



Ryan Moore

Exposure to untrustworthy websites in the 2020 US election

Ryan C. Moore^{1,2}✉, Ross Dahlke^{1,2} & Jeffrey T. Hancock¹

Research using large-scale data on individuals' internet use has provided vital information about the scope and nature of exposure to misinformation online. However, most prior work relies on data collected during the 2016 US election. Here we examine exposure to untrustworthy websites during the 2020 US election, using over 7.5 million website visits from 1,151 American adults. We find that 26.2% (95% confidence interval 22.5% to 29.8%) of Americans were exposed to untrustworthy websites in 2020, down from 44.3% (95% confidence interval 40.8% to 47.7%) in 2016. Older adults and conservatives continued to be the most exposed in 2020 as in 2016, albeit at lower rates. The role of online platforms in exposing people to untrustworthy websites changed, with Facebook playing a smaller role in 2020 than in 2016. Our findings do not minimize misinformation as a key social problem, but instead highlight important changes in its consumption, suggesting directions for future research and practice.

Both concern over and research on misinformation have exploded in recent years¹. In an effort to better understand and prevent the spread of misinformation, much extant research documents exposure to misinformation online using large-scale data on individuals' internet use. This work finds that relatively few people are exposed to misinformation online, or at least fewer than many initially expected^{2–7}. Exposure is also highly concentrated^{4–6,8}. For example, Grinberg et al.⁴ found that 1% of Twitter users were exposed to 80% of the fake news on Twitter during the 2016 election. Relatedly, certain individuals are more likely to be exposed to misinformation online than other groups. For example, during the 2016 election, people aged 65 years and older were twice as likely to be exposed to fake news on Twitter and seven times more likely to share fake news on Facebook than 18–29 year olds^{4,5}.

Many studies investigating exposure to online misinformation have leveraged data collected during the 2016 US election, perhaps because concern over fake news rose during the 2016 election⁹. However, a consequence of focusing on the 2016 election is that we have little insight into how exposure to misinformation online has changed since then. This limitation is important given the myriad ways the digital (mis)information ecosystem has changed (for example, new platforms, new misinformation-generating world events and new modalities to disseminate misinformation^{10,11}). Furthermore, in the

wake of 2016, online platforms such as Facebook have taken steps to mitigate their reputation as a purveyor of misinformation¹².

While most prior research focuses on 2016, some work has examined changes in exposure over time. For example, Guess et al.¹³ found a decline in the number of Americans exposed to fake news websites from 2016 to 2018. In contrast, Allen et al.³ found that exposure to fake news was 'generally stable' from 2016 to the end of 2018. Discrepancies between these two findings may partly be explained by the authors using different lists to identify visits to fake news websites in their data. Allcott et al. also examined changes in exposure over time, finding that engagement with fake news on Facebook declined from 2016 to 2018, while engagement with fake news on Twitter rose over the same period¹⁴.

Given the changes in world events, the digital media landscape and a considerable societal effort to combat misinformation, a vital question remains as to how misinformation exposure during the 2020 US presidential election compared to exposure during the 2016 election, which served as the context for much of the existing research. In this Article, we investigate exposure to online misinformation during the 2020 election in a way that allows us to compare exposure in 2020 with 2016 directly. To do this, we collected web browsing data (that is, uniform resource locators (URLs) visited) from a nationally representative sample of American adults ($N = 1,151$) during the lead-up