Fake News and the 2018 US Midterm Elections

Case Study

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Abstract

According to a high-ranking official in the US State Department, "fake news," i.e., intentional information distortions, has become a threat to the "enlightened order" in Western society by undermining civil and reasoned discourse in the digital sphere (Nazaryan, 2018). Such a statement reflects the concerns from government planners and researchers about fake news becoming more virulent on social media platforms, especially when originating from foreign sources (Foreign influence, 2018). Therefore, its role as a digital and social phenomenon, this study will examine how fake news is perceived by voting-age participants, to see if they can identify it when compared to accurate media, and to determine if information distortion may have affected their vote in the 2018 mid-term elections.

Keywords: fake news, 2018 election, social media

Fake News and the 2018 US Midterm Elections

"Fake news" has become a hot political topic since the 2016 election, made more salient by President Trump's use of the term, the possibility of foreign election meddling, and the spread of inaccurate and divisive content via the Internet, partisan media, and social media. Trump often uses the term fake news to criticize media outlets (Trump, 2017) or as an agenda-setting tool (Woolley & Guilbeault, 2017), though fake news as a concept did not begin with his candidacy (Golbeck et al., 2018). Fake news in the form of rumors and false information has been around for a long time, dating back to the Roman Republic when Cleopatra and Mark Antony's political opponents spread rumors about them (MacDonald, n.d.). Researchers identified different forms of fake news several years before the 2016 election when the term was used to define websites that monetized news distortions (Alexander, 2016) or to describe satirical content (Bedard & Schoenthaler, 2018). But fake news is more than just an online phenomenon, which is why average people should care about this issue, because it can lead to Real World consequences. Case in point, the panic created around the Columbian Chemicals Plant in Centerville, LA, by a hoax spread via text messages and social media claiming that the plant had exploded (Smith, 2015). Or in the case of Edgar M. Welch, who went to a pizzeria armed with a rifle, believing he was rescuing children who were part of a child-sex ring due to the fake news "Pizzagate" story that had spread across the Internet, especially on Fake, Twitter, and other social media platforms (Kang & Goldman, 2016).

Furthermore, According to the US Intelligence Community (IC), fake news is sometimes a product of asymmetric tactics by foreign actors, such as the Russian FSB (formerly the KGB), who use fake news to influence the American public in the same way as Cold War-era propaganda, or what Philip Howard from Oxford University calls "computational propaganda"

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(Foreign influence, 2018). According to Baum, Lazer, and Mele (2018), "Misinformation amplified by new technological means poses a threat to open societies worldwide" and that Russia's goal via fake news is to "influence elections and destabilize liberal democracies, while those from the far right of the political spectrum are seeking greater control of ours" (p. 5).

What is most alarming about the IC's assertions is that these foreign actors are using American social media companies as part of their "meddling" efforts, particularly via Facebook, which sold millions in advertising to Russian investors during the 2016 election (Leonnig et al., 2017). Facebook CEOs admitted that its user base is now being used "in unforeseen ways with societal repercussions that were never anticipated," with the spread of fake news and the creation of partisan echo chambers being the side effect (Breland, 2018). These foreign influencers, according to the FBI and other IC agencies, have targeted US voters via their "race, religion and interests such as gun ownership, the Confederate flag" (Seetharaman, 2017) by using memes produced by so-called "troll farms" tied to Russian investments into Facebook (Fowler, 2017). As a result, Pentagon planners believe that fake news and other forms of disinformation and misinformation has become a national security concern, especially since 67% of Americans get their news via social media acting as a possible terrain for the growth of fake news (Gottfried & Shearer, 2017), particularly since 42% of journalists conduct their research via social media (Cison, 2017).

Furthermore, one in three adults will come across fake news and believe some aspect of it, meaning that real news gets crowded out, undermining the concept of "the truth" that defines the public's shared reality (Penny, Cannon & Rand (2017). The result is a viral-like infection of fake news into the digital body politick, leading to an ideologically polarized American public from information exposure via social media relationships (Bakshy, Messing, & Adamic, 2015).

With the goal of studying how fake news operates on voters as individuals and as identity groups, this study's purpose was to research the potential effect of fake news on the 2018 midterm election that was plagued by episodes of fake news, e.g., rumors regarding a caravan of Central American migrants during the election cycle (Knowles, 2018). As a result, the questions posed to the study's participants were designed to find any correlation between political views, political leanings and preferences, and their views on fake news and their ability to recognize it when they see it.

To make such a determination, this paper will also examine the following **Hs/RQs: Hypotheticals:**

H1: Fake news, like all advertising, propaganda, and other forms of opinion manufacturing, has a more profound effect on voting decisions than most voters realize.

H2: Fake news misinforms voters, detracting from their ability to make sound voting decisions.

H3: Fake news has "Balkanized" voters into echo chambers and ideological subgroups, making political compromise more difficult, undermining the US as a functioning democracy.

H4: The president, political parties, and ideologically driven news media have "weaponized" fake news, to the degree that Democrats, Republicans, and Independents cannot agree upon a common "reality," making problem solving and problem resolution more difficult.

Research questions:

RQ1: Can research participants tell the difference between "real news" (i.e., news based on research, and sound, ethical journalism) and fake news?

RQ2: How did fake news affect US voter opinions in the 2018 mid-term elections? RQ3: How can fake news be countered? What solutions are available?

Literature review

Fake news has become an academic focus of study since the 2016 elections due to the rise of digitally propagandized disinformation and misinformation, but what exactly is fake news and how does it relate to the voting public? In a study that examined the fake news consumption of liberals and conservatives, Allcott and Gentzkow (2017) described fake news as "news articles that are intentionally and verifiably false, and could mislead readers" (p. 213). Narayanan et al. (2018) called fake news "extremist, sensationalist, conspiratorial, masked commentary" that could be described as "polarizing political content and misinformation." The inability for media consumers to detect the difference between credible and satirical news stories demonstrates why audience members consume fake news (Bedard & Schoenthaler, 2018). Web search research, according to (Cunha et al., 2018), showed that the public perception of fake news changed before and after the 2016 election from The Daily Show and the Onion to Donald Trump and CNN, demonstrating how social media has blurred the line between satirical fake news and factual information (Flintham et al., 2018). Selective exposure theory offers one explanation for this cognitive shift, describing how consumers tend to choose media that appeals to their political views has increased the spread of fake news (Guess & Reifler, 2018).

In 2016, only 51% of Democrats and 14% of Republicans expressed trust in the media, demonstrating a historical low in public faith in traditionally trusted news outlets, partially due to geographic partisan polarization, and partially due to high volumes of fake news exposure that one in three adults received before the 2016 election (Baum, Menczer, Pennycook, & Sloman, 2018). The US public's easy acceptance of inaccurate information, according to Pennycook, Cannon, and Rand (2017), is possibly due to prior exposure of fake news increasing the perceived accuracy of it. This "illusory truth effects" makes fake news more believable, especially since it tends to be partisan, making it easier to reject ideas that clash with an individual's political views while accepting those that reinforce it, and the probable cause behind fake news outperforming real news in the months before the 2016 election (Silverman, 2016).

Method

Participants

A total of 141 unpaid volunteer participants took part in the study, which used a mixed method questionnaire for its data gathering via a SurveyMonkey survey that was disseminated via the Internet on reddit.com (/r/conservative, /r/thedonald, /r/Republicans, /r/Samplesize), Discord (a communication application) and seanhannity.com. Due to the online nature of the survey, the participants came from different parts of the US without preferences for one region over another. The questionnaire was designed to determine if a correlation existed between political views of individual participants and their opinions on fake news, media, and politics, and how Conservative, Liberal, and Independent groups would differ on these opinions and views.

Instrument Design

The survey was separated into several sections that were a combination of fifty qualitative and quantitative questions. The first sections asked questions on the participant's media consumption and social media usage. The second and third sections quizzed the participants on their ability to identify fake news by using both real and fake images and fake and real headlines sourced by fact-checking websites. The fourth and fifth sections asked indepth questions on the sources the participants view as fake news and real news and their attitudes on fake news and media providers. The fifth and six sections of the questionnaire

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gathered data on demographics: their gender, age, income, and political preferences, all possibly relevant to their fake news consumption (Guess & Reifler, 2018).

Limitations

Due to the nature of where the survey was posted, such as on reddit.com, the respondents heavily leaned toward the liberal side and toward a younger, male, college-aged and higher-thanaverage salaried audience, so all demographics or political persuasions did not have equal representation. Furthermore, the length of the questionnaire possibly affected the number of questions that the participants answered since the qualitative research questions required more in-depth responses. The study was also limited by time and scope since online surveys can only reach a limited audience size when seeking participants. Another issue is that some images and headlines that were marked as "fake news" or "real news" for the study were sometimes criticized by the participants as being misleading, e.g., one responded saying that the New York Times using dubious sources for a widely reported story. Therefore, deciding what was accurate or inaccurate for this study had the potential for creating an observer effect and forming biases to mislead the participants (who can respond with "trollish" behavior if they feel incentivized). Additionally creating trust between the researcher and the participants can me more difficult without face-to-face and regular contact compared to online surveys.

Findings

Demographics

The participants (n = 66) who responded to questions on their demographics were asked twenty-three questions, mostly multiple choice, on their gender, age, marital status, household income, education level, and racial or ethnic identity. When it came to their gender identification, 37.88% were female, 60.61% were male, and 1.52% were non-binary. The largest age group was the 18 to 25 group with 43.94%, the second largest was the 25-34 group with 36.36%, and the third largest was the 35-44 age group with 10.61%. Three-quarters of the participants were single (74.24%) and the largest reported household income group was the \$50,000 to \$74,999 group (30.30%). Most of the participants had college degrees, with 50% having a bachelor's degree, 10.61% with a master's, and 1.52% having a PhD degree. Whites (80.3%) were the largest represented racial/ethnic identity group among the participants.

Political Identity

This section's purpose was to identify the political leanings of the participants through multiple-choice or textual questions with the aim of drawing a possible correlation between these leanings and their perspectives on fake news. The majority of participants (95.38%) for this section (n = 65) were registered voters, with California (13.85%) and Texas (9.23%) having the largest US state representation. The overwhelming majority of these participants, (92.31%), also said that they voted in the 2018 midterm elections, with 84.62% saying that they typically vote for both presidential and midterm elections. Democrats were the largest party affiliated among participants (56.92%), with Independents (32.31%) and Republicans (10.72%), coming in second and third. Regarding political leanings, liberals were the largest self-identified group (60%), the second was Independents (24.62%), and the third were conservatives (15.38%). Three-quarters of the respondents (76.92%) said that they voted in the 2016 election. Of those participants, 13.85% voted for Donald Trump for president, and 86.15% stated that they voted for someone else.

Media Consumption

The next questions sought to determine the frequency that the participants used social media. Of the 131 participants who answered questions from this section, the majority of them

(72.52%) indicated that they use some form of social media on a daily basis with websites (71.76%), social media (58.78%), and online newspapers (56.49%) having the highest usage. For social media, Facebook (48.85%) and Twitter (41.98%) were the most frequently used social media platforms, but Instagram (33.59%) and Reddit (32.82%) were also reported with high usage. Three-quarters of participants (75.57%) check social media more than once a day, indicating the potential for high exposure to fake news, an observation that the participants themselves may have suspected since more than half (52.67%) responded affirmatively that their media sources have influenced their voting on issues or their preferences for a political party.

Identifying fake news content

The following sections focus on the participants' ability to identify fake news images, with responses to why they made their decisions, as well as having to decide between two headlines, one of which were fake news and one of which was from sourced media outlets.

Identifying fake news images. A series of images, some of them fake, some real, were presented to the participants (n = 73) to determine their ability to recognize misleading content. As seen in Table 1, there were varying degrees of success identifying fake news and real news images when the participants were included within ideological groups with Conservatives scoring a 74.98% success rate, Independents with an 85.24% success rate, and Liberals scoring with a 90.51% success rate. As a whole, regardless of party or ideological identification, the participants were able to detect fake images 83.57% of the time by using a variety of methods as their comments on the images indicated. For example, the participants used terms or words such

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as "sensationalized," "biased source," or "no citations" when evaluating one fake news image. (See Figure 1.) Another participant noticed that the fake news image lacked an inappropriate Twitter handle, such as Peter Griffin, a cartoon character, meaning that the names of sources were means of identifying content of a dubious accuracy. The images that caused the greatest challenge when trying to identify as being fake or real where the ones that seemed like legitimate news due to the way that the image was presented, such as the format, the name of the presenter, etc.

Identifying fake news headlines. A series of headlines, 50% real, 50% fake, were used to determine



Make America Great Again

Figure 1. Described as "sensationalized" by a participant. From https://www.snopes.com/factcheck/mexican-police-caravanphotos/

how accurately the participants could identify a real or fake headline when given a choice of each. As a whole, the participants were able to spot the fake news over three-quarters (78.71%) of the time, but, as shown in Table 2, as self-identified groups, Conservatives (66%), Independents (85%), and Liberals (85.13%) had differing identification success rates (though the difference between the Independents and Liberals was negligible) when parsing fake news and real news headlines.

Opinion on News Sources

This section gathered opinions from the participants on the validity or invalidity of different news sources. When asked, "Which of these news sources would you consider to be fake news sources?" the majority of participants as a group (n = 65) said that media outlets such as Infowars (89.23%), Breitbart (78.46%), the Drudge Report (67.69%) would qualify as such. In contrast, in response to "Which of these news sources would you consider to be real news sources?" the participants responded with BBC News (84.61%), Reuters (73.85%), and CNN (66.15%) as their first choices.

Fake news sources. When studied as separate ideological groups, answers regarding fake news media changed based on their self-identified political views. Conservatives, for example, indicated that CNN (80%), Infowars (80%), and the Drudge Report (70%) were fake news (see Table 3) while Liberal participants said that Breitbart (92.31%), Infowars (89.74%), and the Drudge Report were fake news (see Table 4), and Independents indicated that Infowars (87.5%), Breitbart (75%), and Fox News (50%) were fake news (see Table 5).

Real news sources. Conservatives said that Fox News (40%), Breitbart (40%), the BBC (30%) and Reuters (30%) were real news. (See Table 6) whole Liberals choose the BBC (97.43%), CNN (79.49%) and Reuters (79.49%) as being real news (see Table 7). Similarly, Independents viewed the BBC (87.5%), Reuters (81.25%), and CNN (62.5%) as real news. (See Table 8.)

Fake News and the 2018 Election

The goal of this section was to elicit qualitative responses via in-depth questions that would be difficult to measure via quantitative measurements, so longer form, open-ended questions were used. After each question, a word map will show the most common responses, first as a combined group, and then in political identification groups. For Q54: "In relation to the 2018 midterm elections, what issues do you believe were

worthy of real news?"



Figure 2. Q54: Conservatives, independents, and liberals combined, immigration seemed to have been the primary issue according to the participants.



Figure 3. The conservative word cloud for response to Q54.



Figure 4. The independent participant's word cloud for Q54.



Figure 5. The Liberal word cloud for Q54.

When asked Q55: "In your own words, what does 'fake news' mean to you?" some similar, some different responses were given by the group.



Figure 6. Q55: *Figure 8*. Combined, participants associated fake news with false information.



Figure 7. The conservative word cloud for response to Q55.



Figure 8. The independent word cloud for Q55.



Figure 9. The Liberal word cloud for Q55.

Q56: "What phrases or words would you use to describe fake or inaccurate news?"



Figure 10. "Misleading," "propaganda," "lies," are some words that the participants used to describe fake news for Q56.



Figure 11. The conservative word cloud for response to Q56.



Figure 12. The independent word cloud for Q56.



Figure 13. The Liberal word cloud for Q56.



Q57: "What phrases or words would you use to describe real or accurate news?"

Figure 14. For Q57, the participants used words such as factual, sourced, reliable, and unbiased to describe real news.



Figure 16. The independent word cloud for Q57.



Figure 15. The conservative word cloud for response to Q57.

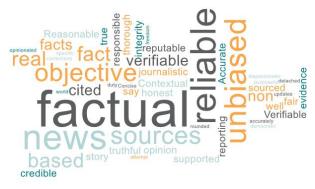


Figure 17. The Liberal word cloud for Q57.



Q58: "Who do you think are the largest creators or spreaders of fake news?"

Figure 18. For Q58, various words composed from different political views comprise the participant's response to who spreads fake news.



Figure 19. The conservative word cloud for response to Q58.



Figure 20. The independent word cloud for Q58.



Figure 21. The Liberal word cloud for Q58.



Q59: "Why do you think individuals or organizations create and spread fake news?"



Figure 23. The conservative word cloud for

response to Q59.

Figure 22. For Q59, *v*arious words comprise the participant's response to why fake news is spread.



properties provide the second second

Figure 24. The independent word cloud for Q59.

Figure 25. The Liberal word cloud for Q59.

Q60: "In your view, what effect has fake news-information distortions, phony stories,

intentional efforts to mislead people-have had on American politics?"





Figure 26. For Q60, various words comprise the participant's response explaining the effect fake news has had in their view.



Figure 28. The independent word cloud for Q60.

Figure 27. The conservative word cloud for response to Q60.



Figure 29. The Liberal word cloud for Q60.

The following sections will use quotes placed into bullet points to demonstrate some of the responses that the participants provided from all three political identification groups.

Q61: "Do you have specific memories of stories, memes, news reports, etc., that you believe were fake news?"

Conservatives:

- Participant 1: "Hands up, don't shoot."
- Participant 3: "Children in cages."
- Participant 9: "One of the first ones on Facebook was the Kony 2012 thing." Independents:
 - Participant 12: "The Turkish kid who drowned that was claimed by media to be refugee."
 - Participant 17: "President Trump exaggerating the size of the crowd at his inauguration, the White House spreading a doctored video."
 - Participant 22: "The biggest one that sticks out in my mind is the 'PizzaGate' controversy and the conspiracy that the Clintons were assassinating political enemies."

Liberals:

- Participant 30: "Glenn Beck's 'administration changing' story he heavily promoted in the wake of the Boston Marathon bombing."
- Participant 54: "Vaccinations causing autism."
- Participant 64: "The caravan is full of dangerous people."

Q62: "Have you ever came across a story that you believed was fake, but turned out to be real? Or vice versa? A real story turning out to be fake?"

Conservatives:

- Participant 2: "I initially disbelieved the Amadou Dialou story."
- Participant 9: "All the time. Icelands president tried to ban pineapple on pizza."
- Participant 10: "Never. fake news is blatant and reality cannot be faked."

Independents:

- Participant 20: "At first I believe all the 'Trump is separating families at the border' stuff. Then I found out they've been doing it for ages."
- Participant 21: "Oh sure. I make mistakes."
- Participant 24: "The giant alligators in Florida caught on video looked like movie special effects to me at first."

Liberals:

- Participant 28: "Yes, the dead pimp that was elected as well as the man who published bigfoot erotica."
- Participant 53: "Yes, it was due to a bad title and phrasing."
- Participant 65: "Yes, factual errors come out frequently as more information comes to light."

Q63: "What do you believe can be done to combat fake news?"

Conservatives:

- Participant 3: "Laws forcing companies to pay a fee and tell their viewers live that xxx was fake."
- Participant 4: "Harsher punishment for libel and slander."
- Participant 10: "Shut down all mainstream media and arrest all people behind the fake stories, for treason and possibly libel."

Independents:

- Participant 12: "Tougher libel laws."
- Participant 13: "Suspended or shadow ban people's account who spread it."
- Participant 24: "Have every story cite the source or provide a means for further research. Also publicly out news organizations when they knowingly present inaccurate information."

Liberals:

- Participants 49: "Better education, require transparency, restore the FAIR act."
- Participants 55: "Teach critical thinking skills to kids in school, more responsibility for social media sites to not allow some of these things."
- Participants 62: "I think if you make fact checking easily accomplished using keyword fact checkers."

Interpretation of Findings

Many of the factors that this paper studied were found across all users despite their political views, from their media consumption, with most of them showing technological fluency and indicating that they use the Internet in some way to procure information on current events and the world. Social media plays a strong role in this digital-consumer relationship, meaning that many of the study's participants were probably exposed to many of the same fake news with each user reacting differently to such media. The uncertainty behind how each user reacts to this dubiously accurate content provided the motivation for RQ1: Can research participants tell the difference between "real news" (i.e., news based on research, and sound, ethical journalism) and fake news?

According to this study's research, the response to this question would be an affirmative. Most respondents scored fairly well (higher than 70%) during the identification section of the study when asked to determine which images were fake news or real news, with participants using logical deduction to do so, from studying the fake news's source to examining its presentation, to tell the difference between accurate, valid media and inaccurate fake media. That being said, a fair number of participants failed in their attempts to do so, with Conservatives scoring the lowest score and Liberals scoring the highest, though members from all groups failed at identifying fake news images at point or another. For example, even though Liberals had a higher success rate with fake image identification, the vast majority of them, 64% of them, believed that image #20 (See Figure 30) was a real news image even though its content is based on information distortion (Sherman, 2018).

A similar story was told when it came to the participants identifying fake news headlines, with most of the participants successfully determining their veracity. Still, a sizable minority

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failed in this task, 22% of the participants as a whole, even when the title of the headline, such as "Deep-Sea Godiva Rig Taps World's Largest Offshore Ganache Deposit," should have been a clue to the headline's veracity (The Onion, 2017). Consequently, every failure to identify fake news content can lead to the furtherance of its ideas, diffusing it via user engagement and leading to a cascading effect and furthering the fake news as an even faster rate than real news (Vosoughi, Roy, & Aral, 2018).

RQ2: What role did social media have with propagating fake news during the 2018 midterm elections? One image from this study, Figure 30, showed how this election cycle could have been affected by fake news, particularly when it comes to the issue of immigration, perhaps the most important issue of this election according to the participants (See Figures 18 to 21). Forty percent of the Conservative respondents believed it to be true even though it is fake news (Evon, n.d.), with one even said that the image was "provable and expected from the caravan



Figure 30. This is not an accurate representation of the picture. From https://www.politifact.com/truth-o-meter/statements/2018/may/29/donald -trump/trump-correctly-tweets-democrats-mistakenly-tweete/

members," showing how the fake news image reinforced his views. In the same way, Liberal participants believed that Jon Favreau's image (See Figure 30) purportedly showing young detainees in a holding cell due to Trump was actually taken several years earlier when Obama was president, with Liberal participants saying the tweet that Favreau "provides source" and that it has a "link to an actual news source." In both cases, in their failure to recognize the fake image, the Conservative and Liberal participants leaned upon their political views when information was incomplete, demonstrating how even careful media users, relying upon sources or trusted individuals, can fail in their attempt to determine what is or is not real, leading to the "peer trap" for validating relayed, second-hand information (Sundar, 2018).

The section on media opinion showed a degree polarized media opinions as well, with Conservatives opinion that CNN is indeed fake news (See Figure 19) while the Independents and Liberals having a fake news opinion on media sources (e.g., Fox News and Breitbart) that Conservatives felt were real news. Generally, though, Conservatives seemed to have the most skepticism when it came to media sources, scoring none of presented media sources very highly (including Fox News, which was real news scored at 40% by conservatives) corresponding to studies that showed Republicans having little trust in media (Dupuy, 2018).

As seen from Figures 14 to 17 and 22 to 25, all participants, no matter their political views, had concerns about fake news: in the way that it distorts information, the money and power that seem to motivate those people who create and spread it, and the need for some means to address the problem. Some participants suggested government action, whether it involves the reinstatement of the FAIR act, or making libel a meaningful consequence behind fake news, while others believed that increasing awareness about and education on fake news would be possible solutions.

This leads to RQ3: How can fake news be countered? This question will be answered in the following section.

Solutions

Solution #1: Baum, Lazer, and Mele (2018) suggest that, to combat fake news, some means of warning media consumers which media content is fake news should be developed by

the private or public sectors. They also suggest that an anti-fake news system should also have the ability to detection of questionable accuracy, especially when promoted by bots, in addition to identifying sources that are known for promoting fake news should play a part of an anti-fake news system. Additionally, they suggest a three-pronged approach to battling fake news: (1) maintaining an ideologically diverse debate by keeping conservatives involved in discussions on fake news; (2) working with journalists to elevate more accurate and diverse media content; and (3) "Developing multidisciplinary community-wide shared resources for conducting academic research on the presence and dissemination of misinformation on social media platforms" (p. 3).

Solution #2: Nossel (2017) argues that the free market and private entities such as Facebook and Google should self-regulate fake news, though she further says that too many restrictions would hinder free speech. Evidence of this taking place was evident during the 2018 midterm elections when Facebook and other social media platforms were much more prepared and were proactive in shutting down fake news accounts and user groups, though this does not indicate that the issue has been completely resolved (Read, 2018).

Solution #3: The use of fact-checking sites such as Hoaxy (cnets.indiana.edu/blog/2016/12/21/hoaxy/), Politifact (www.politifact.com), and Snopes (www.snopes.com) for combating fake news, especially regarding the solutions offered by Baum, Lazer, and Mele and Nossel. These sites also put responsibility onto average citizens, providing them with access to accurate information sources so they can make their own due diligence via diverse information and platforms (Mathekga, 2017).

Solution #4: According to West (2017), five different approaches could be used to fight fake news: (1) the US government promoting news literacy and professional journalism; (2) the encouragement of quality journalism as a means to rebuild the public's trust in the media; and (3)

private investment by technology companies to identify fake news creators and to hold them accountable, partially by disinvesting fake news creator's financial incentives.

Solution #5: Developing anti-fake news systems is not an adequate enough approach. Baron and Crootof (2017) suggests that fake news is a loaded political term, so producing more media content is inadequate to combat disinformation and misinformation since quality is more important than quantity to rebuild the public trust that has been compromised by "psychological realities of tribalism, the power of confirmation bias, and the dopamine surges associated with outrage" requiring the establishment of new and respected gatekeepers (p. 4).

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APPENDIX A

Table 1

Ability of Participants to Identify Fake News Images

Self-identified ideological leaning	Success rate	Failure rate
Conservatives	74.98%	25.02%
Independents	85.24%	14.76%
Liberals	90.51%	9.49%

Differing Fake Headline Identification Rates

Conservatives66%Independents85%Liberals85%

Fake News According to Conservatives

BBC	Reuters	Fox News	CNN	Infowars	The Guardian	Drudge Report	t None above
50%	40%	40%	70%	70%	50%	70%	50%

Fake News According to Liberals

Reuters	Fox News	Breitbart	CNN	Infowars	The Guardian	Drudge Report
2.56%	38.46%	92.31%	5.13%	92.31%	7.69%	76.92%

Fake News According to Independents

BBC	Fox News	Breitbart	CNN	Infowars	The Guardian	Drudge Report	None above
6.25%	50%	75%	6.25%	87.5%	31.25%	76.92%	6.25%

Real News According to Conservatives

BBC	Reuters	Fox News	Breitbart	CNN	Infowars	Drudge Report	None above
30%	30%	40%	40%	10%	10%	10%	50%

Real News According to Independents

BBC	Reuters	Fox News	Breitbart	CNN	Infowars	The Guardian	Drudge Report
87.5%	81.25%	25%	12.5%	62.5%	12.5%	43.75%	12.5%

Real news According to Liberals

BBC	Reuters	Fox News	CNN	The Guardian	Drudge Report	None above
97.44%	82.05%	28.21%	82.05%	79.49%	7.69%	2.56%

APPENDIX B

Sources for fake news and real news images:

- Image 1: https://www.snopes.com/fact-check/mexican-police-caravan-photos/
- Image 2: https://www.snopes.com/fact-check/borderline-bar-shooter-middle-east/
- Image 3: https://www.usnews.com/news/healthiest-communities/articles/2018-11-09/heroism-

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Image 4: https://abcnews.go.com/US/survivor-mass-shootings-year-thing-attribute-

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Image 5: https://www.mediamatters.org/blog/2018/07/31/Conservatives-on-social-media-are-

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Image 7: https://www.snopes.com/fact-check/tom-hanks-t-shirt/

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Image 17: https://www.latimes.com/politics/la-me-pol-california-house-vote-20181108-

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Image 18: https://www.bloomberg.com/news/articles/2018-11-09/bmw-says-it-s-committed-tou-s-plant-sees-trade-wars-temporary

Image 19: https://www.snopes.com/fact-check/north-dakota-voting-hunting-licenses/

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Sources for fake news and real news headlines:

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1b. https://www.theonion.com/deep-sea-godiva-rig-taps-world-s-largest-offshore-ganac-

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2a. https://abcnews.go.com/Politics/kellyanne-conways-husband-argues-trumps-acting-attorney-general/story?id=59066631

2b. http://realnewsrightnow.com/2016/11/new-study-shows-illegal-immigrants-outnumberamericans-2-1-2025/

3a. https://pacificdailytimes.com/tag/castro/

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APPENDIX C

SurveyMonkey Survey