Influence of Information Media on the Scope of Political Participation of Twitter Users in Poland: Structure and Activity

Jacek Nożewski

University of Lower Silesia

jacek.nozewski@dsw.edu.pl

ORCID: 0000-0001-7211-147X

ABSTRACT

The aim of the article is to determine the influence of the media on shaping the scope of political participation on Twitter, which takes the form of users observing the profiles of selected politicians. **Research methods:** The aim of the analysis is to emphasize the bipolarity of communication processes, which are also a reflection of social and political interactions in Poland, and to present a specific analytical concept that allows to indicate the position of the media in shaping and transferring user activity. The research process was based on a two-level analysis. At the first level, it focused on defining the importance of information media as well as their role and position in the structure of the network created by recipients. At the second level, it led to the creation of a binary classification model and the estimation of its predictive capabilities in relation to the media and selected politicians. The developed analytical concept is based mainly on quantitative data, and the R programming language and the Twitter REST API protocol were used in their acquisition, processing and analysis, which enables access to public data. As part of the project, the relationship structures characteristic of 8,366,926 users were analyzed. **Results and conclusions:** The research highlighted the division of public opinion visible in user-driven communication networks. The conducted analysis showed the strength of individual media that may influence the public's decision to observe a given politician on Twitter. The exploration of unique networks of user relations, based on statistical correlation analysis and binomial regression, confirmed the tendency of users observing media considered to be conservative or right-wing and left-wing or centrist to follow the profile of Andrzej Duda or Rafał Trzaskowski, respectively. As part of the research, the predictive power of the created model was also estimated. **Cognitive value:** the results of which are presented in this article, is an introduction to research on the creation of communication structures on Twitter. The use of

the majority of leading Polish media provides knowledge not only about the rank of individual broadcasters and publishers that can influence the choices made by users, but also presents the hitherto unused concept of the binary classification model in determining the network of media and political relations in the Polish version of Twitter.

KEYWORDS
bipolarity, media and politics, predictive model, communication structure, Twitter