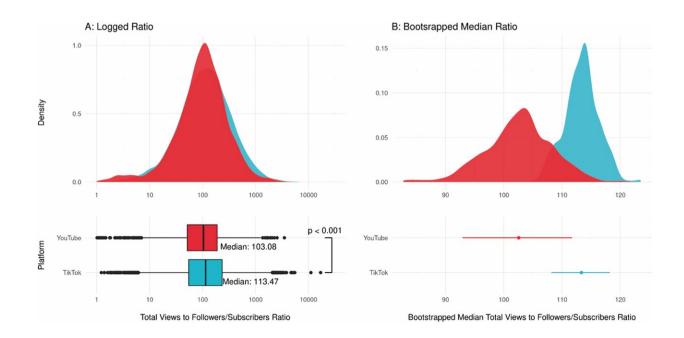


## TikTok lowers barriers to virality, keeps tight control through algorithm

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Higher Views to Followers Ratio on TikTok. Credit: *Computational Communication Research* (2022). DOI: 10.5117/CCR2022.2.004.GUIN

The short-form video platform TikTok has become one of the top social media platforms in the United States where users go to join online dance trends, get their news and even discuss politics. With a goal of understanding how TikTok encourages content creation, especially political content, a Penn State-led research team has found that the platform's unique mobile-only interface and algorithm make content



creation and opportunities to go viral particularly easy yet can lead to high rates of creator burnout.

"TikTok has the most total time spent on platform of any social media company in the United States with an average of 96 minutes a day," said Kevin Munger, Jeffrey L. Hyde and Sharon D. Hyde and Political Science Board of Visitors Early Career Professor of Political Science at Penn State and project lead.

"The most important media includes the content that people spend the most time consuming. Figuring out what TikTok is and what it does is a necessary step in our academic and public conversations about social media politics."

The researchers used hashtags related to the 2020 U.S. election, such as #politics, #MAGA and #democrats, to identify and label 865 TikTok accounts as political and leaning left, right or center. They identified additional potentially political accounts by looking at accounts that interacted with the nearly 273,000 videos produced by the initial sample.

After hand-coding nearly 2,000 accounts as political and leaning left, right or center, they trained a supervised machine learning classifier to identify additional accounts. In total, they analyzed 11,546 accounts and nearly 2 million political videos uploaded to TikTok. They compared the accounts to the top 33 political channels on YouTube, another videoforward platform, to study the aspects that drive video supply and demand on the platforms and how TikTok shapes political communication.

The research team found that approximately 78% of viewers who commented on political tiktoks uploaded videos to the platform compared to 18% of YouTube commenters. The team also found that TikTok's "For You Page," where users spend more than two-thirds of



their time and is curated by the company's recommendation algorithm, replaced "following" behavior.

The page automatically starts playing tiktoks when users open the app and can choose from the trillions of videos on the company's servers. The recommendation algorithm makes it easier for these political videos to go viral, or be viewed thousands or even millions of times, regardless of an account's number of followers.

"TikTok is better at guaranteeing at least some audience for every post, even if you don't have a big network of followers," said Munger, who described the platform as being the first social post-network where the importance of the algorithm has replaced that of the user's network.

"It gives you more of a likelihood of going viral out of nowhere. You're more likely to see one <u>tiktok</u> or a few tiktoks get huge viewership numbers and the rest very few views. I think this inequality for a given account's viewership reflects the more central role of the algorithm in determining what people watch."

TikTok has released little information about how its algorithm chooses which videos to show on the "For You Page," and Munger said this may leave content creators to guess what will go viral next. Because viewership relies more on the algorithm instead of an account's number of followers, creators have to continually produce new videos to maintain higher view counts, potentially leading to high burnout rates, according to the researchers.

They reported their findings in the journal *Computational Communication Research*.

TikTok takes advantage of a smartphone's vertical, user-facing camera and provides filters and audio files that make it easy to create videos and



tap into existing trends. These affordances incentivize more users to become creators, Munger said.

The central role of the algorithm differentiates TikTok from its competitors, according to the researchers. On YouTube, the number of views that a video receives largely correlates with the number of people subscribed to the account. In general, large subscriber numbers result in more views. Creators on YouTube can also consider viewer comments when deciding what to post in future.

TikTok's recommendation algorithm and "For You Page" play a more central role in determining whether a video goes viral or flops, replacing the need for a large account following. The researchers looked at the peak-median views ratio, or how many more views an account's most popular video received compared to their average video.

They found that a political TikTok account's most popular video has 64 as many views as their average video, compared to 40 on YouTube. Without the viewership security that comes with a large follower count, creators on TikTok must continually post new content in the hope that it goes viral, and the importance of the algorithm means that viewer comments carry less weight in <u>content creators</u>' decision-making.

These aspects can lead to high creator burnout, and the algorithm's central role means that the company is ultimately in charge of what users see, said the researchers.

Despite the potential for burnout, TikTok's easy-to-use interface and short-video format can lead to more cross-partisan communication compared to other platforms, added Munger.

"The fact that it's very short—many users stick with the default 15-second video—and you can debate people point-by-point is part of



what's unique about TikTok," he said.

"There is more cross-ideological communication here than on YouTube, where hours-long videos can change the political discussion toward more fringe worldviews. I think the need for new content and to get a more personalized back-and-forth debate going engages the audience."

Although TikTok may help facilitate political discussion, the platform's user base skews younger, and much of the political content is poorly argued or evidenced, said Munger. He sees the platform as an opportunity for more experienced individuals to engage younger audiences.

"On the one hand, I'm quite sympathetic," he said. "Thinking back to when I was a teenager, I did not make the best political arguments. Still, the fact that these arguments now are being consumed not just by friends but by potentially hundreds of thousands of people means that it's important for established individuals who have different, perhaps richer perspectives to engage these audiences where they are on these platforms."

**More information:** Benjamin Guinaudeau et al, Fifteen Seconds of Fame: TikTok and the Supply Side of Social Video, *Computational Communication Research* (2022). DOI: 10.5117/CCR2022.2.004.GUIN

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