

Chapter 11

Fake News and Information Warfare: An Examination of the Political and Psychological Processes From the Digital Sphere to the Real World

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ABSTRACT

Fake news—false information passed off as factual—is an effective weapon in the information age. For instance, the Russian government perfected techniques used in its 2007 Estonian and 2008 Georgian cyber campaigns to support Donald Trump’s successful candidacy in the 2016 United States presidential election. In this chapter, the authors examine fake news and Russia’s cyberwarfare efforts across time as case studies of information warfare. The chapter identifies key terms and reviews extant political science and psychological research related to obtaining an understanding of psychological cyber warfare (“psywar”) through the proliferation of fake news. Specifically, the authors suggest that there are social, contextual, and individual factors that contribute to the spread and influence of fake news and review these factors in this chapter.

INTRODUCTION

The proliferation and viral spread of fake news - false information passed off as factual – is a global problem, accelerated by information and communications technology that enables near-instant and easily disguised messaging. In the United States, fake news is best known as one of myriad controversies surrounding the 2016 Presidential Election. Candidate Donald J. Trump accused the professional or

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“mainstream” news media of perpetrating a false picture of reality. Using the label “fake news,” he effectively argued that Americans ought not to trust such information sources as The New York Times or CNN. Meanwhile, Trump profited from the proliferation of false reports from less reputable but friendly sources, for example, National Enquirer headlines such as “Hillary: Six Months to Live!” (Graham, 2018) And not least, there is online deception perpetrated by Russia intended to influence the American electorate in favor of Trump (ODNI, 2017).

Fake news is not a new phenomenon. In 1896 William Jennings Bryan began his own newspaper to express his views because “There seems to be an epidemic of fake news.” (in LaFrance, 2017). Historian Eric Burns observes, “The golden age of America’s founding was also the gutter age of American reporting.” (Dickerson, 2016) What is new is the diffusion of fake news, fueled by the ease with which information broadly and accurately spreads across new media. The information age has opened the gates for more participants and more intense forms of manipulation than ever. Fake news spreads rapidly through social media (Allcott & Gentzkow, 2017) by individuals who created it solely to make money from advertising revenue (e.g., Sydell, 2016, November 23) or to harm the credibility of high-profile individuals such as former US Democratic Presidential Candidate, Hillary Clinton (e.g., Silverman, 2016, November). Pope Francis has compared fake news to the snake in the Garden of Eden (Horowitz, 2018). There are real-world consequences. Democracy itself is undermined. Individuals take action, including violent action, in response to the stimulus of the media sphere.

The objective of this chapter is to illuminate socio-psychological dynamics in fake news. What makes fake news effective? Does labeling a news story as “fake” reduce its effectiveness? This chapter reviews constructs that are key to mapping the problem domain and studies providing foundational insights into factors affecting susceptibility to real or fraudulent influence. This chapter investigates two cases of psywar from the same source: Russian Government interference in Western Democracies (Estonia and the United States). There are both contextual factors and individual differences that contribute to the spread and influence of black propaganda online. This includes how information is received and shared, involving elements that are social –such as people’s online interactions and context; technological - the affordances of technology that affect social interaction; and individual – such as the attributes one brings to the engagement. This chapter considers factors in the media sphere other than fake news that may shape and reinforce its effects. It concludes with recommendations for future research on this topic.

BACKGROUND: KEY TERMS IN THE POST-TRUTH ERA

What is going on? One might argue that Americans in 2016 were ready to believe just about anything. Comedian Stephen Colbert had over a decade before coined the word “truthiness” to refer to “the quality of seeming or being felt to be true, even if not necessarily true” (Oxford Living Dictionaries, 2018). After the 2016 election, the late Senator John McCain expressed alarm at “the growing inability, and even unwillingness, to separate truth from lies.” (John McCain, 2017). In a post-truth world, objective truth does not matter, and what is truthful or factual is opinion-based and therefore purely in the eye of the beholder. America had become “untethered from reality,” a “fatasyland,” Kurt Andersen wrote in *The Atlantic* (2017, December 28). Now more than ever, Americans are confused about even “basic facts” and 64% of Americans say that fake news has caused confusion (Mitchell et al. 2016).

Indeed, Kurt Andersen (2017, December 28) blames the social context that let this evil enter. Andersen argues that American academics and counterculture from the 1960s onward promoted relativism that

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Table 1. Key terminology

	What it Is	Example	Motivation	Interest	Consequential
fake news	misinformation or disinformation disguised as news	“NPR: 25 Million Votes For Clinton ‘Completely Fake’ – She Lost Popular Vote https://archive.fo/earRt ”	Deception sow uncertainty persuade	broad	yes
rumor	unsubstantiated information circulating widely	Melania Trump body double	gain status interpret ambiguous situation	broad	yes
gossip	private information shared	those two are dating	emotional connection	personal	no
urban legend	folklore handed down, sensational, scary	alligators living in sewers	moral lesson and/or cautionary tale	broad	no
delusion	belief despite evidence to the contrary	Messiah complex	motivated bias need for closure intolerance of ambiguity	personal	yes

eroded consensus on the idea of “truth” and “facts,” or the relevance of “expertise.” Although Andersen depicts the phenomenon of fake news and conspiracy theories as a uniquely American phenomenon that, like so many American products and services, spread elsewhere across the globe, it has been a current in many societies particularly in times of uncertainty or war.

So, what, exactly, is spreading? What are the appropriate labels for “untruths” in the information space? The discourse on fake news in fact references related but distinct constructs: rumor, conspiracy theory, and delusion. Rumor and conspiracy theories play outsized roles in the current phenomena. Examining their socio-psychological properties may provide some clues as to how fake news works and how to counter it. Delusion, although less widely shared than rumor or conspiracy, is common among the population and highlights individual-level reactions to information. See Table 1 for key terms and examples.

Fake News

Contemporary definitions of fake news vary widely. Some researchers classify political satire (e.g., Balmas, 2014) as fake news, while other scholars define fake news as information that appears to be news yet varies in degree of veracity in reporting (e.g., Conroy, Rubin, & Chen, 2015). We follow Conroy et al.’s (2015) definition of fake news as information that appears to be news but lacks a factual foundation for its claims. In some instances, fake news may spread “honest mistakes” or misinformation. More frequently and perniciously, it is disinformation.

Rumor

Rumor, simply defined, is unsubstantiated information in wide circulation. (Allport & Postman, 1947; Guttieri & Caglayan) Although difficult to verify, an effective rumor is also hard to dismiss immediately. Rumors are especially prevalent in times of societal uncertainty, operating as a sort of “improvised news.” (Shibutani, 1966) to help a society make sense of an ambiguous situation. Rumor is typically more sensational than, but lacking the evidence of, actual news (DiFonzo & Bordia, 2006). Gossip and

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urban legends are conversational forms with many common elements. (Guerin, 2006). These all involve a story that affect listeners, such as novel information that grabs the attention of the listener. However, gossip is more personal and less consequential than rumor; urban legends are of broad but not personally consequential interest. Studies have shown that rumors are an effective means to gain status among one's peers. (Juvonen, Wang, & Espinoza, 2013). Rumors often speak to a listener's bias, for example, Donald Trump promoted a rumor that President Barack Obama was born outside the United States. "The Birther Movement" of Americans who disliked Obama, or the idea of a black president welcomed the idea that he might be disqualified.

Rumors are more easily shared than corrections. For example, an early (and obviously false) story about a triple breasted woman in Tampa Florida was shared 40,000 times (Garber, 2014). An article published by Snopes, a website dedicated to debunking rumors, refuted the story, but that article had only 12,500 shares (DiFonzo, 2013). Boring facts cannot compete with outlandish falsehoods in the popular imaginary.

Just two months before election day, Trump publicly accepted that President Obama was born in the US. Unfortunately, the false and malicious story was already implanted. An Economist/YouGov poll in December 2017, over a year after Trump's concession, found that 51% of Republicans surveyed responded that it was probably or definitely true that President Obama was born in Kenya (Frankovic, 2017).

Megan Garber (2014) observes, "There's the fact that 'sorry, just kidding about that three-boobed lady thing' is nowhere near as shareable as a 'whoa, three-boobed lady!' thing in the first place." According to an MIT study, news making false claims was 70 percent more likely to be shared on Twitter: "True stories were rarely retweeted by more than 1,000 people, but the top 1 percent of false stories were routinely shared by 1,000 to 100,000 people. And it took true stories about six times as long as false ones to reach 1,500 people." (Lohr, 2018).

Conspiracy Theory

Conspiracy theories allege a scheme and cover up. That actual conspiracies exist makes it easy for psychological operations to manipulate theories, which are not or cannot be verified by facts or objective method. Populists, in particular, because they rise on the fear of "the people" against some "elite" or another ethnic group, share conspiracy theories as part of their identity and group formation. (Yablokov, 2014). Popular conspiracy theories include government cover-ups of some aspect of the John F. Kennedy assassination, Unidentified Flying Objects, and even the 9/11 terrorist attacks.

Professor Kate Starbird noticed conspiracies circulating after mass shooting incidents. She has identified "emerging alternative media ecosystem on the web" by mapping the connections of conspiracies on Twitter to web-based news sites. As part of this process, she studied 81 sites including beforeitsnews.com, nodisinfo.com veteranstoday.com and infowars.com. These sites feature suspicion of "globalism." The visitors and page views of Infowars.com are on par with the *Economist* (Beauchamp, 2018). Although bots may be generating it, a viewer who finds that "multiple sources" convey the same information may think it valid, however erroneous.

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Delusion

In a January 2017 Washington Post survey, photos of the Obama and Trump inaugurations, Trump and Clinton supporters were asked which of the photos depicted which event. The two images are featured side by side in Figure 1.

Trump supporters disproportionately (41% of them compared to 8% of Clinton supporters) said that the photo of the larger crowd (belonging to Obama) was the crowd attending the Trump inaugural. Separately, half of the participants were asked a different question, which photo depicted a larger crowd. 21% of Trump voters said that the photo on the left in Figure 1, depicting the Trump inaugural, was larger compared to 2% of Obama supporters. The Post suspected the phenomenon of “expressive responding” in which the answers of the Trump supporters were more about expressing their support for Trump than it was about factually answering the questions. It is also possible that these subjects genuinely believe that they what they see is accurate because they are motivated to interpret what they see in accordance with their preferences.

Among the general population it is common to find delusion, which is to maintain belief in spite of evidence, or lack of it. There are those who score highly on the Peters Delusion Index, (Peters, Joseph, Day, & Garety, 2004) and with greater conviction, preoccupation, and distress. Delusion is personal or, idiosyncratic, in contrast to widely accepted conspiracies or religious beliefs. Are some people simply more gullible? Researchers have established that it is more common among the clinically delusional

Figure 1. Aerial views of the inaugurations of Trump (Photo A) and Obama (Photo B)
Source: Washington Post

Please look at the following two photos: Photo A and Photo B.



Which photo has more people?

[Photo A](#) has more people

[Photo B](#) has more people

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to jump to conclusions without seeking evidence, and correlated delusion-proneness with a high need for closure. (Colbert & Peters, 2002) Given the prevalence of some delusion in the general population, these findings may offer insight. Intolerance of ambiguity and need for closure are considered distinct phenomena, but both seem relevant to human responses to the cognitive load of modern communications.

SPREADING THE NEWS

For foreign powers seeking to shape politics of another nation, fake news is a tool of psychological warfare that spreads (false) propaganda in order to promote one's own position, cause or candidate, against that of other(s). Note: for a commonsense definition, see Merriam Webster Online. The US military differentiates propaganda according not only to deception, but also to attribution. If propaganda, is it is overt, whether true or false, it is considered to be "white" when the originator takes responsibility for it; "gray" - which again can be true or false - when it lacks an identifiable source; or "black" when it deliberately presents a false source. (Goldstein & Jacobowitz, 1996). This latter form characterized Russian operations in numerous nations including the United States. Figure 2 provides an example of a Russian Internet Research Agency (IRA) advertisement placed on Facebook, one of over 3,500 purchased, that disguised its source.

Figure 2. Example of a Facebook page created by the Internet Research Agency, a Russian enterprise, intended to sow discord in the United States

Source: U.S. House of Representatives Permanent Select Committee on Intelligence Democrats, "Exposing Russia's Effort to Sow Discord Online: The Internet Research Agency and Advertisements."



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Figure 3. An example political ad placed by Russians in the months leading up to the 2016 US Presidential election

Source: <https://democrats-intelligence.house.gov/uploadedfiles/6053177352305.pdf>

The image shows a Facebook post from a page named "Army of Jesus". The post is sponsored and contains the following text:

Today Americans are able to elect a president with godly moral principles. Hillary is a Satan, and her crimes and lies had proved just how evil she is. And even though Donald Trump isn't a saint by any means, he's at least an honest man and he cares deeply for this country. My vote goes for him!

The main image in the ad depicts a devil-like figure with horns and a red, muscular body shaking hands with Jesus Christ, who is shown with long hair and a white robe. The background is a dramatic, cloudy sky. Text overlaid on the image reads:

**SATAN: IF I WIN CLINTON WINS!
JESUS: NOT IF I CAN HELP IT!**

At the bottom of the image, it says:

PRESS 'LIKE' TO HELP JESUS WIN!

Below the image, the post shows 97 Reactions, 15 Comments, and 29 Shares. At the bottom of the post are buttons for "Like", "Comment", and "Share".

Practitioners of psychological operations analyze their target audience - typically enemy soldiers, civilian workers, and/or commanders - based upon their ability to achieve the objective (effectiveness) (Goldstein & Jacobowitz, 1996). Russian propagandists analyzed the vulnerabilities (perception, motivation, stress and attitude) of their target audiences, and their susceptibility to influence. For example, Russian ads in the US election (illegally purchased because they are foreign) targeted religious audiences on Facebook, as in the ad depicted in Figure 3 below.

Advertising firms may employ similar techniques. There is in fact a relationship between political propaganda and commercial advertising. The Trump campaign, for example, hired Cambridge Analytica to provide detailed such information on over 87 million Facebook users, including their identities, friends, and "likes" (Granville, 2018) in order develop more effective Pro-Trump digital ads tailored

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Figure 4. One of Donald Trump's many tweets decrying "fake" news
Source: @realDonaldTrump verified in Twitter search with thanks to Trump Twitter Archive



to individuals based on their personalities. Their aim was to design ads based upon more finely tuned determinations than those available through more traditional data-gathering techniques. These included psychological traits such as “whether a particular voter was, say, a neurotic introvert, a religious extrovert, a fair-minded liberal or a fan of the occult.” (Rosenberg, Confessore, & Cadwalladr, 2018). The revelation that Cambridge had used people’s private data unknowingly or under false pretenses was, however, cause for not just concern, but Congressional investigation.

Cambridge Analytica initially took credit for the Trump win. Likewise, a former employee and whistle blower charges that their services delivered a decisive advantage in the vote of the United Kingdom to leave the European Union (or Brexit). Although certainly unethical, and possibly illegal, those activities do not cross the line of information warfare unless alleged ties are proven between the firm and foreign agencies seeking to shape these events. The analysis was used to develop messaging that frequently spread rumors and allegations of conspiracy in order to undermine both the legitimacy of political opponents and confidence in the news media.

As the image from 2017 depicted in Figure 4 illustrates, the 45th President of the United States and others in his administration have persistently sought to re-define unfavorable mainstream media coverage of his administration as fake news. Similarly, certain members of the President’s administration have avoided the truth by suggesting that there is such a thing as “alternate facts,” an oxymoron.

The US intelligence community has determined that Russian President Vladimir Putin directed his government to launch an information campaign disseminated by various means, including paid human “trolls” posting provocative or divisive comments, and software or bots to reproduce and spread information. According to their joint report:

“Moscow’s influence campaign followed a Russian messaging strategy that blends covert intelligence operations—such as cyber activity—with overt efforts by Russian Government agencies, state-funded media, third-party intermediaries, and paid social media users or “trolls.” (ODNI, 2017: ii)

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Russia used psychological warfare tactics similar to yet more sophisticated than those previously employed in cyberattacks against Estonia in 2007 and Georgia in 2008. Russian campaigns took advantage of the features of the different social media platforms to sow chaos and disinformation on the American Electorate (Lin & Kerr, 2017). For instance, on Twitter, bots - automated programs such as chat bots for social interaction - were used to help disinformation spread virally. On Facebook, ads placed by the Russians were micro-targeted at voters living in key districts around the country. Conflicting protests were set up using Facebook's event planning tool, bringing Americans holding different perspectives on controversial topics to face-off with one another. African Americans were targeted with messaging intended to influence them to stay away from the polls on election day (Howard, Ganesh, Liotsiou, Kelly & François, 2018). The overall impact of this interference on the outcome of the election is still being investigated but emerging evidence suggests that this influence operation was effective in suppressing votes and intensifying pre-existing political and societal divisions in the United States (Jamison, 2018). Professional news bureaus and fact checking organizations attempted to debunk fake news stories. It was a difficult task because the disinformation was delivered via social media at scale and many messages went viral.

Technological developments that enable cheap, instantaneous and wide-reaching communication are important elements of the fake news dynamic. The software platforms known as social media created an inviting ecosystem for fake news. Practitioners of psychological operations are among many actors using automated bots as well as humans to perform analysis and inject messages. According to Pew Research Center in 2017, 93% of Americans reported reading news online (Pew, June 6, 2018). Many Americans consume online news through social media -- 35%, says Pew -- which is about the same as the percentage who go directly to a website to read the news (36%). Consider that a mere 5% of American adults used social media in 2005, increasing tenfold to 50% by 2011. As of 2017, 69% of Americans report using social media (Pew, Feb. 5, 2018). Today a surprising number of users do so on a daily basis. Among Facebook users, for example, 74% reported being on the site at least once a day; 51% more than once daily. More than 60% of Snapchat and Instagram users are active daily. More than 40% of Twitter and Instagram users are on the site at least once daily. (Smith & Anderson, 2018, March 1) As a result, social media provides a venue for bots and trolls - human beings seeking to create conflict or confusion - to disseminate misinformation.

The internet offers gifts to actors -domestic and foreign- who seek to influence political behavior by empowering ordinary individuals to reach the entire rest of the globe at lightning speed. That the Trump campaign was vulnerable to Russian trolls is well-established. The Internet Research Agency, the "troll factory" linked to Russian intelligence and President Vladimir V. Putin himself, created false personas who interacted with unsuspecting Trump campaign staff in the campaign's Facebook pages (Vogel, 2018). For instance, they focused on the swing state of Florida, writing to the campaign for help staging rallies in August of 2016.

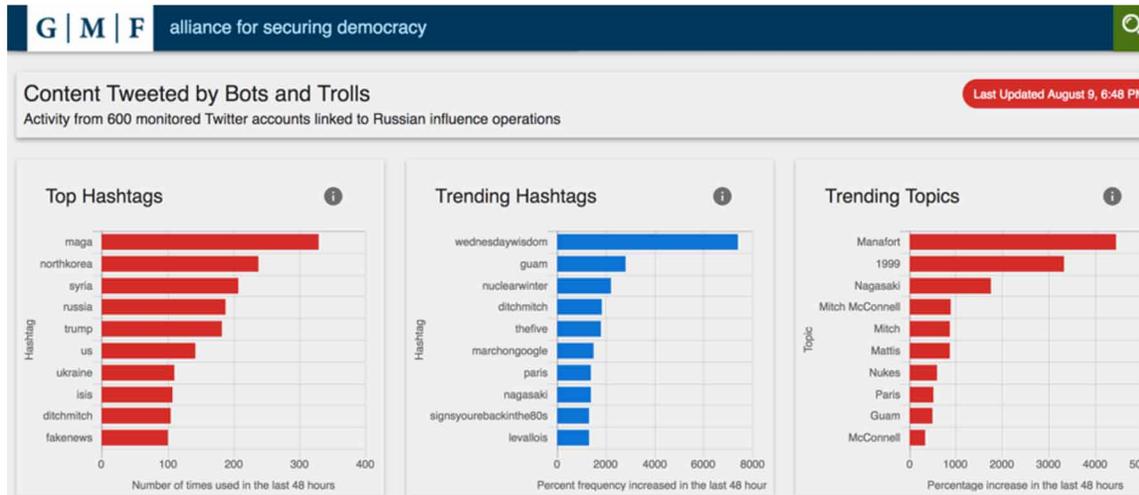
Likewise, the Russian campaign preyed on American divisions. The Clinton campaign depended upon strong African-American voter turnout. The Russian Instagram account "Woke Blacks" called Clinton "the lesser of two devils" and urged African-Americans to stay away from the polls. The Russians also urged voters to choose the third-party candidate Jill Stein with an Instagram ad promoting a post saying "Choose peace and vote for Jill Stein. Trust me, it's not a wasted vote." (Martin & Haberman, 2018, February 18).

It can be difficult to discern fake posts and personas from authentic ones (for example, see Silva and Sterbenz, 2018). One must look for clues, such as whether there is a photo of a person, the number of

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Figure 5. Researchers follow Twitter posts in Russian influence operations, identifying trends as depicted above

(Source: Alliance for Securing Democracy)



followers compared to the number following, or the number of posts compared to the days the account exists. The software “botcheck.me” enables Twitter users to use machine learning to identify political propaganda. It is not necessary for humans to read a story to participate in sharing it widely. Tony Haile, CEO of Chartbeat who studies web traffic, notes that “once a message has reached a critical number of people via bots, those people will assist in the spread of that information even though more than half of them will not have read it.” (Burkhardt, 2017).

Since the election, Russian bots continue to influence politics at the highest levels. Clint Watts, an expert on cybersecurity at the FBI told the NPR that this is happening:

They might broadcast stories and then follow up with another tweet that tries to gain the president’s attention, or they’ll try and answer the tweets that the president puts out...It’s a circular system. Sometimes the propaganda outlets themselves will put out false or manipulated stories. Other times, the president will go with a conspiracy (O’Connor & Schneider, 2017).

One successful example is a conspiracy theory that the Obama administration wiretapped Trump during the campaign. Once the conspiracy gained traction, bots and trolls amplified the message and added further conspiracies to the ecosystem.

FACTORS IN FAKE NEWS

In today’s social media age, individuals see themselves as empowered participants in the construction of the information stream. In illustration of this, consider Cameron Harris, a recent college graduate in Maryland. In Fall 2016, Harris purchased an expired domain name, ChristianTimesNewspaper.com, for \$5. When candidate Donald Trump was down in the polls, making comments about election integrity and hinting at voter fraud, Harris posted the following headline:

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BREAKING: “Tens of thousands” of fraudulent Clinton votes found in Ohio warehouse <https://t.co/yU1AyAVRHp> via @FoxNews @ @CBSNews @ABC -- TRUMP TV (@SJavner) October 2, 2016.

The headline and accompanying story - completely fabricated by Mr. Harris - was eventually shared with six million people (Scott, 2017). The lies did come to light, and if Harris had sold *ChristainTimesNewspaper* before that happened, he may have netted much more than \$20,000. Mr. Harris did lose his job once the details of his role in the proliferation of fake news was revealed (Scott, 2017). The ruse succeeded in part because of the typical Trump supporters’ distrust in the mainstream media and their faith in their own candidate. In other words, motivated reasoning, emotional contagion and social validation all appear to play a role in susceptibility to fake news. Of particular concern today is their role in behavior, how social media engagement prompts individuals to take action in the real world, sometimes with dire consequences.

Motivated Reasoning

The construct of motivated reasoning suggests that “people are more likely to arrive at those conclusions that they want to arrive at.” (Kunda, 1990) A person may desire to be rational, and search memories and other sources for evidence, but studies of motivated reasoning find that the search itself, the reasoning involved, is directionally biased toward evidence that will confirm one’s own beliefs. It is reasonable to assume then that where there is ideological polarization, there is motivated reasoning. A small percentage of the American population’s political beliefs fall into the ideological extremes of “consistently liberal” or “consistently conservative.” But their views have outsized influence compared to others with mixed ideological views. They are more civically engaged and therefore more likely to vote, to donate, and to participate directly (Habits, 2014). It is possible that these individuals are also more likely to spread rumor, knowingly or unknowingly. Indeed, it is difficult to discern the degree to which the average person who spreads a rumor actually believes it to be true. As Thomas Jefferson observed in the early days of American politics, “defamation is becoming a necessary of life ... [E]ven those who do not believe these abominations, still read them with complacency [and] betray a secret pleasure in the possibility that some may believe them, tho they do not themselves.” Thomas Jefferson (letter to John Norvell June 11, 1807, cited in Hundley, 2017).

Emotional Contagion

Arousal, or emotional response, fuels motivated reasoning. As Richard Herrmann explains, “Attachment produces more intense positive and negative emotions that in turn shape the interpretation of unfolding events and lead norms to be applied in an inconsistent fashion.” (Herrmann, 2017).

Emotional responses are also correlated with the proclivity to share with others in a phenomenon of emotional contagion. Research on the spread of urban legends and videos online (Heath, Bell, & Sternberg, 2001) has shown that people were more likely to spread urban legends that evoked interest, surprise, or disgust. Guadagno and colleagues found a similar pattern of results with online videos. Furthermore, their results also revealed that the likelihood of sharing the videos was also affected by the source of the videos (Guadagno, Rempala, Murphy, & Okdie, 2013). Specifically, videos that made people angry and were distributed by members of other groups (the outgroup) were more likely to be spread by individuals who viewed the video than were similar videos coming from ingroup members. Regardless of the emotion evoked by the video, they further revealed that interest in the content mediated the relationship between affect and intentions to spread the videos.

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In a study of more than 126,000 stories on Twitter between 2006-2017, researchers found that true stories were associated more with anticipation, sadness or joy. False claims, by contrast, were more likely to be met with emotions of surprise or disgust (Lohr, 2018). More recent evidence also indicates that fake news spreads faster and farther than factual news. Specifically, Vosoughi, Roy, and Aral (2018) examined the spread of verifiably false and genuine news stories on Twitter over an 11-year period. Their results revealed that over 125,000 stories were spread by approximately 3 million people with the fake news stories spreading more than the factual news. This finding was even more pronounced when the stories covered politics. They further examined whether bots were responsible for this difference but found that bots spread an equal amount of genuine and false news stories. Thus, the faster and broader spread of fake news is attributable to human behavior.

Social Influence Processes

Social influence refers to a change in attitude, belief, or behavior as a result of real or imagined external pressure (Cialdini, 2009). Generally, the literature indicates that there are two types of social influence processes: persuasion -- a change in attitude or belief, and compliance -- a change in behavior. While it may seem logical that people's attitudes and behavior are related, the extant literature suggests that this is not always the case (cf. Fazio & Zanna, 1981). Instead, the extent to which attitudes and behavior are related varies by how much a person knows about a topic, how personally relevant it is to them, and the ease with which people can access their attitude on the topic. The more a person knows about a topic, the more relevant it is to them, and/or the more easily they can access their attitude on the topic, the greater the concordance between people's attitudes and behavior.

The Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1984; Petty & Brinol, 2012) is a dual process model of persuasion that establishes how people vary in the amount of cognitive effort they put into processing persuasive appeals. This theory indicates that people tend to process persuasive appeals *centrally* or *peripherally*. When centrally processing such messages, people focus on the content of a message, such as the quality of the arguments and are influenced by these factors. This typically only occurs under conditions in which people are motivated (i.e., the topic is important to them) and have the available cognitive resources to think carefully when evaluating persuasive content. When people process persuasive appeals peripherally, they use decision cues or cognitive heuristics to evaluate the merits of the persuasive appeal. As a result, people processing via the peripheral route may be more influenced by the quantity rather than quality of arguments or be swayed by the perceived credibility associated with the persuasive appeal rather than the veracity of its claims. People are most likely to engage in this type of message processing when the message's topic is relevant to them, they are experiencing information overload, and they know very little about the topic.

While pre-Internet scholarship on the ELM had demonstrated that people are more likely to centrally process written persuasion communications (e.g., Chaiken & Eagly, 1983), the evidence regarding online persuasion has been more mixed and generally suggests that people using text-based communication over the internet suffer from information overload and are therefore more likely to peripherally process information online (Guadagno, Muscanell, Sundie, Hardison, & Cialdini, 2013; Lee, Lindsey, & Kim, 2017; Rodriguez, Gummadi, & Schoelkopf, 2014).

Cialdini (2009) proposed that social influence and persuasion results from a series of universal heuristic cues or decision heuristics that underlie many key aspects of human social behavior and largely influence people through the peripheral route of the ELM. These principles are authority, social valida-

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tion, scarcity, commitment and consistency, liking, and reciprocity. These heuristics are often utilized in information warfare campaigns to influence people's attitudes and beliefs (Guadagno, 2019).

As an illustration of the authority heuristic, consider that more frequently than most living Americans can recall, public authorities make demonstrably false claims without skipping a beat. On January 21, 2017, the first full work day of the Trump administration, the White House press secretary Sean Spicer entered a press conference clearly angry with the news media. "This was the largest audience to ever witness an inauguration — period —" said Spicer, "both in person and around the globe." Later that day, the new president said - at all places, the Central Intelligence Agency - "I looked out, the field was — it looked like a million, million and a half people." (Kessler, 2017) These statements are demonstrably false. Crowd scientists estimate that there were about 160,000 people in the crowd on the Mall in the hour before Trump's speech (compared to 1.8 million for Obama's 2009 inaugural). The Women's March the day after Trump's inauguration included about 470,000 at its peak. Not only did Trump and Spicer spread misinformation, they pulled into question the veracity of the media accounts and expert analysis.

Commitment and consistency (Cialdini, 2009; Festinger, 1957) is also a key aspect in understanding the role of false information in shaping people's attitudes and behavior. For instance, research indicates that people generally find inconsistencies between their attitudes and behavior uncomfortable and as a result, they will adjust their attitudes to match their behavior or vice versa. Classic research in this area demonstrated that when people made the choice to write an essay advocating a position opposite to their actual beliefs, they adjusted their beliefs to be more consistent with the position taken in the essay. This was not the case when participants were instructed to write a counter-attitudinal essay (Cotton & Hieser, 1980). Similarly, Festinger and Carlsmith (1959) found that people given insufficient justification to tell a lie altered their beliefs to accept the lie as truthful. Applied to the overwhelming and often inconsistent information available on the internet, this suggests that people will both seek out and choose to believe information that is consistent with their pre-existing opinions even when confronted with the knowledge that this information is false. This process has also been referred to as the confirmation bias (Nickerson, 1998).

Other factors that contributed to the spread of this false information in the months leading up to the 2016 US Presidential election were Russian trolls and bots who used social validation, which is effective because people perceive that similar others are engaging in a particular behavior and therefore change their behavior too (Cialdini, 2009). For instance, Guadagno, Muscanell, Rice, and Roberts (2013) examined whether factors found to be influential in online social influence -- namely likeability and social validation affected individuals' willingness to comply with a request via social media. To examine this, participants read a fictitious blog post in which a student asked other students to volunteer to help the needy. Depending on condition, participants saw other students' fictitious responses that all indicated a willingness (positive social validation) or unwillingness to help (negative social validation). Participants in the control condition reported their willingness to volunteer sans normative input. Results revealed that social validation affected compliance, but requestor likeability did not. Specifically, compared to the control, participants volunteered significantly more hours when the social validation information indicated that most people helped, and they volunteered significantly fewer hours when the social validation information indicated that most people did not help. Thus, these results support the notion that one factor that affects the extent to which people are influenced on social media is their perception that others -- particularly similar others -- are doing the same thing.

Related to fake news and information warfare, this suggests that when people see many others appearing to believe, like, and share a news story, they will follow suit. Bots can be programmed to work together to

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push a specific message creating a false consensus effect, effectively hijacking people's natural inclination to draw inferences about appropriate behaviors and beliefs by observing the behavioral patterns of groups. Similarly, as evidenced by a recent interview with a former Russian Troll, many of the Russian tactics also aimed to create false consensus by working together to impersonate three Americans, one who holds less-extreme views and is influenced to adopt more extreme views by two others purporting to hold similar extreme political views (Troianovski, 2018). Other evidence also suggests that people, especially non-experts perceive information viewed on a device as more credible (Guadagno et al., 2013).

Finally, the theory of planned behavior (Ajzen, 1991) has relevance to understanding how people's belief in fake news and misinformation can affect their subsequent behaviors. Specially, this theory predicts that people's behavior can be understood as a combination of their attitudes, perceptions of social norms, and their perceived control in acting out said behavior. These three concepts predict people's behavioral intentions which in turn are the best predictors people's actual behavior. In the below section on the real world consequences of fake news and misinformation, we will address how this theory can help understand how people may act on this information.

Real World Consequences of Fake News

Russian propaganda often sought to translate views and likes from the online world into real-world action. Jenna Abram's Twitter account had 70,000 followers. She was a strong Trump supporter. As an "Influencer" she was featured in articles in the Washington Post, USA Today, BBC, and many other news outlets. Her hashtag campaigns included #wordsthatdontdescribeHillary and a false rumor of CNN accidentally broadcasting pornography. Only hers was one of over 2500 fake Twitter accounts (see Figure 6 below). Totally fake, but her campaigns caught fire.

Although numerous campaigns made it into the public discourse, even more notable are those instances in which the campaigns succeeded in influencing actual behavior. Facebook campaigns promoted rallies (Parlapiano & Lee, 2018). According to Special Investigator Robert Mueller's indictment of Russian propagandists, the following rallies were promoted in 2016 alone:

- June 25: March for Trump New York
- July 9: Support Hillary. Save American Muslims Washington, D.C.
- July 23: Down with Hillary New York
- Aug. 20: Florida Goes Trump several Florida cities
- Oct. 2: Miners for Trump several Pennsylvania cities
- Nov. 12: Show your support for President-Elect Donald Trump New York
- Nov. 12: Trump is NOT my President New York
- Nov. 19: Charlotte Against Trump Charlotte, N.C.

Other striking cases of real-world consequences of fake news are found in the cases of Estonia and in Washington, DC with the Pizzagate incident.

Case Study 1: Estonia

The First documented Cyberwar occurred in April 2007 (Guadagno, Cialdini, & Evron, 2010) when Estonia -- one of the most technologically advanced countries in the world -- was cyberattacked by angry

Fake News and Information Warfare*Figure 6. Images of women used by Russian trolls who masqueraded as them on Twitter**Source: Tornoe, 2017*

Internet denizens of Russian descent. Their anger was evoked by a decision of the Estonian Government to relocate a statue commemorating a World War II era Soviet soldier from a prime position in the capital city to a more remote location in a graveyard. Estonians viewed this war memorial as symbolic of their Russian-oppressors, while Russians viewed this war memorial as commemorating Estonian liberation from Nazi Germany by the Soviet Army. This difference of perspective resulted in violent, angry protests in the streets of Tallinn, Estonia's capital city and spread online as members of the Russian language Internet proceeded to engage in a series of coordinated online month-long Distributed Denial of Service (DDoS) attacks on Estonia's Internet Infrastructure that completely disabled it for four days. During this time, members the Estonian government were unable to communicate to coordinate an attack as the DDoS attacks targeted government cyber-infrastructure. Estonians in country and abroad experienced disruption in their lives as these attacks also disabled online banking and news websites.

Guadagno and colleagues examined the social psychological dynamics involved in the success of this cyberattack arguing that social validation, emotional contagion, the relative anonymity of online communication, group identification, emotional contagion, and loss aversion all contributed to its effectiveness. These tactics have been repeatedly refined and employed by the IRA to attack Georgia in 2008 and more recently to interfere in the 2016 US Presidential election.

Fake News and Information Warfare**Case Study 2: Pizzagate**

We already know that fake news has had real world consequences in the United States. On December 4, 2016 28-year-old Edgar Maddison Welch acted on news he heard on InfoWars: according to Alex Jones, the show's host, Hillary Clinton was running a child sex-trafficking ring with Satanic rituals in the basement of a pizza parlor in Washington DC. Welch drove six hours from North Carolina to DC and walked into Comet Ping Pong pizzeria with an AR-15 assault rifle a .38 revolver and a folding knife. Children were playing ping pong. He pointed a weapon at a worker, and fired more than once, including at a lock. Needless to say, he found no children held captive nor even a basement.

It was clear this seemingly normal dad had been manipulated, but by whom? In order to understand what led to this incident, a two year investigation by reporters for Rolling Stone discovered a wild collection of influencers: "ordinary people, online activists, bots, foreign agents and domestic political operatives" (Robb, 2017) According to Rolling Stone, the controversy began just before the US election, on October 29, 2016. The timing coincided with FBI Director James Comey's announcement that he was re-opening an investigation into Hillary Clinton's use of a private email server. There was some revelation that Anthony Weiner, married to a Clinton aide, had sent lewd texts to a 15-year old. "Carmen Katz" posted on Facebook,

My NYPD source said its much more vile and serious than classified material on Weiner's device. The email DETAIL the trips made by Weiner, Bill and Hillary on their pedophile billionaire friend's plane, the Lolita Express. Yup, Hillary has a well documented predilection for underage girls.... We're talking an international child enslavement and sex ring. (as cited in KANG, GOLDMAN, Otterbourg, & Harris, 2016).

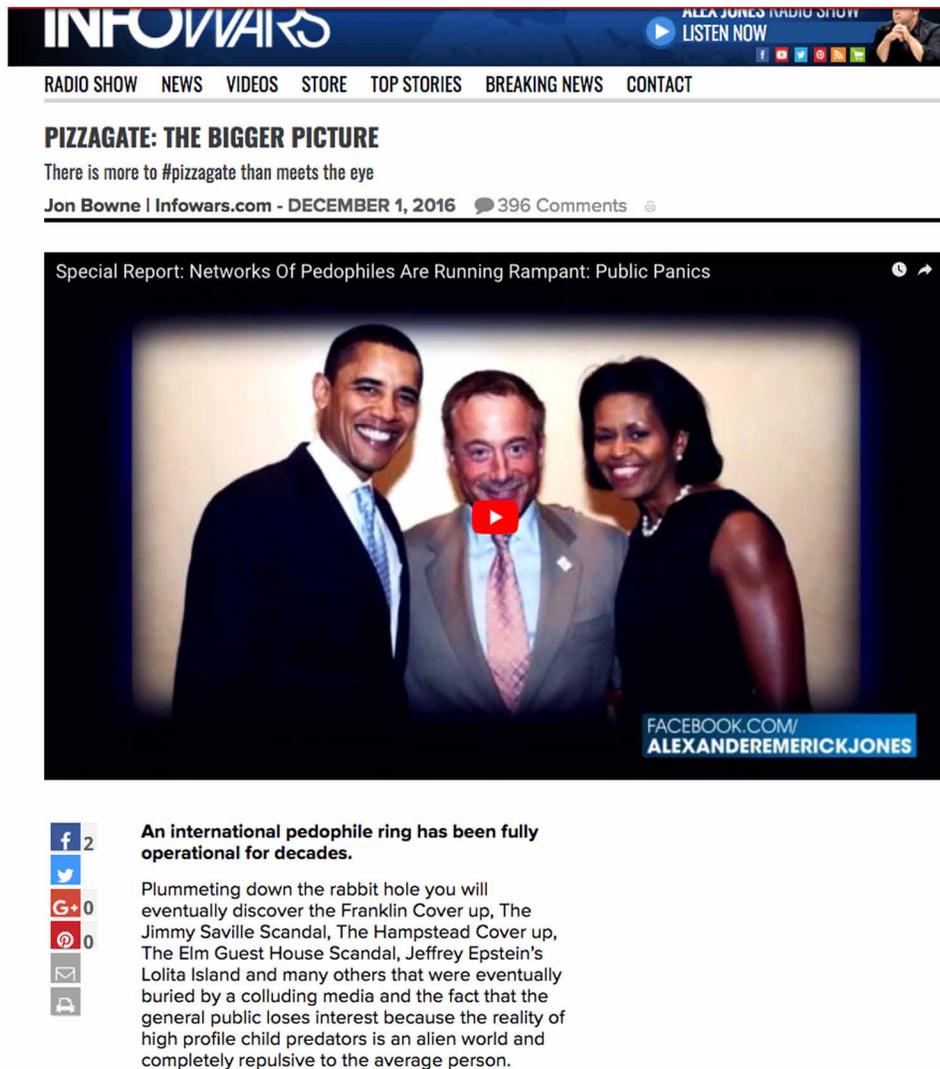
Snopes notes a posting by a Reddit user on November 4, just four days before the presidential election, to r/The_Donald, a subreddit community of Donald Trump supporters. InfoWars, the alt-right media outlet, and others picked up the story (see below). It went viral on social media. Some alleged that "cheese pizza" was a code for "child pornography," and the restaurant encouragement to "play, eat and drink" was a code for "p.e.d." or pedophilia. Graphics circulated with extensive montages decoding imagery or mapping an extensive underground tunnel for access to children human trafficked for sexual exploitation. In 2018, InfoWars continued to feature a 2016 Pizza Gate story on its site (See Figure 7).

Snopes, The Washington Post, and The New York Times debunked the story, as early as November 1, 2016 (Kang, 2016), but that only seemed to fuel the fire. According to the New York Times, "On YouTube, a step-by-step takedown of the Times article was viewed nearly 250,000 times and passed around on Twitter and Facebook." (Kang & Goldman, 2016) Late on the evening of Dec 4, 2016, Michael G. Flynn, Chief of Staff to his father, Retired Lieutenant General Michael Flynn, then Trump's choice for National Security Advisor, posted on Twitter: "Until #Pizzagate is proven to be false, it'll remain a story. The left seems to forget the Podesta Emails and the many "coincidences" tied to it." (Robb, 2017).

From a social psychological perspective, there is a lot going on here. First, we know that turbulent times (such as the 2016 election) are a breeding ground for rumor and conspiracy theories (Guttieri and Caglayan, 2009; Allport and Postman, 1947). Pizzagate is among the most infamous conspiracy theories of this time. Second, as Jim Kline observes (drawing upon the works of Carl Jung and Norman Cohn) child sex trafficking, ritual murder, and cannibalism-- elements of the Pizzagate story -- are "archetypal elements" representing "hard-wired taboos shared by all of humanity." If true, contempt for Clinton

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Figure 7. A screen shot from the primary source pushing the debunked “pizzagate” conspiracy theory (Source: Infowars screenshot 2018)



INFOVARS ALEX JONES RADIO SHOW LISTEN NOW

RADIO SHOW NEWS VIDEOS STORE TOP STORIES BREAKING NEWS CONTACT

PIZZAGATE: THE BIGGER PICTURE
There is more to #pizzagate than meets the eye

Jon Bowne | Infowars.com - DECEMBER 1, 2016 396 Comments

Special Report: Networks Of Pedophiles Are Running Rampant: Public Panics

FACEBOOK.COM/ALEXANDEREMERICKJONES

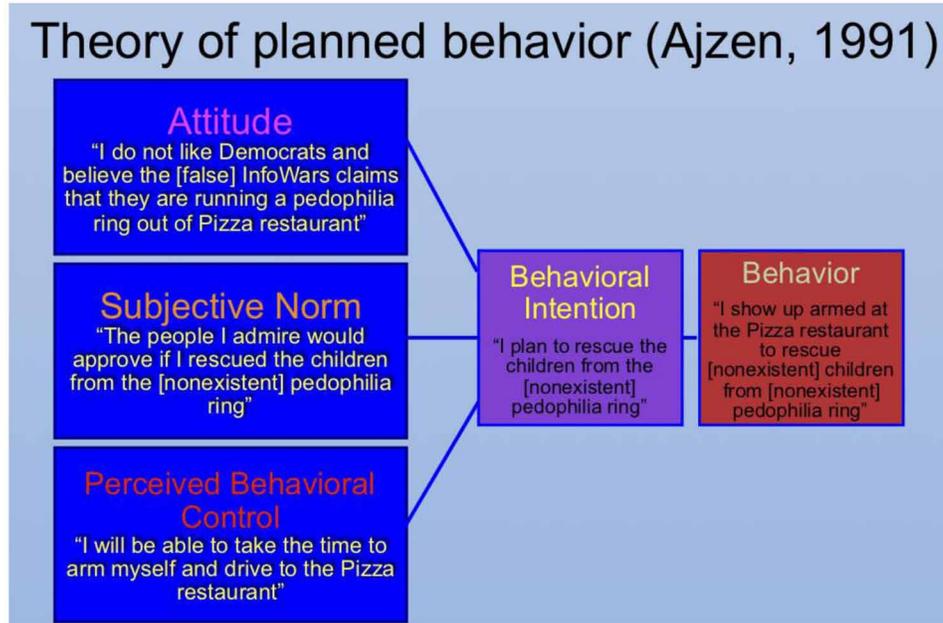
An international pedophile ring has been fully operational for decades.

Plummeting down the rabbit hole you will eventually discover the Franklin Cover up, The Jimmy Saville Scandal, The Hampstead Cover up, The Elm Guest House Scandal, Jeffrey Epstein's Lolita Island and many others that were eventually buried by a colluding media and the fact that the general public loses interest because the reality of high profile child predators is an alien world and completely repulsive to the average person.

would be justifiable, an example of motivated reasoning to confirm bias. The repulsiveness of the story activates emotional responses that prompt people to share, validating the correctness of one another in shared outrage and emotional contagion. Finally, to understand how an individual could move from believing misinformation to actually acting on that misinformation, Figure 8 presents a theoretical accounting of the process utilizing the framework of Theory of planned behavior.

Truth Bombs, Targeted Ads and Reality TV

It is worth noting that not all manipulation during the US Presidential campaign necessarily came in the form of fake news. As alarming as it seems, fake news makes up only a fraction of the total news that the average voter consumed in the 2016 election (Lohr, 2018). First, several “truth bombs” – malinformation

Fake News and Information Warfare*Figure 8. Theory of planned behavior explanation of Welch's potential thought processes*

*Figure 9. False claims about Hillary Clinton publicized by a tabloid known for promoting false stories favorable to Trump and his interests
(Source: author photo Publix, 2018)*



– exploded on both sides, including the release of the Access Hollywood tape and emails from members of the Hillary Clinton campaign. Russian hackers broke into the Democratic National Committee correspondence. According to news reports, they drew attention to any messages showing or suggesting that

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the DNC was favoring Clinton (Martin & Haberman, 2018, February 18). This drove a greater wedge between Democrats supporting Bernie Sanders and Hillary Clinton when Clinton needed to bring them together. They were released in drops to maximize this effect. And of course, James Comey's announcement - based on those hacked emails - that the FBI was reopening an investigation into Clinton's use of email was seriously damaging to Clinton, even if it was inconclusive. Jennifer Palmieri, communications director for the Clinton campaign, has argued "Russia succeeded in weakening her enough so that the Comey letter could knock her off." (Martin & Haberman, 2018, February 18).

Futhermore, if one is going to discuss a blurred line between what is real and not, one might begin with the observation that one of the candidates had been for many years a character on reality television. Trump's appearances on *The Apprentice* surely offered some voters an impression of him as a savvy businessman and commanding boss (Douthat, 2018). Certainly, Trump had help from Sinclair Broadcasting and its thousands of outlets, and *The National Enquirer* which featured sensationalistic anti-Clinton stories such as the one featured in Figure 9.

Many will also remember the long periods of mainstream television broadcasts of empty podiums with the Trump slogan in anticipation of Trump speaking while Bernie Sanders or Hillary Clinton actually were speaking and not covered by the mainstream media (Grim, 2016).

SOLUTIONS AND RECOMMENDATIONS

While the amount of influence Fake News had in determining the outcome of the 2016 US presidential election is not yet fully understood, one thing is clear: Fake News affects people's emotions, behavior, and beliefs and spreads rapidly on social media. This has had tangible, real world consequences (e.g., the Pizzagate shooter was sentenced to 4 years in prison) and raises ethical issues pertaining to the use of people's personal data collected by social media companies and the ways in which social media can be used to spread false information. While many of these issues are not new, the social media component is. Owing to the way that social media facilitates the viral spread of information to a vast number of people at an alarming rapid pace, the best way to stop this type of information warfare may very well be to develop ways to identify and disable it before it is ever posted on social media.

FUTURE RESEARCH DIRECTIONS

In future research, the authors intend to examine affective responses to fake news and motivations behind contagion. An initial unanswered question is whether labeling news as fake will impact people's belief in the narrative presented in a fake news story. Previous research shows that forewarning an individual can decrease his or her susceptibility to a real or fraudulent influence attempt (e.g., Scheibe et al., 2014). Conversely, other research indicates that once a person has formed a belief, s/he will not easily erase the belief if it turns out that the information was false (Gilbert, Tafarodi, & Malone, 1993). Indeed, a person may engage in motivated reasoning or confirmation bias that works to deepen prior false beliefs when presented with information they find threatening (Cohen et al., 2000; Nyhan & Reifler, 2008). To date, these issues have not been thoroughly addressed in the context of fake news. It may be that labeling a news story as "fake" will reduce its effectiveness. However, the label may backfire if participants feel

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threatened by its implications – that what they are reading and believe is wrong – or through processes of confirmation bias ignore it all together.

Other relevant research indicates that people’s perception of media bias is affected by their own political beliefs (Vallone, Ross, & Lepper, 1995). Thus, the source of a new story as well as participants’ own beliefs may also affect their perception of a new story and its validity.

The literature review here has practical implications for people’s news consumption and social media use. First, we urge caution when reading news headlines online -- particularly those with an unknown or low credibility source. Second, we suggest that social media companies devote more towards the prevention of the viral spread of misinformation. Third, we suggest that, to protect people from being targeted in future information warfare campaign, legislation is called for to regulate the ethical and secure use of people’s social media data. Fourth, we suggest that public policy should develop guidelines for societal-level media literacy education so that people have a thorough and clear understanding of the risks involved in social media use.

Finally, the authors would like to acknowledge that, while the focus of present chapter pertained solely to one state actor -- the Russian Government -- they are not the only group of individuals who engage in psywar. Future research should examine the ways in which other sources of fake news and misinformation do so using similar tactics and for similar reasons.

CONCLUSION

This paper began by asking the following questions: “Who spreads Fake News? Who falls for Fake News? What makes Fake News effective?” As the literature above indicates, there are many personal, political, and psychological factors related to answering to these questions. Some of these factors are historical (e.g., fake news has existed for a long time, Russia has been engaging in psywar for a long time). Some of these factors are related to the situation (e.g., the ease with which fake news spreads through social media, the roles of delusion, conspiracy theories, motivated belief, and emotional contagion in the spread of fake news). And, some of these factors are individual (e.g., politically conservative people are more susceptible to fake news (Hamilton, 2017), and watch different news stations than politically liberal people). As a result, the answer to these questions are complex and also in need of more thorough investigation.

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ENDNOTE

- ¹ The views expressed in this academic research paper are those of the authors and do not reflect official policy or positions of any part of the US government. The authors thank panelists for comments on a previous version of the chapter during the 2018 Annual Convention of the International Studies Association.