**A BIASED REVIEW OF BIASES IN TWITTER STUDIES ON POLITICAL COLLECTIVE ACTION**

The main purpose of this paper is to study the biases from various different studies which were previously carried out based on politics in different countries, and how the author suggests a way to improve these studies. The author points out that there are many fractures along the twitter dataset and fails to establish a set of procedures for drawing conclusions from this rich dataset. Other biases in the studies are absence of hashtag and terrorist propaganda in the political studies which further points out why many of the twitter studies fail to support their choice of methodology in the greater picture. The other bias which the author points out is that most of the studies analyze behavior, communication and connectivity between users but do not seek to explain observed partisan difference. Also, a greater focus on theory is needed for twitter analyses to provide externally valid insight into the social world, both online and offline. Also, many authors use random sampling of data from the twitter API however the same data cannot be tested for future research as once the tweet is deleted it is not available anymore by the twitter API. Most of the authors from other papers used filtering methods based on geo-tags, high active users and low active users. The author suggests of removing users with more than 5000 followers because they are more likely to be influential. The author also suggests of using k core centrality to find a network of users and role determining algorithms to find a particular community in the network. The main issue here is that there is no way to separate out experimental and control users given an inherently interconnected network structure.

**FAKE NEWS ON TWITTER DURING THE 2016 U.S PRESIDENTIAL ELECTION**

The paper studies the spread of fake news during the 2016 US presidential election and how these news were statistically related to the total number of users. The study states 27% of people visited a fake news source in the final weeks before the election and the 60% of the fake news came from most conservative 10% Americans. The paper tries to understand how people who saw content from fake news sources were isolated from the mainstream content and were at a greater risk of adopting misinformed beliefs. The author collected tweets from 16,442 accounts in the panel and inferred that 6.7% of the URLS from the panel were fake news and 0.1% of the panel contributed to the 79.8% if the fake news shares. However, people greatly affected by these URLS had a dependency variable of their age, number of political URLs in the individual’s feed, sex and race. However, results carried out suggest that the fake news may not be more viral than real news. Other factors such as number of followers were also associated with sharing of fake news however the result of them sharing these fake URLs were much lower than the users with more followers. Also 95.6% of the non-outlier panel saw the URLs from at least two fake news and 56.4% encountered URLs from at least five. The main problem with the authors results would be the elimination of cyborgs which are automated accounts producing fake news. As mentioned in the paper extensive algorithms should be designed both by the platform and scientist that would eliminate the cyborgs from the platform as they contribute to the spread of fake news on the platform. This could be done by limiting the sharing the number of URLs per day per user to 20 or less.