but they are outside of the scope of this analysis.

Telegram keeps track of how many times messages have been read. The views of a message represents the number of users who saw a post from any device. Multiple views by the same user are only counted as one provided they are within a four-day period. Though if a user sees a message again after four days, Telegram counts this as another view.[6] When a message is forwarded from one channel to another, views from all channels are added to the message's count of views. In our calculations we only examined the views of messages that have not been forwarded, to avoid double counting views. We did not analyze content that contained link shorteners such as bit.ly. In our sample, the 5 most popular link shorteners represented about 7% of all links on Telegram channels. For selected news sources we compared the levels of user engagement on Telegram to Facebook. We did this by collecting all available links to this news source from CrowdTangle and data on engagement with those links from the Facebook Graph API.

FINDINGS

The Reach of English-Language News Sources

In the time period we examined, there were 61,000 messages linking to articles from *The New York Times* that received about 17.3 million views. This is the highest number of views for any English-language news source (see Table 1). TR.news, a website associated with the British extremist Tommy Robinson, and Summit.news, a website associated with the American extremist Paul Joseph Watson, were next on the list. Other widely read mainstream news sources, such as the BBC, *The Guardian*, and the technology news website The Verge were also among the most visible news sources on Telegram. Infowars.com and Russia-backed southfront.org, both sites often found to contain misinformation, also received more than 2 million views on Telegram during the time period.[7]

The results show that mainstream news sources receive a lot of attention on Telegram channels. Out of the top dozen news sources examined, 33% of all views go to the junk news sources. TR.news and

Summit.news have been banned from maintaining their own channels and pages on other social media platforms such as Facebook and YouTube, and so have been attempting to gain a following on Telegram. TR.news is an example of a site for which Telegram is an important broadcasting platform. By way of comparison, in the time period when it gathered 8.4 million views on Telegram channels, links to TR.news on Facebook received about 600,000 reactions.

We also investigated which Telegram channels posted links to the 12 most prominent news sources. We examined whether the messages that gathered many views were concentrated in a single channel or spread across many channels. We found that the messages with highest number of views that link to the junk news websites TR.news, Summit.news and InfoWars.com were concentrated on a small number of Telegram channels (see Figure 1). The channels in question were the Telegram channels maintained by these news sources themselves. There were also a significant number of other channels that have posted messages with links to this junk news network. However, these channels did not influence significantly the overall count of views. This demonstrates that influential junk news sites have relatively weak distribution network on Telegram outside of the channels they maintain themselves.

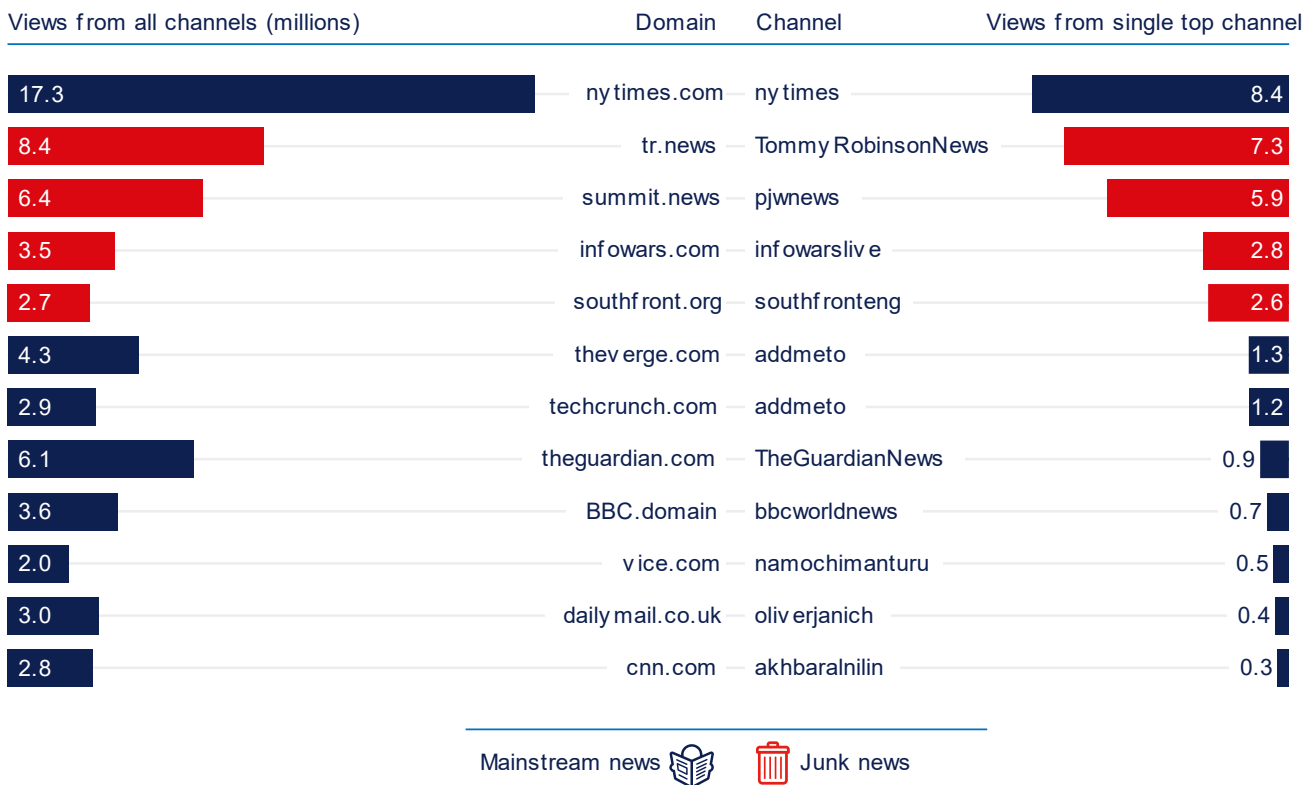
By contrast, links to the mainstream news sites were spread across a larger number of Telegram channels. For news sources such as *The Guardian* and The Verge, a clear majority of the views were generated from Telegram channels not directly affiliated with the news sources. *The New York Times* was somewhere between these extremes. More than a half of the views to *The New York Times*' articles were generated by the two channels that are maintained by the newspaper (nytimes and nytimes_world). These two channels had a relatively small number of subscribers, 11,116 subscribers combined, but a high number of messages - 45,972 messages in total in the time period examined. These results suggest that news sources who actively

Table 1: Prominent English-Language News Sources Across All Telegram Channels

News Source	Views (millions)	Number of Messages	Number of Channels
The New York Times	17.3	61,222	1,049
TR News	8.4	2,122	151
Summit News	6.4	2,885	289
The Guardian	6.1	36,531	999
The Verge	4.3	23,501	402
BBC News	3.6	5,729	791
InfoWars	3.5	5,469	215
The Daily Mail	3.0	4,718	643
TechCrunch	2.9	3,023	286
CNN	2.8	24,667	525
South Front	2.7	11,828	66
Vice	2.0	4,654	532

Source: Authors' calculation based on open access data[5] Notes: Listed sources received more than 2 million views for the studied period. Given name of news sources is based on the branding on their website. The table shows the number of views for all messages linking to the news source's domain, the number of messages containing such links and the number of channels with at least one message linking to the domain.

Figure 1: Distribution of views between Telegram channels for the 8 English-language news sources with most views



Source: Authors' calculation based on open access data[5]

maintain their own channels on Telegram added to their visibility. At the same time, a wide range of Telegram channels posted links to mainstream news articles, whereas junk news sources were almost entirely reliant on their own official Telegram channels. This suggests that there is a fairly large audience for junk news sources. However, articles from these sources rarely circulated widely outside of junk news-related channels.

The Reach of Individual Telegram Channels

The analysis above has examined all Telegram messages across several channels that link to individual news sources. We also analyzed individual Telegram channels that are important sources of news, and looked at all of their messages regardless of where they link to.

For Table 2, we analyzed the English-language news sources presented in Table 1 and for each source selected the Telegram channel maintained by those organizations with the largest number of subscribers. Table 2 describes how Telegram channels reached their audiences. For every channel we calculated the indicator of views per subscriber, to describe how actively the subscribers were following the channel's content. Views per subscriber is the average number of views for the channels messages divided by the number of subscribers. The numbers show that for the junk

news channels, TommyRobinsonNews and pjwnews, views per subscriber were significantly higher than, for instance, it is for *The New York Times*. The numbers also demonstrate that the audience of junk news channels on Telegram was significantly more engaged than the audience of mainstream news channels.

The table also shows that content from the junk news channels was shared onto other Telegram channels more frequently. For instance, for TommyRobinsonNews, an average message was shared to 145 other channels about 2.7 times. These channels had 1666 subscribers on average. This suggests that Telegram channels did not exhibit the phenomenon of virality. This is one attribute that the platform has as a content distribution avenue for those choosing to adopt it.

Most channels on Telegram had fewer subscribers than equivalent channels on larger platforms, such as Facebook or YouTube. For instance, the Facebook page of *The New York Times* had gathered over 17 million likes, many times more than its over 10 thousand subscribers on Telegram. The dataset, however, shows that Telegram channels consistently reached a higher proportion of their viewers. A study by the social media analytics firm DataReportal showed that the number of views a Facebook page will get is on average 5.2% of the number of users who have liked the page.[8] The median views per subscriber rate for all Telegram

Table 2: Prominent Channels Maintained by English-Language News Sources

Channel Title	Subscribers	Number of Messages	Views (millions)	Number of Shares	Avg. Views per Subscriber
Tommy Robinson News	50,250	935	15.6	2,514	0.33
Paul Joseph Watson	24,992	543	6.7	2,090	0.49
<i>The New York Times</i>	10,383	30,522	8.4	162	0.03
InfoWars.com	9,556	2920	3.5	1,069	0.12
BBC World News	6,645	513	0.7	2	0.21
SouthFront	1,683	7,446	2.8	421	0.22
<i>The Guardian</i>	607	29,658	0.9	85	0.05
The Verge	312	10,817	0.3	57	0.1

Source: Authors' calculation based on open access data[5]

Note: Comparison of individual Telegram channels maintained by news sources with more than 2 million views across all Telegram channels. The average views per subscriber were counted by dividing the average number of views for messages in a channel by the number of subscribers the channel has.

channels in our dataset was 36%. These figures suggest that Telegram users engage with sources more proactively than the audiences of some leading platforms.

The high views per subscriber ratio was also the explanation for the success of channels such as TommyRobinsonNews on Telegram. The results show that the way in which junk news channels such as Tommy Robinson News managed to reach high number of views mainly through having a loyal group of subscribers reading their content.

CONCLUSIONS

This study is one of the first attempts to investigate the spread of news and political content on messenger platforms through a case study of Telegram channels. We find that while mainstream news sources receive a lot of attention on Telegram channels, partisan, junk news sources, particularly from the right side of the political spectrum, also have significant audiences on the platform. TR.news and Summit.news reach a larger audience through Telegram channels than many of the most prominent newspapers, including CNN and *The Guardian*.

Our study also points to the limitations of trying to find your audience through Telegram, in comparison other large social media platforms, such as Facebook or YouTube. Unlike many social media platforms, Telegram offers no recommendations or an algorithmic timeline, which could surface created content to users who are not subscribed to particular channels. This means much of the reach is driven by self-selection. We also find that sharing of messages between channels does not significantly increase their audience, at least for the relatively prominent Telegram channels we examined. These features of Telegram, in addition to the relatively small userbase in most English-speaking countries, limit the potential for reaching a wider audience on the platform, beyond those who actively seek to engage with a particular source or community.

At the same time, Telegram remains an important channel for distributing news to many groups and individuals that have been deplatformed from other social media, including Summit.news and TR.news. Their subscriber count on Telegram was smaller than it was on Facebook or YouTube. However, subscribers on Telegram are much more likely to view individual messages than on other social media platforms. Even relatively small Telegram channels can help outlets generate significant amount of engagement from a loyal audience.

REFERENCES

- [1] P. Durov, "400 Million Users, 20,000 Stickers, Quizzes 2.0 and €400K for Creators of Educational Tests," *Telegram*, Apr. 24, 2020. [Online]. Available: <https://telegram.org/blog/400-million>.
- [2] S. Banjo, "Hong Kong Protests Drive Surge in Telegram Chat App," *Bloomberg*, Aug. 15, 2019.
- [3] J. Guhl, J. Davey, "A Safe Space to Hate: White Supremacist Mobilisation on Telegram." Institute for Strategic Dialogue Briefing, June 2020. [Online]. Available: <https://www.isdglocal.org/wp-content/uploads/2020/06/A-Safe-Space-to-Hate2.pdf>
- [4] R. Rogers, "Deplatforming: Following extreme Internet celebrities to Telegram and alternative social media," *Eur. J. Commun.*, May 2020.
- [5] J. Baumgartner, S. Zannettou, M. Squire, and J. Blackburn, "The Pushshift Telegram Dataset," *ArXiv200108438 Cs*, Jan. 2020, Accessed: Apr. 24, 2020. [Online]. Available: <http://arxiv.org/abs/2001.08438>.
- [6] Telegram.org, "Telegram FAQ," *Telegram*. [Online]. Available: <https://telegram.org/faq>.
- [7] E. Macguire, "Banned from Facebook and Twitter, UK far right turns to TikTok," *Aljazeera*, Apr. 16, 2020. [Online]. Available: <https://www.aljazeera.com/news/2020/04/banned-facebook-twitter-uk-turns-tiktok-200416102704155.html>.
- [8] S. Kemp, "Digital 2020 Global Overview Report". Accessed: 13. July 2020. Available: <https://datareportal.com/reports/digital-2020-global-digital-overview>.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the support of the European Research Council for the project 'Computational Propaganda: Investigating the Impact of Algorithms and Bots on Political Discourse in Europe', Proposal 648311, 2015–2020, Philip N. Howard, Principal Investigator. Project activities were approved by the University of Oxford's Research Ethics Committee, CUREC OII C1A 15-044. We are also grateful to the Adessium, Luminare, Ford Foundations and the Oxford Martin Programme on Misinformation, Science, and Media for supporting this work. Any opinions, findings, conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the University of Oxford or our funders.

ABOUT THE PROJECT

The Computational Propaganda Project (COMPROP), which is based at the Oxford Internet Institute, 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 integrate important trends identified during analyses of current events with basic data visualizations, and although they reflect methodological experience and considered analysis, they have not been peer reviewed. Working papers present deeper analysis and extended arguments that have been collegially reviewed and engage with public issues. COMPROP's articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.