

Bringing Truth Into Fake News: The Diffusion of Fact-Checked Fake Stories on Twitter

Berry, Colin (School: Yorktown High School)

In this project, I seek to understand what happens to fake stories after a credible fact-checking source has confirmed that the story is false. Although prior research shows that the number of retweets of fake stories is much higher than true stories on social media, I seek to understand whether the diffusion of fake stories changes after a story has been fact-checked and publicly announced on Twitter to be false. This is useful to know because if Twitter can be used to spread false stories, it can also be used to correct false information and a high diffusion rate of the fact-checked tweet would help to discredit the original rumor or false story. Using the fact-checking site, Snopes, I analyzed fake stories from the 2021 calendar year that had available links to their origin. Looking at diffusion rates (retweet rates) right before and right after a false story is publicly confirmed to be false on Twitter, my results show no significant difference in diffusion rates over a one, three or five hour window. Considering the diffusion size (total number of retweets for fifteen days after tweet), fake stories have a significantly larger diffusion size than fact-checked stories on Twitter, with fake stories having an average fifteen day total number of retweets of 4659 versus 197 for the fact-checked stories about that false story. Taken together, this study suggests that fact-checked stories diffuse at a considerably lower rate in addition to having no significant impact on the diffusion rate of the false news it is trying to correct. Once false information is out, its spread is difficult to stop or correct, making it increasingly important for social media users to reflect and research information before continuing to spread what they read on social media platforms.

Awards Won: