Social Media & Misinformation

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False

WTOE 5 NEWS

YOUR LOCAL NEWS NOW

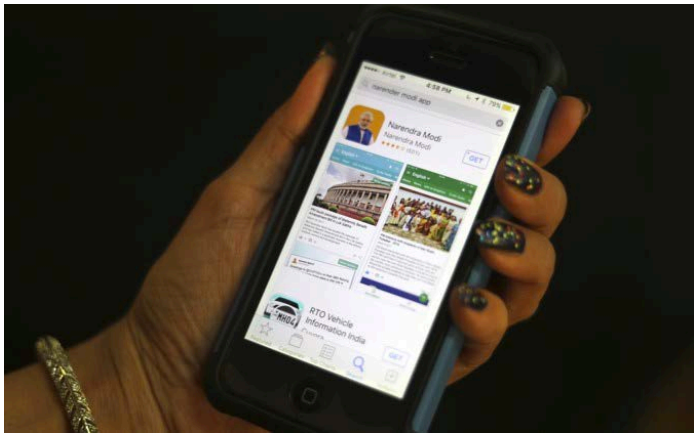
HOME | US ELECTION

Pope Francis Shocks World, Endorses Donald Trump for President, Releases Statement

TOPICS: Pope Francis Endorses Donald Trump

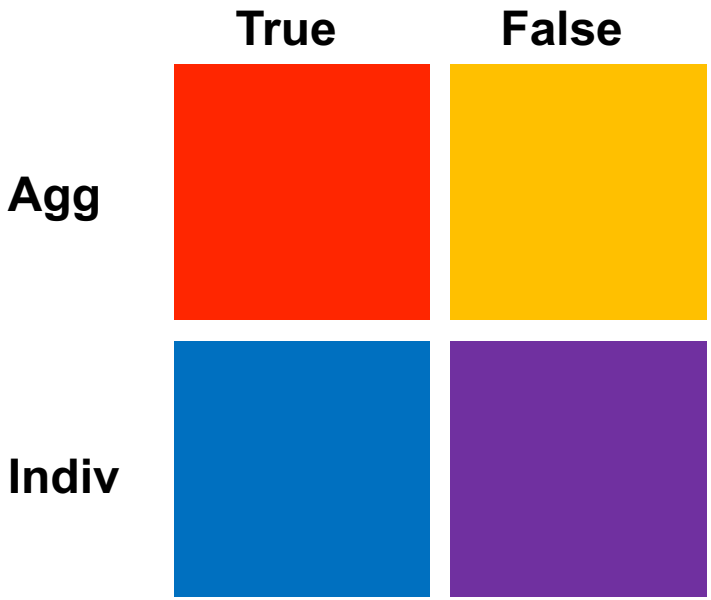
photo by Jeffrey Bruno / CC BY-SA 2.0 / cropped & photo by Gage Skidmore / CC BY-SA 3.0 / cropped

True

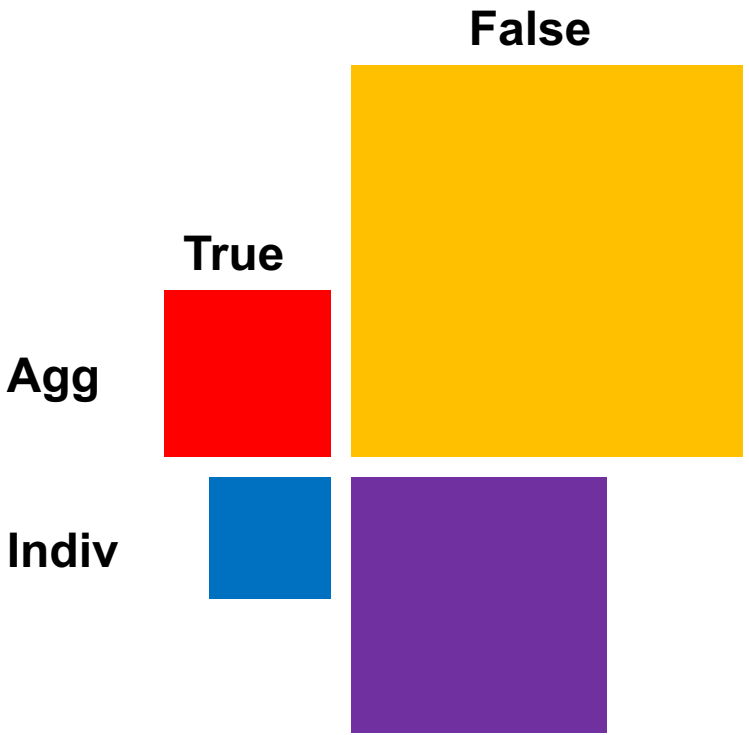


Aggregate

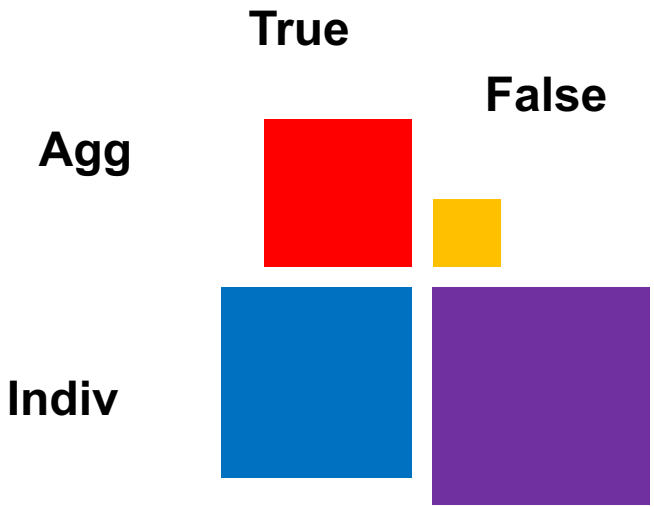
Individual


True
False
Agg
Indiv

Current Discussion



Likely Reality



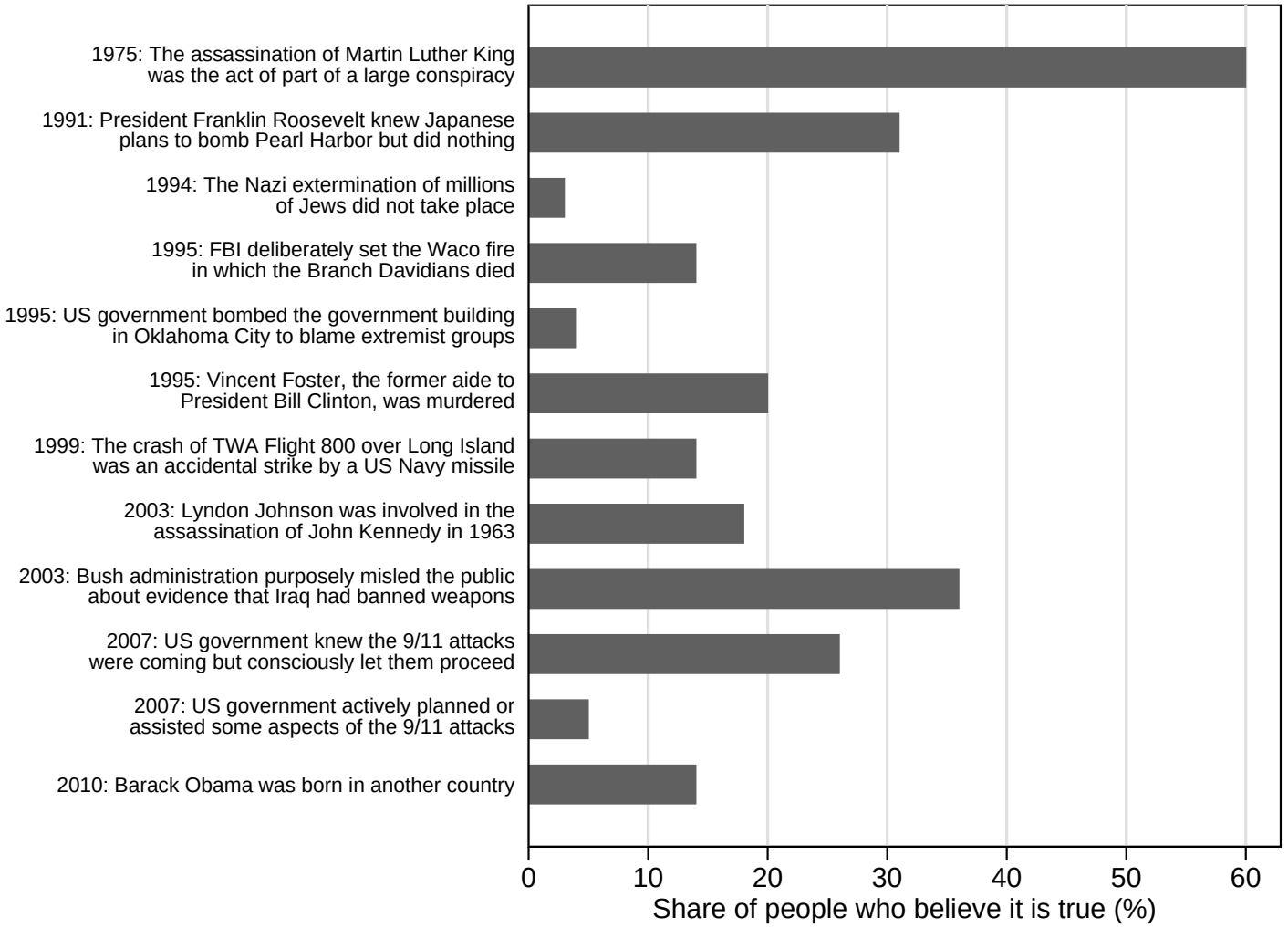
Outline

1. Context
2. 2016 US Election
3. Post-2016

1

Context

Sources: Allcott & Gentzkow 2017; Boxell et al. 2017


1975: The assassination of Martin Luther King was the act of part of a large conspiracy
1991: President Franklin Roosevelt knew Japanese plans to bomb Pearl Harbor but did nothing
1994: The Nazi extermination of millions of Jews did not take place
1995: FBI deliberately set the Waco fire in which the Branch Davidians died
1995: US government bombed the government building in Oklahoma City to blame extremist groups
1995: Vincent Foster, the former aide to President Bill Clinton, was murdered
1999: The crash of TWA Flight 800 over Long Island was an accidental strike by a US Navy missile
2003: Lyndon Johnson was involved in the assassination of John Kennedy in 1963
2003: Bush administration purposely misled the public about evidence that Iraq had banned weapons
2007: US government knew the 9/11 attacks were coming but consciously let them proceed
2007: US government actively planned or assisted some aspects of the 9/11 attacks
2010: Barack Obama was born in another country
0
10
20
30
40
50
60
Share of people who believe it is true (%)

WORLD

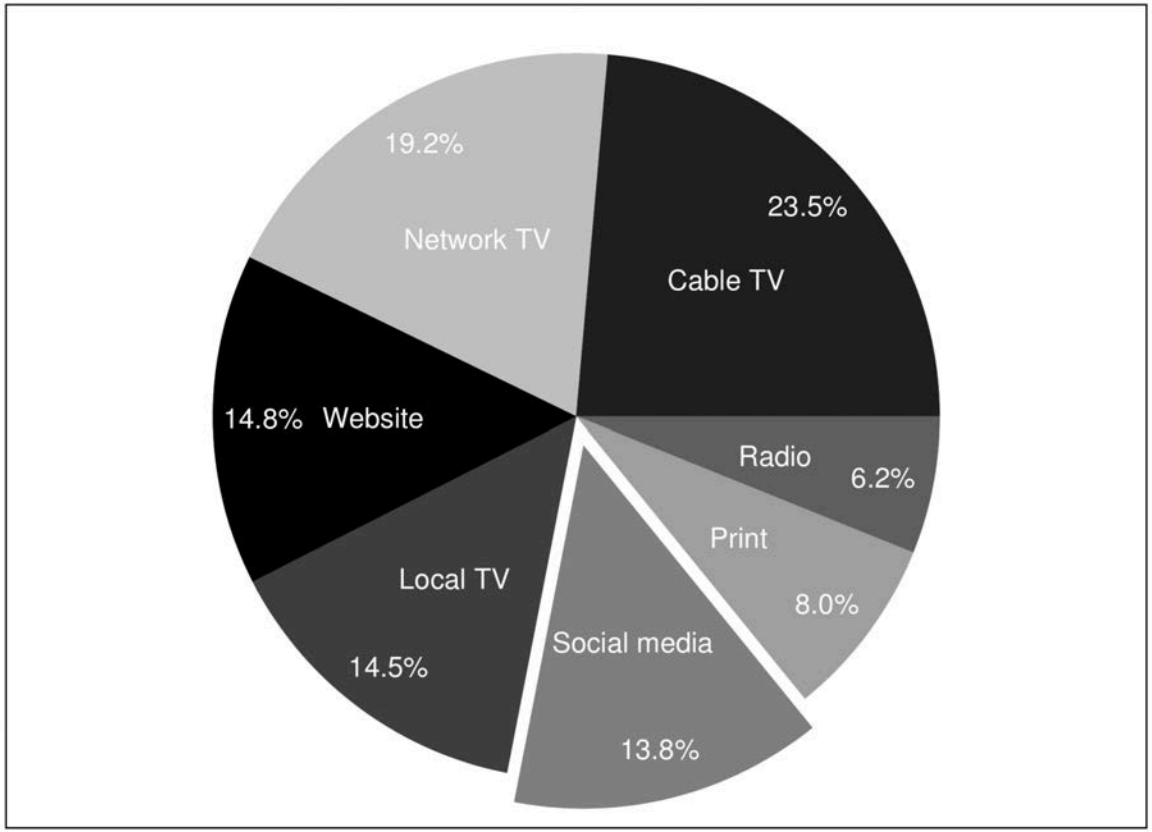
Text Messages Used to Incite Violence in Kenya

February 20, 2008 · 6:00 AM ET
Heard on Morning Edition

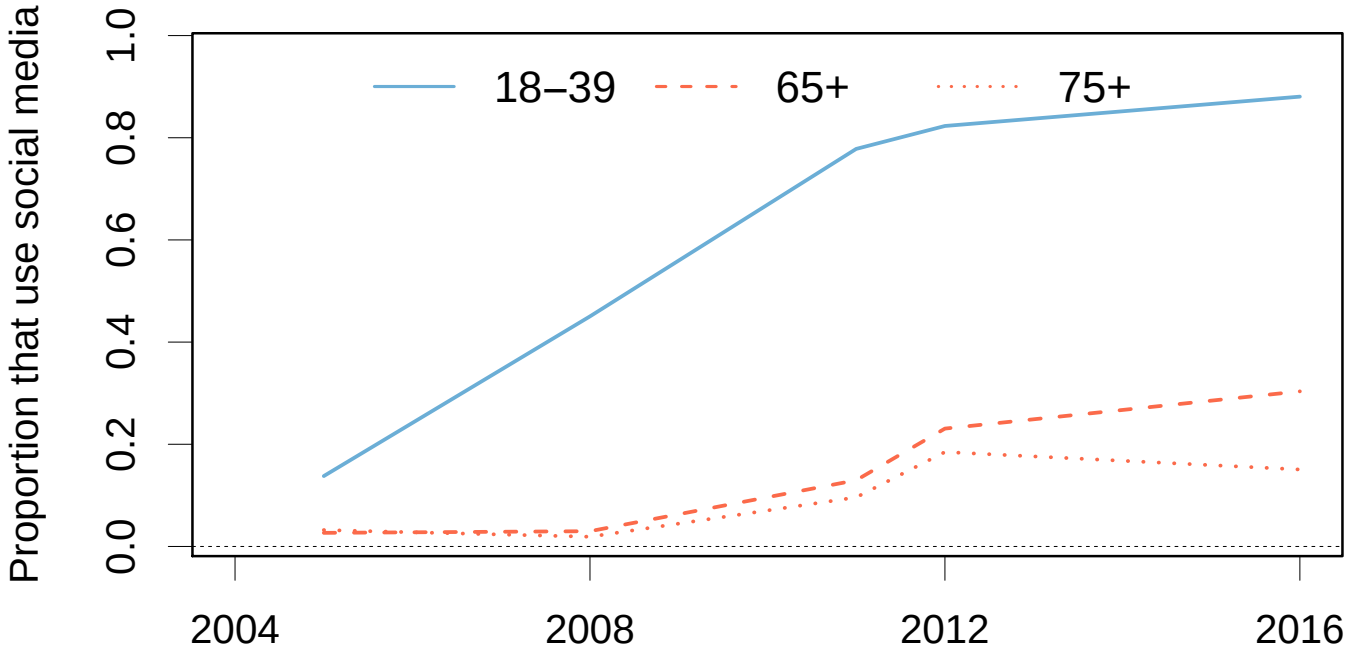
OFEIBEA QUIST-ARCTON

Kenya is reflecting on a month of violence following a disputed presidential election in December. One feature of the bloody crisis has especially shocked many ordinary Kenyans is how the cell phone became a deadly tool of violence.

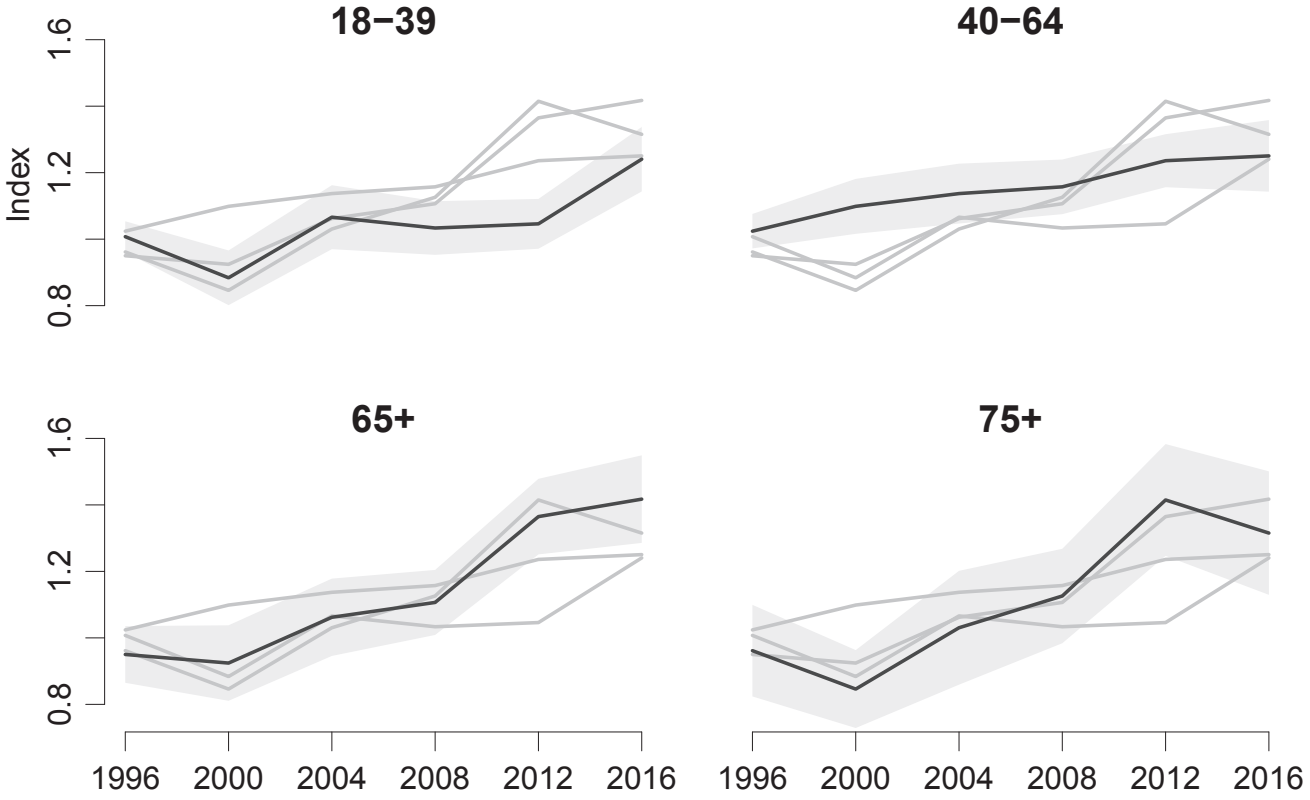
Most important election news source



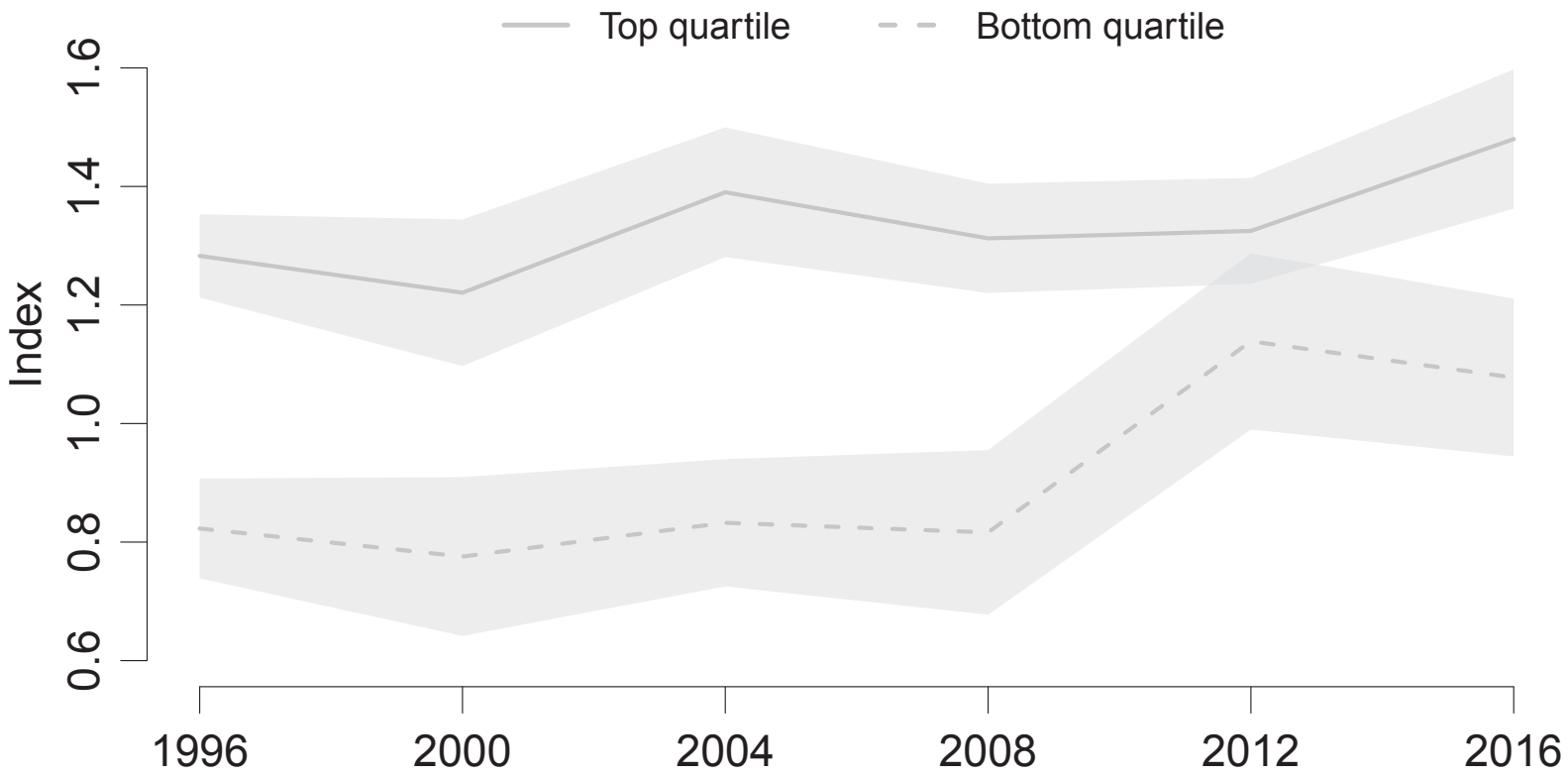
Social Media Use by Age



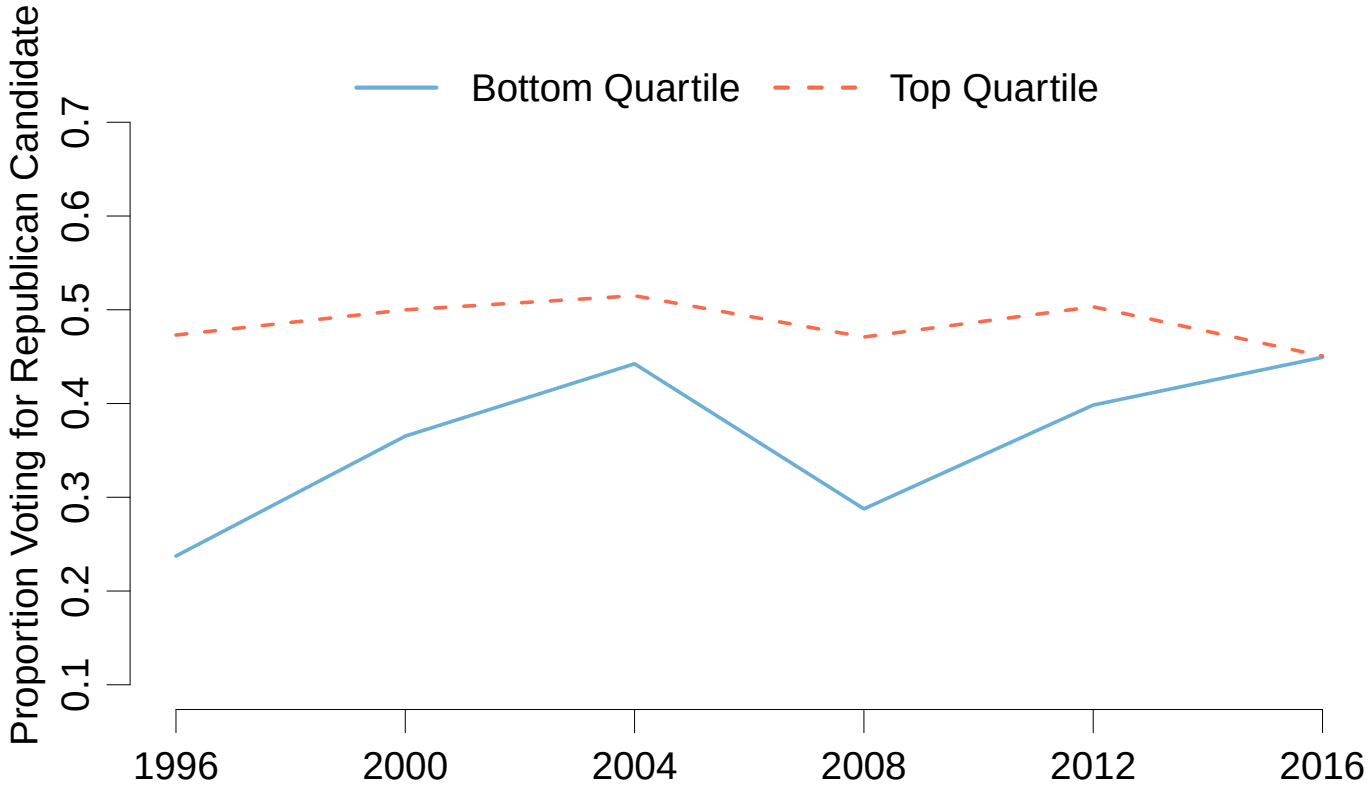
Polarization by Age



Polarization by Predicted Internet Use



Republican Voting by Predicted Internet Use



2

Fake News in 2016

Source: Allcott & Gentzkow 2017

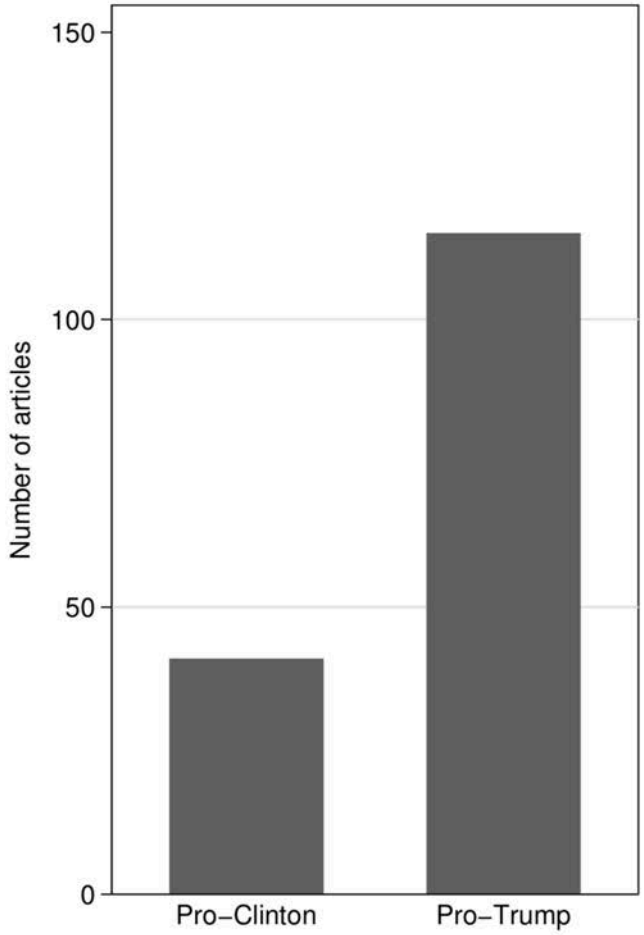
Supply of Misinformation

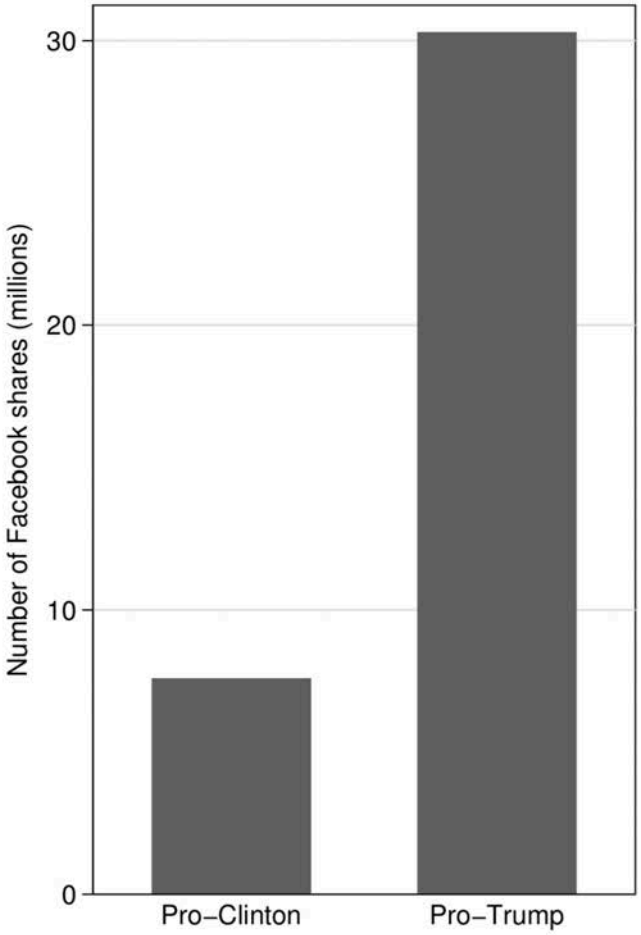
- Types of sites
  - Purely fake news sites, e.g. DenverGuardian.com
  - Non-obvious satire sites, e.g. WTOE5News.com
  - Mix of true and false articles, e.g. EndingTheFed.com
- Examples of producers
  - Teenagers in Veles, Macedonia: more than 100 sites
  - US companiy Disinfomedia: several sites, 20+ employees
  - Paul Horner: ran National Report for years before election
  - 24-year old Romanian: endingthefed.com
- Motivations
  - Advertising revenues
  - Ideology

Fake news database

- All false election-related stories from Snopes & Politifact
- 21 major fake news stories compiled by Buzzfeed

- Total: 156 stories


150
100
50
0
Number of articles
Pro−Clinton
Pro−Trump


30
20
10
0
Number of Facebook shares (millions)
Pro−Clinton
Pro−Trump

Post-election survey

- Week of Nov 28, 2016
- 1208 respondents
- Weight for national representativeness

- Demographics
- Political affiliation / ideology and 2016 vote
- Media consumption
- Recall of 15 election headlines
  - “Do you recall seeing this reported or discussed prior to the election?”
  - “At the time of the election, would your best guess have been that this statement was true?”

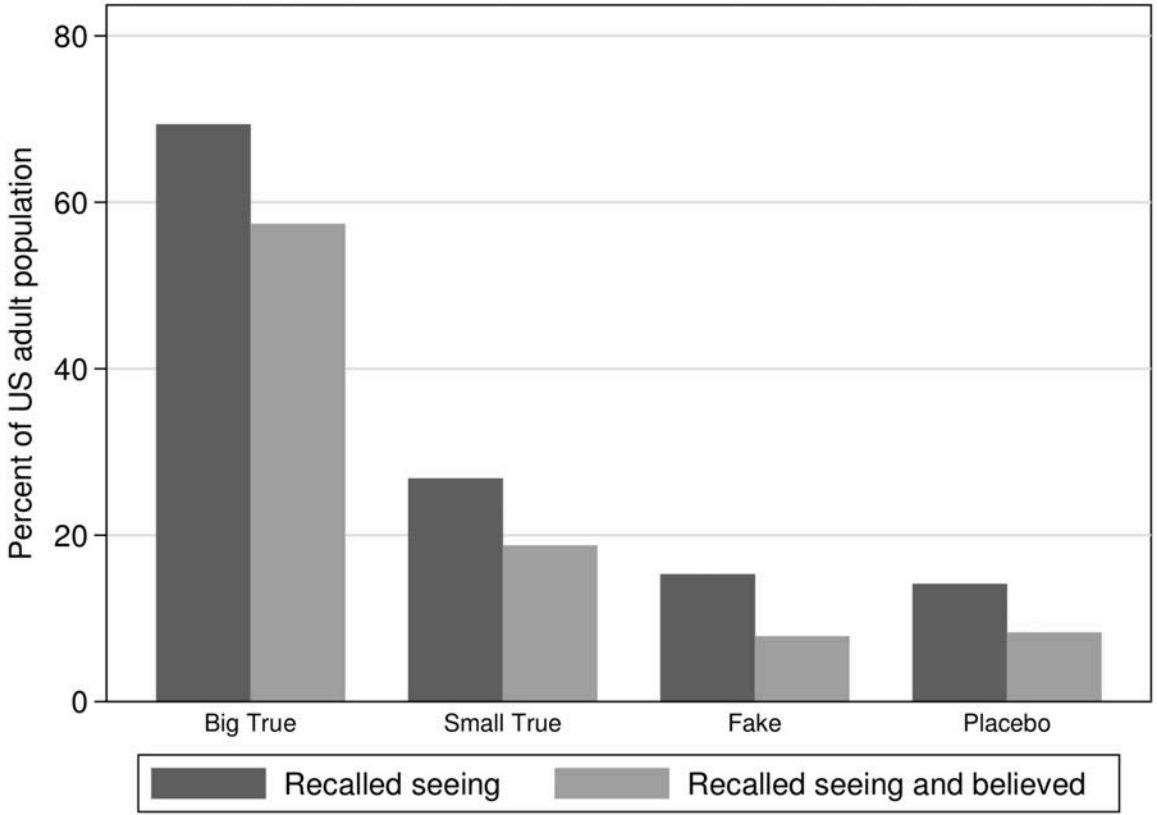
Headlines

- 3 randomly selected headlines from each of 5 categories
- **Big true**: Most recent major election stories listed by The Guardian
  - e.g., “At the 9/11 memorial ceremony, Hillary Clinton stumbled and had to be helped into a van.”
- **Small true**: Most recent stories on Snopes & Politifact judged unambiguously true
  - e.g., “Under Donald Trump’s tax plan, it is projected that 51% of single parents would see their taxes go up.”
- **Big fake**: Fake news stories frequently discussed in mainstream media
  - e.g., “Pope Francis endorsed Donald Trump.”

Headlines (Cont'd)

- **Small fake**: Most recent stories on Snopes & Politifact judged unambiguously false
  - e.g., "At a rally a few days before the election, President Obama screamed at a protester who supported Donald Trump."
- **Placebo**: Stories we invented (Pro-Trump & Pro-Clinton versions of each)
  - e.g., "Leaked documents reveal that the Clinton campaign planned a scheme to offer to drive Republican voters to the polls but then take them to the wrong place."
  - e.g., "Clinton Foundation staff were found guilty of diverting funds to buy alcohol for expensive parties in the Caribbean."

Recall and belief of fake news in our survey



Exposure

- 3 methods
  - Based on total count of shares
  - Based on Comscore traffic data
  - Based on our survey

$\Longrightarrow$ **~1-3 views per voter**

Could fake news have affected the election outcome?

Impact on vote share = Exposure rate × Persuasion rate

- Exposure rate: 1-3 fake articles per potential voter
- Persuasion rate: consider TV ads (Spenkuch & Toniatti 2016) as a benchmark
- Fake story would need to be on the order of 10 × more persuasive than TV ad to change outcome in pivotal states

SCIENCE ADVANCES | RESEARCH ARTICLE

SOCIAL SCIENCES

Less than you think: Prevalence and predictors of fake news dissemination on Facebook

Andrew Guess[1]*, Jonathan Nagler[2], Joshua Tucker[2]

So-called "fake news" has renewed concerns about the prevalence and effects of misinformation in political campaigns. Given the potential for widespread dissemination of this material, we examine the individual-level characteristics associated with sharing false articles during the 2016 U.S. presidential campaign. To do so, we uniquely link an original survey with respondents' sharing activity as recorded in Facebook profile data. First and foremost, we find that sharing this content was a relatively rare activity. Conservatives were more likely to share articles from fake news domains, which in 2016 were largely pro-Trump in orientation, than liberals or moderates. We also find a strong age effect, which persists after controlling for partisanship and ideology: On average, users over 65 shared nearly seven times as many articles from fake news domains as the youngest age group.

Selective Exposure to Misinformation: Evidence from the consumption of fake news during the 2016 U.S. presidential campaign

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Brendan Nyhan
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Dartmouth College

Jason Reifler
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University of Exeter

January 9, 2018

Abstract

Though some warnings about online "echo chambers" have been hyperbolic, tendencies toward selective exposure to politically congenial content are likely to extend to misinformation and to be exacerbated by social media platforms. We test this prediction using data on the factually dubious articles known as "fake news." Using unique data combining survey responses with individual-level web traffic histories, we estimate that approximately 1 in 4 Americans visited a fake news website from October 7-November 14, 2016. Trump supporters visited the most fake news websites, which were overwhelmingly pro-Trump. However, fake news consumption was heavily concentrated among a small group — almost 6 in 10 visits to fake news websites came from the 10% of people with the most conservative online information diets. We also find that Facebook was a key vector of exposure to fake news and that fact-checks of fake news almost never reached its consumers.

POLITICAL SCIENCE

Fake news on Twitter during the 2016 U.S. presidential election

Nir Grinberg[1,2]*, Kenneth Joseph[3]*, Lisa Friedland[1]*, Briony Swire-Thompson[1,2], David Lazer[1,2]†

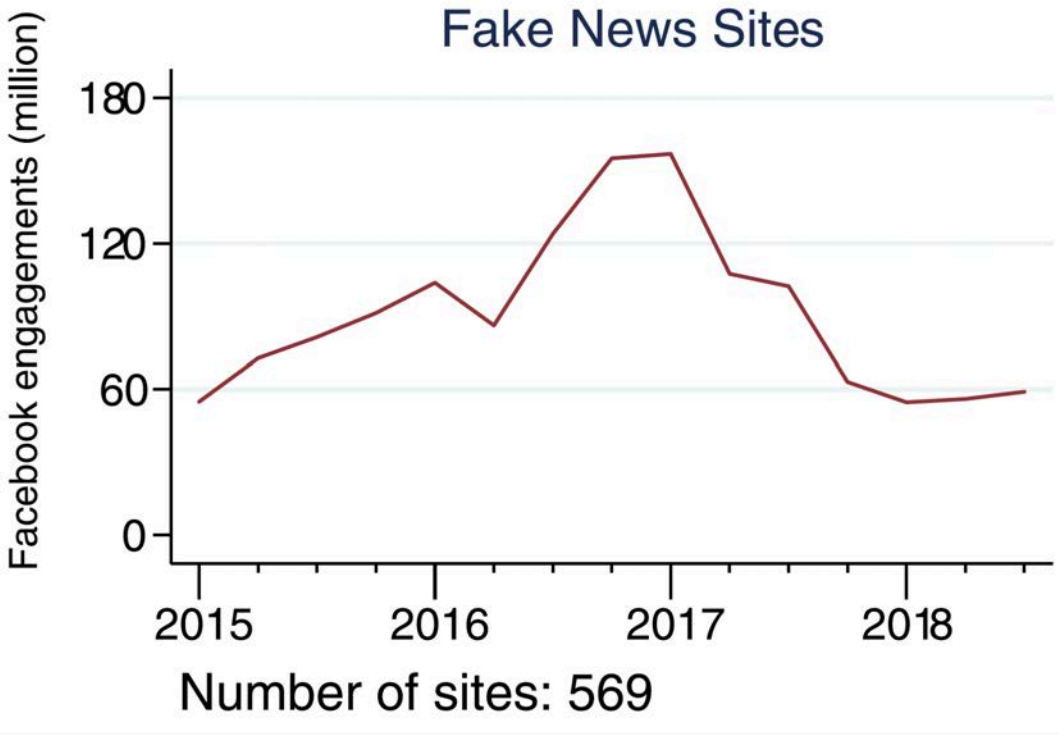
The spread of fake news on social media became a public concern in the United States after the 2016 presidential election. We examined exposure to and sharing of fake news by registered voters on Twitter and found that engagement with fake news sources was extremely concentrated. Only 1% of individuals accounted for 80% of fake news source exposures, and 0.1% accounted for nearly 80% of fake news sources shared. Individuals most likely to engage with fake news sources were conservative leaning, older, and highly engaged with political news. A cluster of fake news sources shared overlapping audiences on the extreme right, but for people across the political spectrum, most political news exposure still came from mainstream media outlets.

3

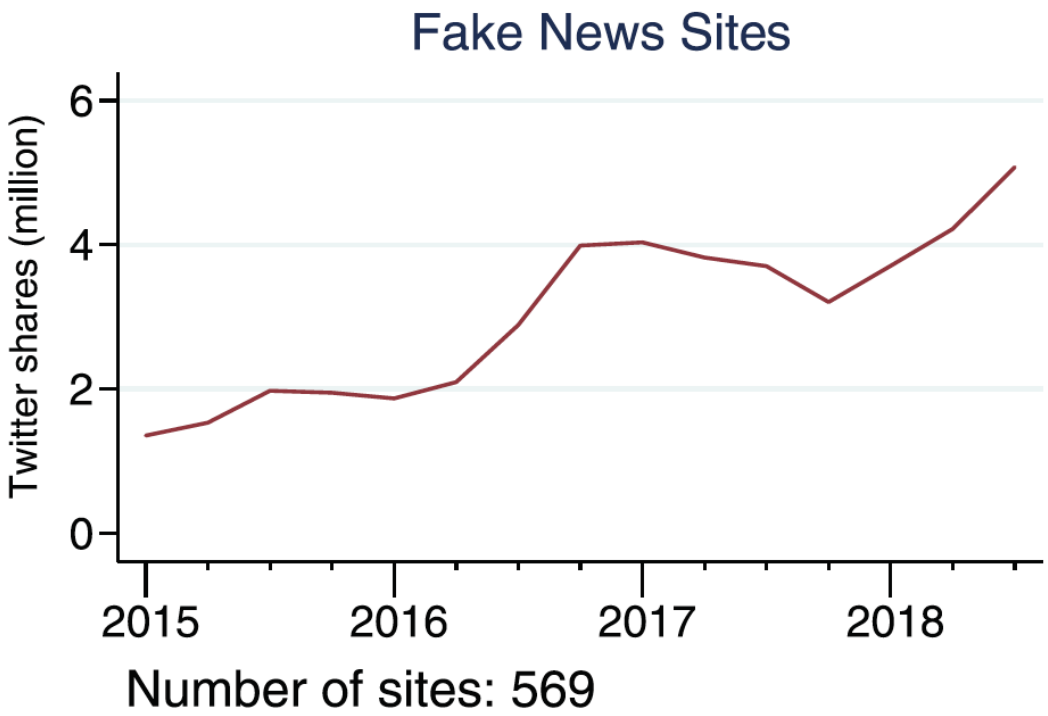
Post-2016

Sources: Allcott et al. 2019a, Allcott et al. 2019b

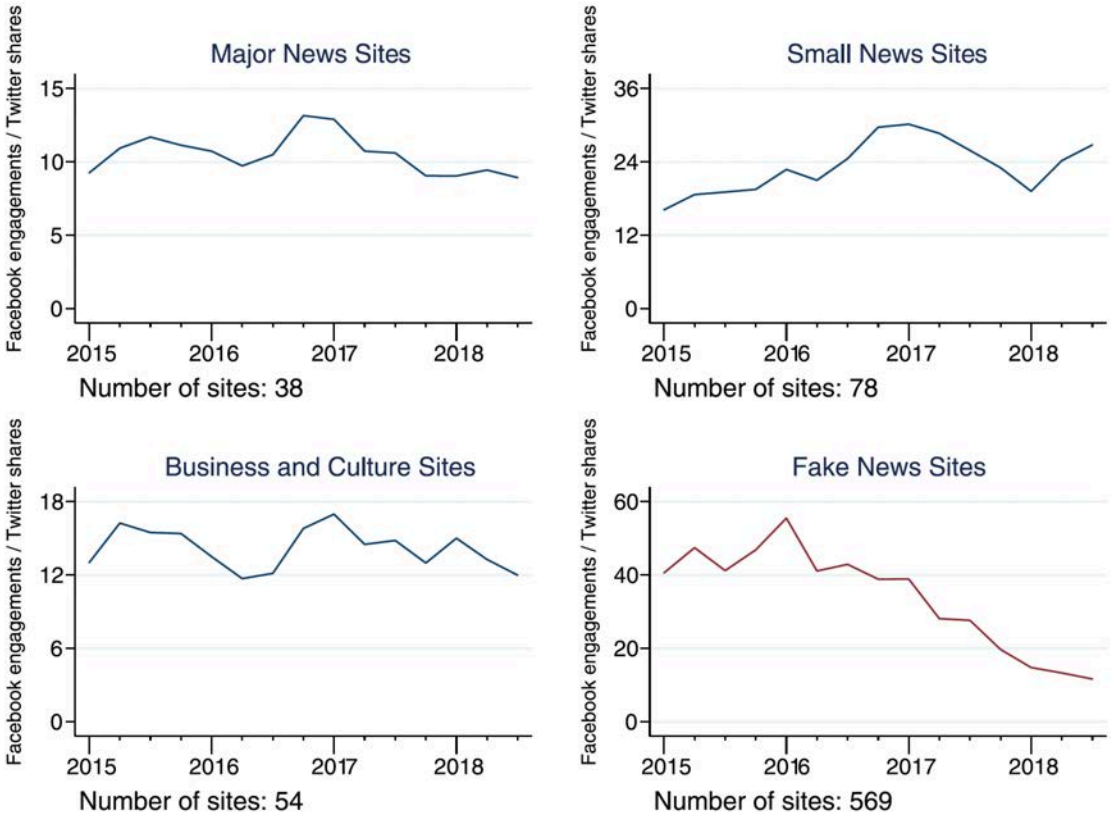
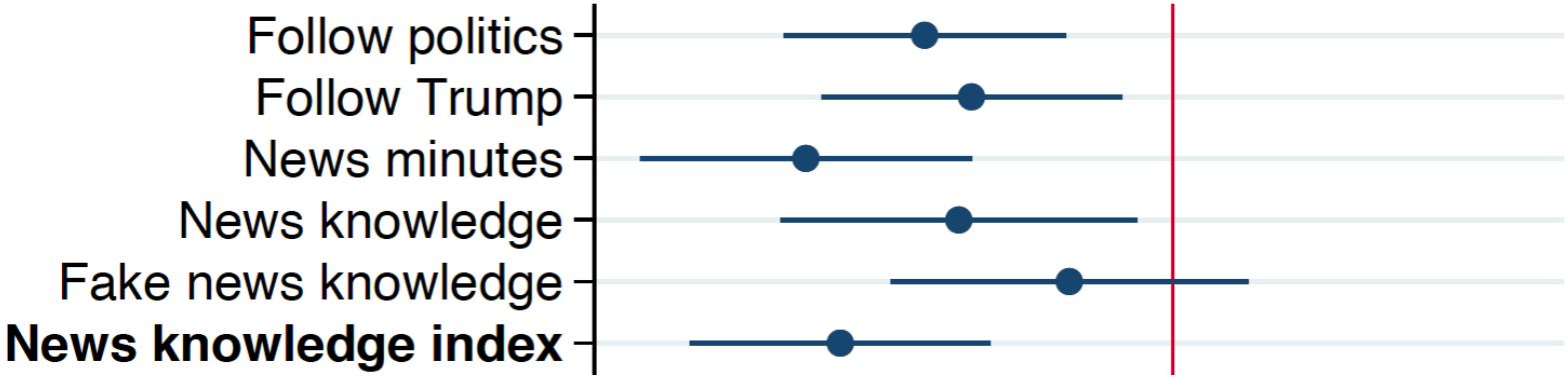
Facebook


Fake News Sites
Facebook engagements (million)
180
120
60
0
2015
2016
2017
2018
Number of sites: 569

Twitter


Fake News Sites
Twitter shares (million)
6
4
2
0
2015
2016
2017
2018
Number of sites: 569

Ratio


Major News Sites
Facebook engagements / Twitter shares
15
10
5
0
2015
2016
2017
2018
Number of sites: 38
Small News Sites
Facebook engagements / Twitter shares
36
24
12
0
2015
2016
2017
2018
Number of sites: 78
Business and Culture Sites
Facebook engagements / Twitter shares
18
12
6
0
2015
2016
2017
2018
Number of sites: 54
Fake News Sites
Facebook engagements / Twitter shares
60
40
20
0
2015
2016
2017
2018
Number of sites: 569

Random Experiment