New Methods and Procedures for Measuring Public Opinion with Social Media Data

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Abstract

The study of public opinion has always been central to political science. Traditionally, publics expressed themselves through the written word, phone, or on the internet. In recent years, citizens around the world have taken to social media to express their political opinions. At the same time, political scientists have increasingly begun to apply computational science methods to study political phenomena, including public opinion. Yet none of these methods are explicitly designed or tailored for use with social media data, presenting serious obstacles for researchers interested in their use. In this paper, we review current practices for measuring public opinion using social media data and show that existing practices rely on the researcher to provide substantial information about a social media user base, which they may not have access to. To supplement current practices, we refine existing procedures for collecting short-text data and go on to create new procedures for measuring latent public opinion using social media data provided by the researcher. We illustrate our method with an analysis of Twitter posts by Americans in response to the U.S. withdrawal from Afghanistan in 2021. We provide software and guidance for researchers wishing to use social media data to analyze public opinion for their own work.

Keywords: public opinion, social media, machine learning, computational social science

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