Swedish tweets about immigration reveal new insights into polarization dynamics

9 February 2022

A computational analysis of more than 1 million Tweets from Swedish speakers has found little evidence for significant polarization within this network on the topic of immigration—even after Sweden's 2015 refugee crisis. Elizaveta Kopacheva and Victoria Yantseva of Linnaeus University, Sweden, present these findings in the open-access journal *PLOS ONE* on February 9, 2022.

Social media platforms can enable grassroots activism and expose people to new ideas, but they can also create echo chambers and cause group polarization. However, most research into polarization caused by social media has focused on political party support or membership, while neglecting a wider selection of social issues, such as immigration.

To broaden understanding, Kopacheva and Yantseva studied a network of Swedish speakers who discussed immigration on Twitter from 2012 to 2019. The research team applied analytical tools known as network analysis and natural-language processing to almost 1,200,000 tweets in order to explore the dynamics of interactions between active users in the network, and to quantify polarization in their sentiments regarding immigration.

This analysis revealed the development of different discussion communities within the network over time. However, despite immigration being thought of as a controversial topic, the researchers did not find significant evidence for polarization between users in the network and communities.

Moreover, polarization dynamics did not change significantly in the wake of the 2015 refugee crises, when an unprecedented number of asylum seekers came to Sweden, and the government struggled to adequately accommodate them. However, the researchers did note a shift in sentiment after the 2015 crisis, with users' tweets becoming more negative in tone and a declining proportion of tweets having a neutral tone.

The authors discuss potential mechanisms that could underlie their findings and outline possible next steps. For instance, future research could incorporate more information on Twitter users' behavior and consider less-active users, or it could examine the potential impact of Twitter's 2017 expansion of the maximum-allowed length of each tweet.

Overall, the researchers say, their findings could help clarify the potential role social media could play in reducing radicalization and right-wing populism.

The authors add: "We detected no permanent changes in the levels of polarization that could be directly attributed to the crisis, which applies both to the network and community levels. Still, we saw a moderate but long-lasting shift towards a more negative tonality of users' messages after the crisis and a declining share of neutral tweets."

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