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COVID-19 information on Social Media in Europe: A threat or a blessing?

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Europe is facing unprecedented challenges from COVID-19 at the moment. Providing citizens with accurate, timely and frequent information about the health risks posed by COVID-19, as well as measures they can take to protect themselves, is key to mitigating the spread of the virus. Social media can, in this context, become an essential tool as it allows us to reach and engage a large number of people. But, social media can also be misused to spread misinformation. This policy brief critically questions what potential role social media play in informing Europe's population about the COVID-19 pandemic. Using more than 50,000 tweets, we analyse who has an impact on the discussions surrounding COVID-19 on social media in Europe. With this study, we seek to contribute to the debate on the problems, but also the benefits of social media for the spread of information.

Social media and their role to inform the public

42% of Europeans access daily information via social media.37% come across fake news almost every

8,000 tweets about COVID-19 are posted on Twitter in Europe every day.

According to the Eurobarometer report about EU media use in 2018, the access of news via traditional media outlets like the printed press is drastically declining in Europe. When a crisis hits, however, news users seem to turn to household brands. In the Netherlands, for example, market research showed a significant increase in visits to national news websites, with these sites suddenly reaching more people than

Facebook.¹ At the same time, the increase in the percentage of citizens using social media daily for accessing information is striking, changing from 18% in 2010 to 42% in 2017.²

On the one hand, social media allow news consumers to interact mutually with each other and with the news source as social media channels have transformed from simple status updating platforms into versatile networking and engagement tools.³ On the other hand, according to a 2018 survey across all 28 European member states, 37% of social media responders' come across fake news on social media every day or almost every day.⁴

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¹ Kantar (2020). COVID-19 Barometer (Wave 2) [Market Report], Kantar, http://www.tns-nipo.com/onze-specialisaties/covid-19/covid-19-barometer

² https://op.europa.eu/en/publication-detail/-/publication/a575c1c9-58b6-11e8-ab41-01aa75ed71a1/language-en/format-PDE

³ Newgarden, K., 2009. Annotated bibliography - twitter, social networking, and communities of practice. TESL-EJ 13 (2), 1-20.

⁴ https://www.statista.com/statistics/1076701/fake-news-frequency-europe/

Social media are (as any media outlet) dominated by COVID-19 content at the moment. Between March and May 2020 alone, more than 80 million tweets about COVID-19 have been posted on Twitter in English.⁵ Based on our findings, on average every day, around 8,000 tweets about COVID-19 are posted on Twitter in Europe alone.

In order to better understand the benefits and threats social media pose in the context of information provision about COVID-19, this Policy Brief wants to contribute to the discussion by giving first evidence from more than 50,000 original tweets (no re-tweets) about COVID-19 that have been posted on Twitter at the end of March (see below for more insights about the methodology).

Findings of the study

- Amongst the Twitter accounts tweeting about COVID-19 in Europe that have the most engagement, we find media organisations and public administrations, as well as individual academics, politicians, journalists and public figures. This shows that a variety of actors are shaping the public discussion on the platform. Partisan and 'alternative' media are not amongst the most engaging Twitter accounts.
- The most liked and shared Covid-19-related tweets include tips to cope with and numbers about the pandemic. Tweets that share highly emotional personal stories can also attract a lot of engagement. None of these highly engaging tweets could be identified as "fake".

In order to show the relative impact of Twitter accounts on the discussions about COVID-19 in Europe, we analysed Europe-based accounts who tweeted about COVID-19 with the most likes and re-tweets on these tweets. Sky News (@SkyNews) was the most engaging account in the timeframe analysed. Next to other media related accounts (e.g. @BBCHindi, @radiosavana), those leading to the most engagement on Twitter are public organisations like The European Centre for Disease Prevention and Control (@ECDC_EU), the International Observatory of Human Rights (@observatoryihr) and the UK Department of Health and Social Care (@DHSCgovuk). We can identify impactful academics (e.g. @ashoswai - Professor at Uppsala University), politicians (e.g. @damian_from) and journalists (e.g. @MattMcBradley, @MurtazaViews). What needs to be noted is that among the most impactful Twitter accounts, we can also find prominent people or influencers like Greta Thunberg (or @snapnchat).

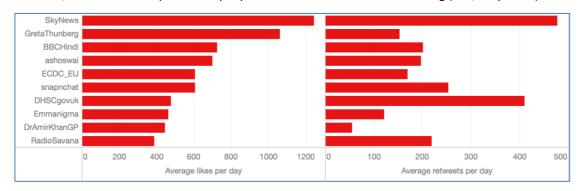


Figure 1: Ten most impactful Twitter accounts in the analysed timeframe based on daily average number of likes and retweets on COVID-19 related tweets.

Unsurprisingly, most of the highly liked and re-tweeted tweets come from the Twitter accounts identified as the most engaging. These tweets are about tips about to behave during the COVID-19 pandemic or have information about the current situation (e.g. in numbers of tested or infected). Other tweets are more personal about what happened to someone due to corona (e.g. that someone got dismissed by @LawyerDailed). Most of the most engaging tweets had videos, pictures

5 https://ieee-dataport.org/open-access/corona-virus-covid-19-tweets-dataset

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and other visualisations attached. None of the most engaging tweets could be classified as "misinformation" or "fake news".

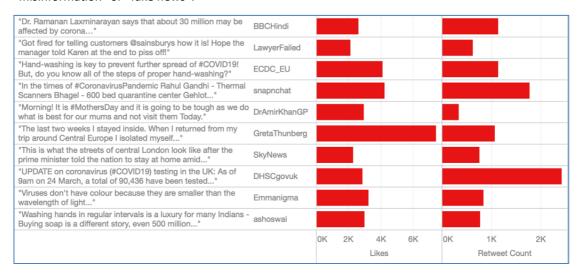


Figure 2: **Top ten most engaging tweets in the analysed timeframe about COVID-19 based on number of likes**and retweets.

Policy implications

Social media are now an integral part of the public debate. The COVID-19 epidemic forms a good case to delve deeper into who is shaping that public debate on a platform like Twitter. Looking at the most engaging tweets, various voices are contributing to the debate amongst which are media organisations, but also public figures, politicians and academics.

In that context, it is hopeful to see that the measures Twitter took mid-March to counter disinformation on its platform seem to bear fruit. The company shifted its 'free speech' policy and for the first time, started to actively remove content that denied recommendations by health authorities, offered harmful treatments or incited uncivil behaviour. This comes on top of Twitter's collaboration with public organisations like the NHS in the UK, aiming to guide users to legitimate sources. That Twitter is ready to intervene more proactively in removing content is telling for the changing mindset amongst social media companies. Even Mark Zuckerberg from Facebook weighed in on the discussion:

Even in the most free expression-friendly jurisdictions like the US, you've long had the precedent that you don't let people yell 'fire' in a crowded room, and I think that's similar to people spreading dangerous misinformation in a situation like this."6

Of course, policing social media in a way that respects freedom of speech on the one hand and tackles harmful content, on the other hand, still remains a balancing act. More and more regulations are being put forth by governments. In 2018, for example, the European Council and European Parliament adopted the revised AVMS directive, in which the obligation to protect minors from harmful content was also extended to video-sharing platforms. Much of that regulation is still to be transposed in coand self-regulatory practices, but platforms are already taking measures pro-actively⁷.

Based on this study (which needs follow-up work, extending data sets), we do not see big counterfactual accounts taking lead roles in the online discussion on Twitter nor see a public debate on the platform dominated by certain "fake" messages or profiles. That does not mean that disinformation is not circulating, for example in private chat applications such as Whatsapp. Still, working with social

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⁶ https://www.theguardian.com/world/live/2020/mar/18/coronavirus-live-news-updates-outbreak-us-states-uk-australia-europe-eu-self-isolation-lockdown-latest-update?page=with-block-5e727a0a8f088d7575595fd9#block-5e727a0a8f088d7575595fd9

⁷ imec-SMIT is currently analysing co- and self-regulatory practices of Video-Sharing-Platforms (VSP's) in EU Member States. The study is carried out together with Deloitte and is being funded by the European Commission. Results are due for October.

media platforms together in the future for public organisations is important to on the one hand, tackle misinformation and on the other use the wide reach of social media for their advantage.

We want to highlight with the study, that social media are used and sometimes counterintuitively have a positive impact on discussions about COVID-19. In times where only the negative impacts including the spread of misinformation is highlighted (even though this shouldn't be underestimated), we should also not underestimate the benefits of social media to spread important information from trustworthy information sources to the European public.

The methodology of the study: We built a Twitter crawling engine to collect the data using the Twitter REST APIs based on COVID-19 related hashtags including, #corona, #coronavirus, #COVID19, and #coronaviruspandemic. We chose Twitter for the analysis, as it gives detailed and easily accessible data through the open API (which is restricted for other social media platforms like Facebook), and has a relatively high number of users in Europe (about 11% of Europeans have a Twitter account). We followed the method as described by Komorowski et al. (2018). We restricted the scraping to tweets coming from European accounts (but in all languages). We scraped tweets from 17 – 24 March 2020. The timeframe was chosen because during this time most countries announced lock-down measures and other far-reaching new regulations that impacted most of the population in Europe. Statistical analysis and visualisation of the data from the followers' accounts and the tweets were performed with Tableau (www.tableau.com). We used Google Translate automatic integration into Google Sheets to identify the language of tweets and translate them into English for analysis.

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The **Media Programme** of SMIT, a research group at imec and VUB, consists of 45 junior and senior researchers. The researchers are specialist in various policy, market, and user research methods. Their work spans the fields of national and European media and competition policy, cultural diversity, public broadcasting, the sustainability of creative industries, immersive media, data and valorisation, privacy, media literacy, and digital inclusion. The programme is headed by Prof. Dr. Karen Donders (<u>karen.donders@vub.be</u>). The programme is also in charge of **Mediahub Brussel**, that is investing in education, innovation and collaboration in the Flemish and Brussels media sectors. The Mediahub Brussel is supported by the Flemish Government.

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⁸ Sechelea, A., Do Huu, T., Zimos, E., Deligiannis, N., 2016. Twitter data clustering and visualization. In: Telecommunications (ICT), 2016 23rd International Conference on. IEEE, pp. 1-5.

⁹ https://gs.statcounter.com/social-media-stats/all/europe

¹⁰ Komorowski, M., Huu, T.D. and Deligiannis, N., Telematics and Informatics (2017), http://dx.doi.org/10.1016/j.tele.2017.11.001