AMER0037 - Dissertation

'Take It With A Grain of Salt': An Analysis Of Political Misinformation And The Modern Media Ecosphere's Interaction With American Millennials During COVID-19

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Quotations And Words To Consider Before Reading

"What's Going On?" - Marvin Gaye

"Free will is given to every human being. If we wish to incline ourselves toward goodness and righteousness, we are free to do so; and if we wish to incline ourselves toward evil, we are also free to do that...Of our own accord, by our own faculty of intelligence and understanding, we can distinguish between good and evil, doing as we choose. Nothing holds us back from making this choice between good and evil - the power is in our hands." - Maimonides, 12th Century

"Political language is designed to make lies sound truthful and murder respectable" - George Orwell

"Oppressive language does more than represent violence; it is violence; does more than represent the limits of knowledge; it limits knowledge." -Toni Morrison

"It's easier to fool people than convince them they have been fooled" - Mark Twain

"Misinformation is not like a plumbing problem you fix. It's a social problem like crime that you must constantly monitor and adjust to." - Tom Rosenstiel

"Just as the hand, held before the eye, can hide the tallest mountain, so the routine of everyday life can keep us from seeing the vast radiance and secret wonders that fill the world." Chasidic, 18th century.

"If everything is amplified, we hear nothing" - Jon Stewart

Acknowledgments

Thank you to my family, my friends, my dissertation supervisor, Nick Witham, without whom I would have been lost in a sea of trouble. I am grateful for the wonderful academic community at UCL-I carry you all in my heart, always.

In loving memory of EJE

Abstract

Through a content analysis of President Trump's tweets regarding the COVID-19 pandemic specifically between January 31st, 2020, and March 31st, 2020, and a nationally representative survey of American Millennials in partnership with YouGov, this dissertation explains the modern media ecosphere – an environment where politicians, social media, the news media, and the individual consumer congregate to pass different forms of information to one another. I identified 37 pieces of political misinformation relayed by the President through his personal social media platform. This misinformation is filtered through social media and the news media, impacting American Millennials. Overall, as concluded in the survey, this demographic is fed up with the political division, lies and corruption and wants social media sites to step-in and stop the circulation of false information. Nonetheless, American Millennials do little to corroborate the information they receive, spend a lot of time on Facebook, do not vote, and distrust the White House. The modern media ecosphere is an analytical framework that can be used by future researchers to further study the many dynamics at play.

Introduction

This dissertation centres in what I call a *modern media ecosphere*, an analytical framework that seeks to explain the COVID-19 relationship between political elites, social media, the news media and the individual consumer - in this case specifically American millennials ages 18 to 34. Pointedly, this research focuses on the misinformation coming from President Donald J. Trump and people associated with his administration from January 31st until March 31st, 2020, and seeks to analyse how it was politicized, resulting in further ideological polarization among Americans and greater collective distrust in the news media. I use the President's promotion of the anti-malaria drug Hydroxychloroquine, partial invocation of the Defense Production Act (DPA), and insistence that the virus would weaken with warmer weather to analyse how instances of political misinformation are spread through Facebook and Twitter, and additionally how they are reported on by mainstream news outlets through social media. This study then draws on data from an original nine question survey of 1,000 American Millennials, conducted in partnership with YouGov, to draw conclusions on how this technologically competent generation perceives and interacts with the modern media ecosphere.

The traditional media ecosphere of information formerly existed in newspapers, a handful of major television networks, and in-person community discussions, but has now relocated onto global social networking platforms, allowing people to spread wrong information from the comfort of their homes, behind screens, to sow distrust and further political division (Startt and Sloan, 1994). The dissemination and effects of misinformation coming from political elites like President Trump, that is then exacerbated by news coverage and by social media engagement, is an understudied area of media and political communications research (Tucker *et al*, 2018, p. 67-70). General study in this field concentrates on purposely deceptive fake news, propaganda,

native advertising, bots, trolls, and conspiracy theories (Faltesek, 2020, p. 169). This is due to intense media focus on Russian disinformation through both government official and independent communication agencies that is intent on exposing false narratives to alter election outcomes (Bennet, 2018, p. 127). Still, research that strays away from endless debate on defining nuances in terminology is vital to primarily understanding the motivations behind why and how false information is spread by political elites, and to understanding the relationship American millennials have with this information, leading to potential solutions that properly confront misinformation and prevent it from continuing to prevail in the modern media ecosphere.

Weeks and Zúñiga (2019) identified six observations, presented as suggestions, on what political misinformation research should consider moving forward. In sum, they advocate for placing attention on the political significance of false information. Their advice expands on a similar call for analysis into politicians "spreading and debunking disinformation" from a review of literature pertaining to "the relationship between social media, political polarization, and disinformation" (Tucker et al, 2018, 63). Unfortunately, there is not enough empirical research addressing the spread of misinformation from politicians and government officials, and even less pertaining to information spread during public health emergencies throughout history and COVID-19 (Eysenbach, 2020, p. 3-5).. Consequently, a few questions emerge from these research gaps: what roles does each entity within the modern media ecosphere play in the spread of COVID-19 related misinformation, in determining what becomes politicized and when? And how do American Millennials view the modern media ecosphere and how do they interact with the cacophony of COVID-19 related information?

These questions are expansive in more ways than one. They ask about the function of political misinformation and about how a technologically attuned generation connects with the

modern media ecosphere - a worldwide free flowing market of information where political elites, journalists, commentators, social media users, and even internet trolls, congregate to consume, create, and share virtually any and every piece of information that is available (Figure 1). These are important starting points, and from them stem further issues to be addressed by future research. Complete responses to these challenging questions represent a foundational understanding of the ways in which the modern media ecosphere interacts with itself, marking a minor yet important step in further understanding *information disorder* - defined by Wardle as a comprehensive umbrella term defining all types of misinformation, disinformation, and maliformation (Wardle, 2020, p. 71).

Before going into further detail, I will first clarify the origin and function of the modern media ecosphere and then provide justification for using American Millennials (18-34) as the demographic for this research. Furthermore, before transitioning into a complete review of literature pertaining to the topics, this contextual introduction discusses chapter structure, research design, questions, and methodology used in this dissertation.

Some scholars use the term *media ecosystem* to explain the web of connectivity between individuals and the digital world (Huggett, 1999, p. 426). The pioneering botanist, Sir Arthur Tansley, noted that the term ecosystem only describes a "community of organisms together with their physical environment" (Tansley, 1935, p. 248). Therefore, an improved term that represents a generation that spends more time watching TV and scrolling through social media than socializing and communicating in person is necessary (Pew Research Center, 2015). Furthermore, if researchers are to embrace a biological term to interpret a media landscape that operates through networks of interconnected computer systems, it should take into consideration the system's function within a global sphere of information. Commoner (1972, p. 336) used

ecosphere to describe "the home that life has built for itself on the planet's outer surface." Indeed, this is more akin to the ways in which social media, news media, politicians, and citizens interact: an autonomous structure (home), built by people, to connect all energy and matter (life) virtually with each other. Therefore, this ecosphere is not rooted in the natural world, nor physically attached to the earth, but rather exists as an "outer surface" of communication. So, unless someone is the subject of a news story, attends a protest, or is affiliated with the content of the news coverage in some tangible way, the degree to which the modern media ecosphere interacts with itself mainly occurs on smart devices. In fact, Millennials under the age of 35 overwhelmingly use smartphones to access the news and social media. Likewise, politicians use the omnipresence of social media through mobile devices as channels for direct communication with their constituents and with society at large (Pew Research Center, 2019). Therefore, because these communications transpire within the life bubbles of their consumers, it is important to use the term ecosphere instead of ecosystem. The term carries metaphoric significance as well; like an aquarium for fish or plants, a media ecosphere creates the illusion of a sustaining and symbiotic microcosm of life that is nevertheless enshrined in glass and disconnected from the natural world. Nevertheless, a network of connection and communication does not have to occur in real life to be considered a community. Everyone with an internet connection is a part of a global village of media technologies that amplifies exponential gossip creating incentives for people to be knowledgeable of other people's business (McLuhan and Powers, 1986, p. 20-28). Social media companies capitalize on human psychology, designing their interface as habitforming, leaving users wanting consistent connectivity to fill the void of information stimulus (Johanssen, 2019). Moreover, since Multi-billion-pound tech companies and large media conglomerates have created a world where online connection is primary - where news

consumption is provided instead of sought after - it has become more difficult to decipher between fact and fiction than ever before. Consequently, the COVID-19 pandemic has provided a situation where online false information can circulate faster and more effectively because people are spending more time at home, making them more click-susceptible and prone to interactions with potentially manipulated or false forms of information (Brennan *et al*, 2020).

Also, the general scientific uncertainty regarding details of COVID-19, particularly from January 31st, 2020, when the Trump Administration declared COVID-19 a public health emergency, to March 31st, 2020, when the United States reached 200,000 confirmed total cases of COVID-19, created a collective heightening of emotions like stress and anxiety, causing hysteria and anguish (Fuentes et al, 2020, p. 5-7). Out of a desire to alleviate some of these difficult feelings, many well-intentioned people fell victim to the age-old trend of rumourspreading (Power, 2020). For example, an inaccurate claim stating that gargling warm salt water every 15 minutes eliminated the virus was sent through WhatsApp group messages and then began circulating through Facebook, Twitter, and the rest of social media in early March, 2020 (Power, 2020). The origin of this false information is undetermined, making the intentions behind its creation unknown. However, what is known is that false cures coming from friends and family on social media spread like wildfire, offering hope to millions of quarantined people desperate for remedies and a return to normal life (Jamieson and Albarracin, 2020, p. 3-5). Nonetheless, this type of false information must be distinguished from the dissemination of misand disinformation by political elites with the intent of weaponizing social media's purpose to connect people, and the news media's mission to report, as political strategy to bombard the public with doubt and distrust, leaving them struggling to discern what is real and what is fake.

President Donald Trump, on March 19th, held a 'Coronavirus Task Force' press briefing where he falsely claimed that the United States Food and Drug Administration (FDA), a federal agency that is a part of the Executive Branch, approved the anti-malaria drug Hydroxychloroquine as a valid treatment against COVID-19 (President Donald J. Trump, 2020). Per Brennan (et al, 2020) false information that is spread by "politicians, celebrities, and public figures" made up 20% of all COVID-19 related false information but "accounted for 69% of total social media engagement." As the scientific community largely discounted the use of Hydroxychloroquine for regular treatment of COVID-19, the majority of the mainstream press corps published articles stating that the President had made inaccurate or misleading statements. Conversely, the conservative network Fox News featured interviews with doctors and administration officials offering hope that the drug could work against COVID-19 (Paz, 2020). Because of the inconsistent messaging coming from both direct government officials and mainstream media sources, Americans had to make the decision of whom to listen to for information related to COVID-19. Ultimately, this is polarizing Americans by proving their distrust, and fuelling their anger, anxiety, and frustration with the function of democracy. And because of the inherent structure of the modern media ecosphere, the public can choose the information they wish to hear. Unfortunately, this ability to decide the information we consume is informed largely by the consumer's political ideology because of the abundance of new media sources available online (Flynn, Nyhan and Reifler, 2017, p. 132). Therefore, if a person supports the President they are most likely to believe Hydroxychloroquine is a potential treatment for COVID-19. Whereas a fervent critic of the President is most likely to believe the opposite. Thus, it is quite evident that politics affects the ways in which individuals view public health problems.

Though the majority of COVID-19 related false information, like the faux 'gargling cure', is spread by ordinary people bottom-up through endless shares and comments on social media, political elites and popular hyper-partisan media outlets have more influence and reach, giving them the ability to be more calculated with their output (Pennycook et al, 2020, p. 770). Moreover, political polarization, and the circulation of misinformation actively lessens the value of journalism in a democracy where anyone can find information that corresponds with what they want to hear, instead of forming impartial consensus on the truth. Still, the reality is that the very notion of truth is contested not only by American Millennials but collectively among all Americans. The question of how can someone tell the truth when the government and journalists are offering disparate versions of COVID-19 information arises because seemingly there is no answer. A person either listens to the information coming from their chosen news sources, believes the White House's 'Coronavirus Task Force', or adheres to the US Centers for Disease Control and Prevention (CDC) guidelines, and advice from doctors, family and friends. Arguably, even information coming from highly trusted gatekeepers of scientific knowledge and consensus is disputed (Eysenbach, 2020, p. 2). For example, in August, 2020, the CDC contradicted previous recommendations declaring that anyone who had come in contact with a person who tested positive for COVID-19 did not need to get tested or abide by quarantine regulations. An unnamed top ranking CDC official expressed to the Cable News Network (CNN) that the directive was "coming from the top down," and even though multiple health experts expressed concern about the decision, supporters of the President dismissed the criticism as 'fake news' (Valencia, Murray and Holmes, 2020). Therefore two polarized factions of Americans exist, and political misinformation channelled through the media ecosphere diminishes the capacity for democracy to "prevent misconstruction or abuse of its powers", as noted in the

Preamble to the Bill of Rights in the US Constitution (Madison, 1791). Arguably, however, it is disparate interpretations of the Constitution that serve as justification for the spread of misinformation. There needs to be a shared understanding of reality and truth, otherwise the title of 'United States of America' is a tired moniker, devoid of principle.

Why Generation Y?

Generation Y, also known as Millennials, is America's largest living generation with roughly 72.1 million people in 2019, surpassing Baby Boomers at 71.6 million (Dimock, 2019). They were born between 1981-1996, making them between 24-39 years old in 2020 (Dimock, 2019). There is no agreed upon scientific method for distinguishing generational cut-off points, rather important historical events like the 9/11 terrorist attacks and significant moments of technological evolution are the markers (U.S. Bureau of Labor Statistics, 2019). So, for example, Millennials were between the ages of 5 and 20 on 9/11, old enough to understand the cultural and historical significance. Furthermore, Boomers grew up during the popularization of TV; Gen X experienced the diffusion of personal computing; Millennials came to age during the explosion of social media; whereas when the first iPhone was released, the eldest Gen Z'ers were 10 years old (Dimock, 2019). This dissertation adopts the Pew Research Center's accord on the matter, considering everyone born after 1997 as members of Generation Z, and everyone born between 1981 and 1996 as Generation Y.

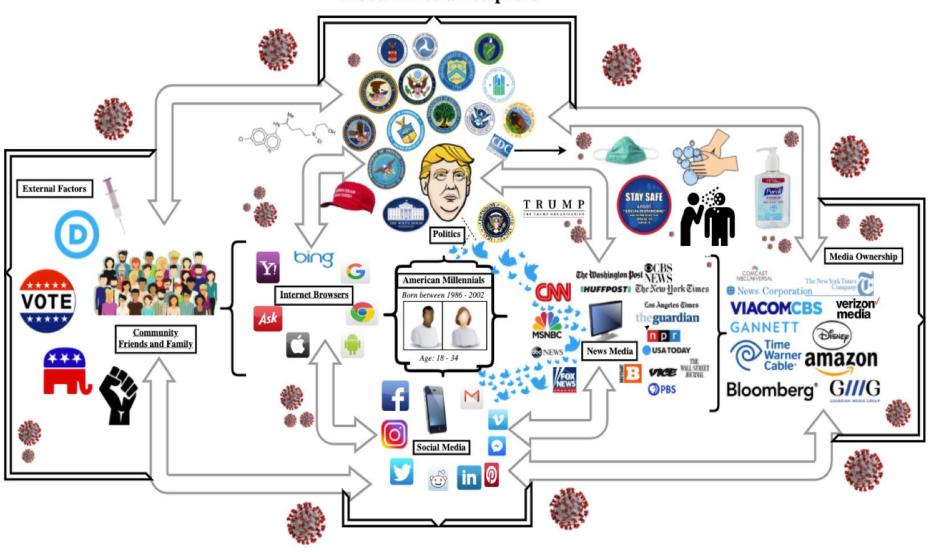
Millennials, more so than any other generation in history, have grown alongside the advent and widespread implementation of new media like Facebook and Twitter (Pew Research Center, 2020). Unlike Boomers and the Silent Generation, they do not recall a past where news came solely from the Big Three networks, NBC, CBS, and ABC, where most the country trusted broadcasters like Walter Cronkite regardless of their political affiliation. Today, technology has created a society where almost all Millennials own a smart device and use the internet, providing a demand for new voices and other journalism organizations like MSNBC and Fox News to adjust their message to niche audiences through social media (Newman *et al*, 2019). This is due to the realization that 90% of 18-29 year olds and 82% of 30-49 year olds use at least one form

of social media on a consistent basis (Pew Research Center, 2019). Interestingly, Millennials are more likely to view the internet as a source of positivity for themselves and society when compared to older generations (American Press Institute, 2015). Furthermore, Millennials are better educated, far more racially and ethnically diverse, and less likely to get married than previous generations (Dimock, 2019). And, generally, Millennials place a lot of trust on their online social networks. Never in history has a generation relied on a third-party platform so heavily for news content, Facebook being the overwhelming preference for viewing news, more than any other source (Eckstein/YouGov, 2020) Consequently, Millennials are less aware of certain news sources than other generations, and are overall less political yet no less trusting of the news sources they do know compared with Gen X'ers and Boomers (Pew Research Center, 2019).

So, why use Generation Y as a perspective tool to analyse political misinformation on COVID-19 and the modern media ecosphere? Plainly, because the extent to which Millennials engage with social media is far greater than other generations aside from Generation Z (1997-2010) who use newer forms of social media like Snapchat, Instagram, and TikTok to receive news information. In addition, Millennials broadly adhere to socially progressive principles with 77% saying that good diplomacy is the best way to ensure peace, far more than any other generation (The Generation Gap in American Politics, 2018). Finally, Millennials are less likely to believe in democracy with just 27% of 24-39 year olds believing the government will do what is right most of the time (Pew Research Center, 2019). This is most likely attributed to high unemployment rates, partisan gridlock, lack of government-provided social services like health-care, racial inequality, and the realization that they will suffer the greatest economic impact from COVID-19. Subsequently, Millennials are active protestors exercising their constitutional right

to assemble at greater numbers than any other generation along with Gen Z in the Black Lives Matter movement following the murder of George Floyd (Davis, 2020). Therefore, Millennials are the ideal case to analyse the modern media ecosphere and their relationship to online media, and political information.

Modern Media Ecosphere



Research Questions

This dissertation has two functions: explaining the members, factors, and conditions that contributed to the spread of political misinformation regarding COVID-19 from January 31st to March 31st, 2020, and drawing conclusions from an original large-scale 9-question survey to discuss the relationship between American Millennials, the modern media ecosphere, and political misinformation. Namely, to ensure complete clarity, the two fundamental research questions are listed again below:

- What roles does each entity within the modern media ecosphere play in the spread of COVID-19 related misinformation, in determining what becomes politicized and when?
- How do American Millennials view the modern media ecosphere and how do they interact with COVID-19 related information?

YouGov Survey Demographics and Information

I enlisted the services of YouGov, a UK based international internet market research company, out of San Francisco, California, to issue a survey to a nationally representative, diverse sampling of 1,000 American Millennials (18-34) from August 11, 2020 until August 14, 2020. YouGov collected COVID-19 related media usage information from 1,401 respondents who were then assembled into a sample of 1,000 to produce the final dataset. The weights were then post-stratified on 2016 Presidential vote choice and other demographic factors including gender, age, race, education, family income, ideology, and party identification - all of which are provided below.

Respondents were 50.3% male and 49.6% female, the remaining 0.1% are labelled as other. It is important to mention that after the first day of circulating the survey, I realised that there were only two gender options. This came to my attention through a transgender colleague whom I sent a duplicate version of the survey to complete. This secondary survey was solely used to privately ascertain data on my friends and family and its data is not used in this dissertation. Nonetheless, YouGov said they were only able to provide 'Other' after about one third of the surveys were completed. This exposes a slight shortcoming of the data potentially excluding certain respondents from honestly engaging with the survey by forcing some to conform their gender identity.

Of the 1,000 Millennials surveyed 60.6 % are White, 16.2% are Hispanic, 10.6% are Black, 6.2% are Asian and 5.7% are Mixed or Other. This illuminates the unfortunate reality that YouGov is mainly surveying White American Millennials, illustrating that the data collected is frankly not as diverse as I would like it to be even though it is considered a "diverse sampling". I have expressed to YouGov my disappointment in their inability to produce data that is more

aligned with the reality that American Millennials are a the most diverse generation. For the successive few pages, I will provide all demographic graphs and then comment on the data.

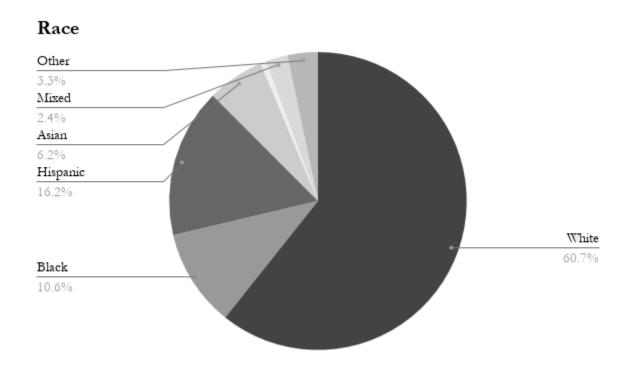


Figure 0.1 / Source: Eckstein/YouGov All infographics have been created by the author unless otherwise cited.

Education

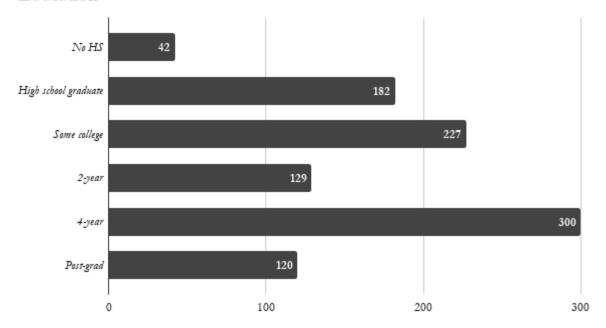


Figure 0.2 | Education | Source Eckstein/YouGov

Marital Status

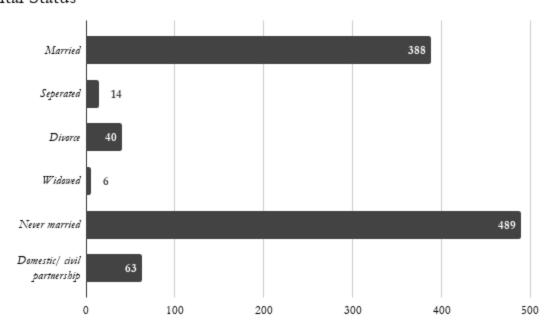


Figure 0.3 | Marital Status | Source: Eckstein/YouGov

Employment Status

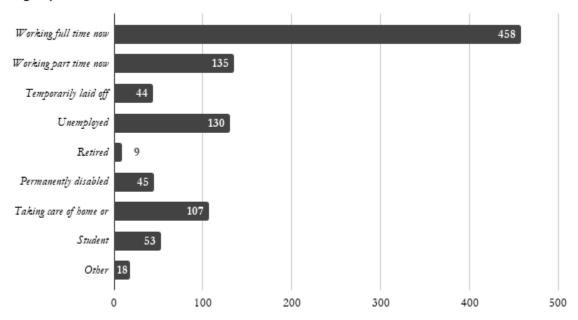


Figure 0.4 | Employment Status | Source: Eckstein/YouGov

Family Income

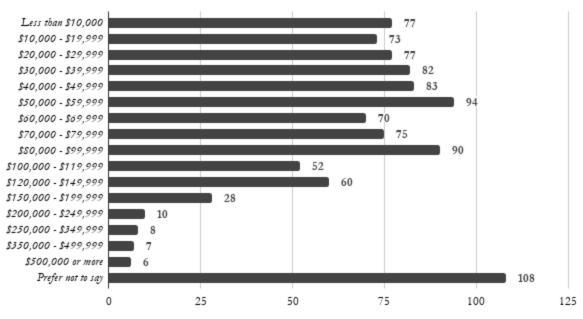


Figure 0.4 | Family Income | Source: Eckstein/YouGov

Party Identification

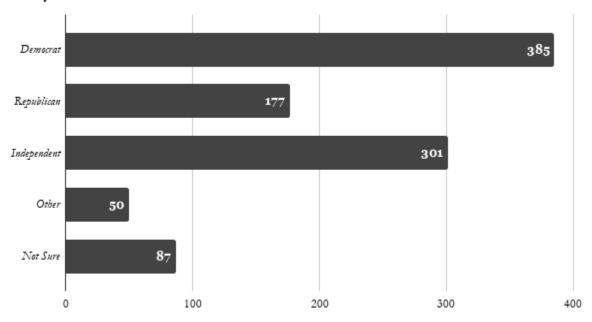


Figure 0.5 | Party Identification (1) | Source: Eckstein/YouGov

Party Identification (2)

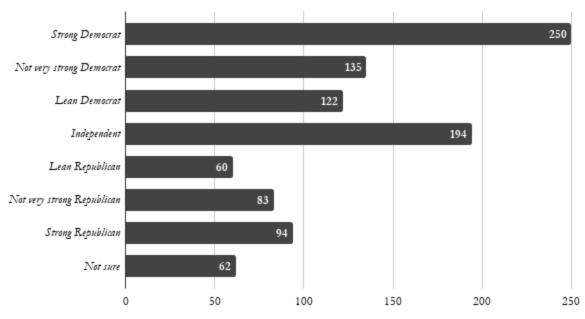


Figure 0.6 | Party Identification (2) | Source: Eckstein/YouGov

2016 Presidential Vote

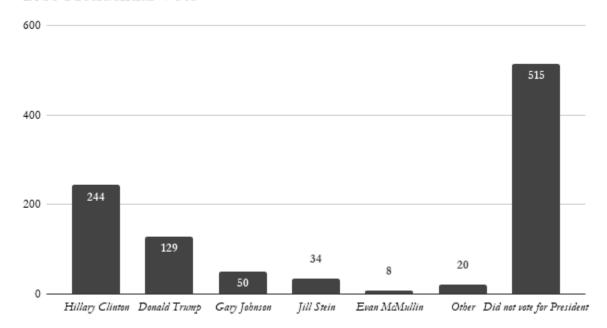


Figure 0.7 | 2016 Presidential Vote | Source: Eckstein/YouGov



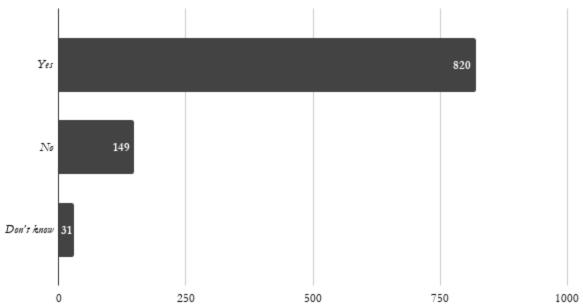
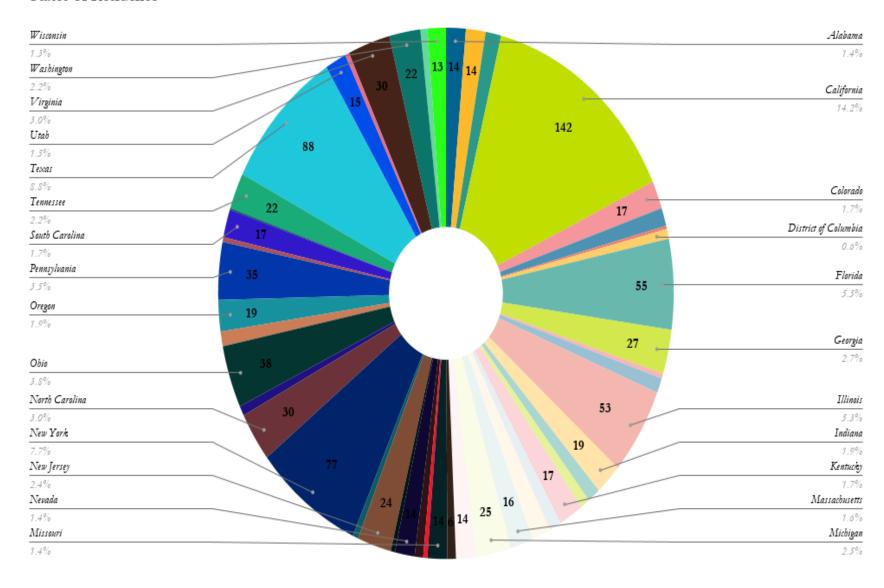


Figure 0.8 | Voter Registration | Source: Eckstein/YouGov

States of Residence



Political Ideology

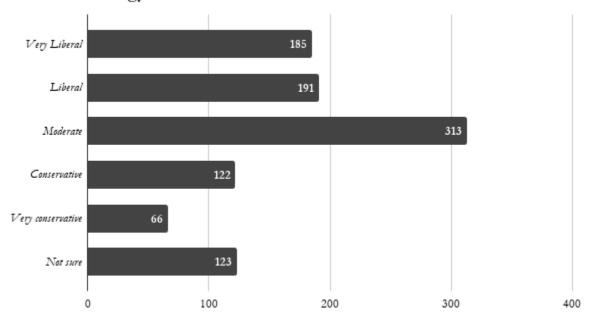


Figure 0.10 | Political Ideology | Source: Eckstein/YouGov

Political Interest

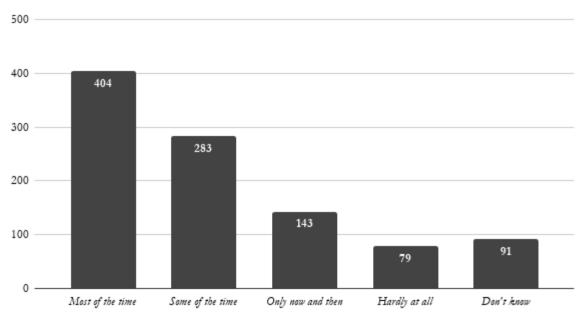


Figure 0.11 | Political Interest | Source: Eckstein/YouGov

In sum, the 1,000 American Millennials represent broadly the entire United States of America. Most respondents (14.2%) come from California and Texas (8.8%). Nonetheless, less populous states that often get overlooked like Oregon (1.9%), Pennsylvania (3.5%), and South Carolina (1.7%) have a voice. Largely, the cohort has never been married (48.9), though some do report having either a civil partnership (6.3%) or marriage partner (38.8%). The majority are registered to vote (82%); most are at least somewhat politically interested (68.7%); 37.6% consider themselves liberal, 31.3% are moderate, and 18.8% are conservative. Although the respondents had rather high political interest, and only 12.5% were unsure of their political ideology, more than 51% did not vote in the 2016 presidential election. This could be attributed to the reality that some born in 1996 were not 18 at the time of the election, though this is rather doubtful. Instead, this is most likely attributed to lack of Millennial enthusiasm for both candidates at the time.

Chapter Structure and Methodology

The first three chapters represent the distinctive realms of the modern media ecosphere - Social Media, The News Media, and Political Elites - that cooperate in the spread of political misinformation. The fourth chapter - The Modern Media Ecosphere and the American Millennial - discusses the findings of the first three chapters and integrates them into the breadth of wider research forming a contextual understanding of where the ecosphere is headed and what can be done to stop misinformation. Subsequently, the role of the American Millennial is brought to the forefront in this chapter where I analyse the ways in which they handle misinformation from politicians, the news media, and social media.

Instead of providing the results of the survey all at once, in consequential order, data that directly applies to a chapter's topic are provided when relevant in that chapter. This means that, 'Chapter 1: Social Media' examines the role Facebook and Twitter play in the spread of political misinformation, and goes into further analysis about the ways in which these platforms are being pressured to censor false information. Consequently, using Google Trends, I link certain popular COVID-19 keywords associated with the political misinformation being analysed during the research time period to illuminate how news coverage and government official communication augments interest in the 'news of the day' that then quickly fades away as the publishers of this information move on to another topic and a new day.

'Chapter 2: Political Elites' examines President Trump's role in spreading misinformation on COVID-19. To examine this, I analysed and fact checked 265 tweets the President issued referencing COVID-19 on his personal Twitter account during the research period. Of the sampling, 28 are confirmed pieces of misinformation that offer false hope,

promote pseudoscientific remedies, and further political divisiveness among Americans. Also, I focus on the President's communication through social media and the White House's distribution of 'Coronavirus Task Force' videos that broadcast misinformation on the anti-malaria drug Hydroxychloroquine, partial invocation of the Defense Production Act (DPA), and the viruses' potential to weaken or "disappear" with warmer weather. I then analyse these tweets and parallel them with applicable findings from the Survey of Millennials.

'Chapter 3: The News Media' looks at these instances of misinformation coming from the President and cross-references them with social media posts on Facebook and Twitter coming from both the top five news sites visited by Millennials and governmental health agencies like the World Health Organization (WHO) and the CDC that are published on the same day the misinformation was published. This form of content analysis seeks to identify a reporting strategy and discover whether the news media corrected the misinformation, to ultimately understand the process of how and when information becomes politicized.

Lastly, 'Chapter 4: The Modern Media Ecosphere and the American Millennial' aggregates all the findings into a wider discussion about the role the average Millennial consumer plays in the modern media ecosphere, drawing further conclusions from the survey; particularly using the original diagram titled Figure 1.1: Modern Media Ecosphere' to visually illustrate this flow of information. This research structure provides an interesting understanding of the ways Millennials check if the information they hear from the media and politicians is accurate, drawing conclusions and quotations from open ended answers from the survey. I close this chapter with observing potential solutions like media literacy education that can help slow the spread of misinformation moving forward.

Finally, the 'Conclusion' summarizes the research, makes notice of any bias or shortcomings, and points to potential ways the modern media ecosphere can ensure a decrease in political misinformation through future research. At the very least, the goal of this dissertation is for people to ask questions about their online presence, and the pieces of information they watch, read, and hear.

Literature Review

The historical and political literature regarding false information coming from political elites specifically relating to public health emergencies is rather barren. Nonetheless, in order to form a comprehensive understanding of the role social media, politicians, and the news media play in spreading misinformation, a review of history and literature that examines the scope and identity of the many factors influencing this ecosphere is crucial. To be concise, media scholars have intently fixated on defining different forms of misinformation, and the involvement in this scholarly work through research and articles continues to grow, but scattered interest and lack of distinct technological solutions have constituted far more chatter than resolution. This literature review will first provide historical context into presidential and journalistic communication during the Influenza crisis of 1917 before providing a general overview of the role of journalism and political elites during COVID-19.

The world was different in 1917. Tweets were sounds of passing birds and news came from a newspaper. Over a century separates us from then, yet nevertheless the COVID-19 pandemic offers time to reflect on this history and use it as a reference point when studying modern media and politics. Namely, presidential communication and journalism's coverage of government decisions has historically and inherently turned political, ultimately leaving Americans to decide what is true and what is false regarding crucial public health information (Hatcher, 2020, p. 615). There is a recent expansion in historical research pertaining to presidential communication and leadership during public health emergencies. Mainly, biographies of presidents allude to their "generic expressions of concern" when pandemics materialized throughout history (Wooley, 2020). Yet, barely any research exists on President Andrew Jackson's response to Cholera, for example, because he was largely focused on vetoing

a bill to charter the banking system to pay off national debt at the height of the pandemic in 1832 (Museum of American Finance, 2020). Similarly, more study needs to be conducted on how 19th century presidents like James Buchanan and Grover Cleveland dealt with their specific public health emergencies (Wooley, 2020). Nonetheless, Skidmore (2016) and Arnold (2018) determine that President Woodrow Wilson's insufficient response to the Influenza pandemic and refusal to keep US troops from fighting overseas is conclusive evidence that his actions, or better put inaction, caused the disease to spread globally. Furthermore, one week after President Wilson called for war against Germany, signalling America's military intervention in the First World War, he signed an executive order creating the Committee of Public Information (CPI), a federal agency focused on creating public support and enthusiasm for war efforts, headed by former journalist George Creel (Cornwell Jr., 1959, p. 159-165). In fact, Creel (1920) defends his propaganda in a belaboured accounting of his memories and letters, providing a methodical structure for how future leaders can use communication to disseminate forms of false information. Still, Funk (1994, p.120) references these propaganda efforts as a form of mass miseducation in American history that heralded an era of partisan journalism and inadequate governmental communication. Moreover, the CPI published newsreels in movie theatres, displaying American heroism on the battlefield against 'barbaric' German soldiers; they bought advertising space in newspapers to recruit men and to stimulate patriotism; and they created imagery like the iconic portrait of James Montgomery Flagg declaring "We Want You For The U.S. Army", that some scholars feel conflated patriotism with blindly loyal forms of militaristic involvement (Cooper Jr., 2011; Berg, 2014).

President Wilson was narrowly focused on the war, never publicly making mention of the deadly Influenza pandemic that would go on to claim the lives of over 675,000 Americans

(Amenabar, 2020). His administration granted no federal assistance to states, and partisan newspapers barely covered the story (Ambar, 2020). In today's media ecosphere, we have become accustomed to a news media that holds political elites accountable for responding promptly to public health emergencies. However, at the time, most journalism outlets were more concerned with sugar coating the reality of the pandemic by publicizing CPI press releases over public health information as to exude loyalty to the president and support of the war efforts (Funk, 1994). For example, in an editorial, The Boston Globe was worried by reports that New England was falling short of meeting its quota for a Liberty bond - a war loan that was offered by the government to support Allied forces in the war (Amenabar, 2020). Even as Influenza seemed to target young people, ravaging Eskimo villages and disseminating 20% of the American Western Samoa population, the news media remained reticent (Clements, 1992, p. 121-126). One front page editorial from the Globe stated: "The place for New England is at the front whether it is buying bonds or responding to the nation's call for men" (Shapiro, 2020). This pronouncement shows that the paper was more concerned in patriotic sentiments and call to action in war time than reporting on the pandemic. Overall, presidential and journalistic communication of public health emergencies has drastically shifted in part due to the popularization of new media technologies that rapidly facilitate virtual conversation between government, news, and citizens, creating an ecosphere where presidential communication is frequent and 'Breaking News' is daily. Moreover, modernity and cultural evolution have reformed the roles of presidents and journalists, allowing a historically contentious dynamic to become more overwhelmed by vitriol and political misinformation.

Again, this is not to say that this contention is unprecedented. As public cohesion around independence and the Revolutionary war began to wane during President George Washington's

first term, James Madison and Alexander Hamilton campaigned for the implementation of divergent political factions known as Federalists and Democratic-Republicans (McDonald, 1976, p. 178-184). As the political divide became greater, newspapers started to diverge from their commitment to objectivity embracing "new roles as propagandists" (Pasley, 2003). Thus, began a partisan press, intent on the business of journalism, instead of its foundational duty to hold those in power to account. In the hope of changing this growing political partisanship in the press, an early version of what would become President Washington's farewell address (1796) discussed his chagrin for the state of journalism by declaring:

As this Address, Fellow citizens will be the last I shall ever make you, and as some of the Gazettes of the United States have teemed with all the Invective that disappointment, ignorance of facts, and malicious falsehoods could invent, to misrepresent my politics and affections; to wound my reputation and feelings; and to weaken, if not entirely destroy the confidence you had been pleased to repose in me...

If these words survived the editing of Secretary Hamilton, they would have marked the most blatant criticism of journalism from President Washington. Nonetheless, his assertion that false information coming from the news media can misrepresent a president's "politics and affections" is a criticism that holds true today but marked a shift in the history of American journalism.

For centuries, all forms of 'fake news', misinformation and conspiracy theories existed in sensationalized newspaper stories. In fact, the history of American journalism is filled with muddied lines between fact and fiction, news and propaganda. Towards the end of the 18th century and for most of the 19th century, the news profited by conducting yellow journalism, an illusory form of reporting that concentrated on exaggerated headlines and illegitimate stories in

order to increase sales (Mott, 1962, p. 519-535). Similarly, politicians found publishing false narratives in newspapers associated with political parties advantageous when it came to furthering their ideological and business agendas. For example, Benjamin Franklin, Founding Father of the United States, purposely penned false news stories during the Revolution linking King George III with brutal Native tribes in order to manipulate public sentiment of the British Crown (Parkinson, 2016). Furthermore, the media tycoon and newspaper publisher William Randolph Hearst focused mainly on journalism's ability to make money, fervently supporting sensationalism as a way to make the industry profitable (Kaplan, 2002, p. 76). However, as the Progressive Era in American history turned cultural attention toward social reform for the middle class and as Hearst realized that his publications could make more through advertising to both sides of the political aisle, reporting started to become less partisan. It was not until the 19th century, however, that objective, fact-based news was re-established as standard journalism practice (Batker, 200). In the 20th century, objective reporting manifested in the uncovering of the Pentagon Papers and the Watergate Scandal, and trailblazed journalistic conventions of uncovering corruption that still exist today. Still, Chomsky and Herman's (1988) thesis fundamentally links corporate ownership of the media, bias, and propaganda as a conflict of interest that bolsters public support for corporate economic, social and political interests. Consequently, their propaganda model for the modern media ecosphere can be used to explain how false information benefits corporate interests yet harms Americans (Chomsky and Herman, 1988, p. 15-33).

Many scholars either conflate misinformation and disinformation or ignore the key differences in their definitions. Dr Claire Wardle, leading expert on social media and Director of First Draft, the world's foremost organization committed to research and practice of mis- and

disinformation, notes that the key difference between different forms of false information lies within whether the content was distributed with intent or not (Wardle, 2020, p. 71-80). Therefore, she defines misinformation as "false information shared by someone who believes it to be true" (Wardle, 2020, p. 71-72). For example, in early March, 2020, a post began circulating social media claiming that a person was free from COVID-19 if they were able to hold their breath for ten seconds without coughing (Link, 2020). This piece of misinformation provided a straightforward yet ineffective way for people to determine whether they were safe or not during early stages of the pandemic where tendencies to believe misinformation were heightened by anxiety and fear. Conversely, disinformation is false information "shared with knowledge of its falsity and thus intention to deceive and do harm" (Wardle, 2020, p, 71). This is a calculated lie, most likely with concealed motivations that are not apparent to the consumer. For example, a Russian group known as the Internet Research Agency (IRA) infamously generates fake accounts and websites disguised as news sites with the intention of disrupting election outcomes (Johnson et al, 2020) In early September, 2020, Facebook and Twitter took down a website called peacedata[.]net, affiliated with the IRA, that focused on painting the United States as warmongering abroad and devastated by racism, COVID-19, and bullish capitalism. Graphika, a tech company that uses artificial intelligence (AI) to study online communities found that this purposely deceptive news site used computer generated images created by Generative Adversarial Networks (GAN) to create fake pictures and personas of supposed members of their editorial board to appear legitimate (Silverman, 2020). Subsequently, Wardle describes malinformation, a third category of false information, as "information based in reality that is shared to do harm to a person, organization, or country." An example of this would be revenge porn, or any privately shared information that is used to harm someone in any way. Altogether,

misinformation, disinformation, and malinformation, are incorporated under the umbrella term *information disorder* (Wardle, 2020, p. 71-85).

It is important before going into further detail about the existing literature, to first form academic definitional consensus on the term 'fake news'. It should not be assumed that most people understand what 'fake news' is, even though President Trump often uses it when fielding questions from media organizations like CNN and The New York Times, platforms that he claims are spreading false narratives about his administration. Yet, many scholars feel that the term is politically dangerous, lacking a unified definition, and ultimately undermining the function of democracy (Zemdars and McLeod et al, 2020, 1-96). Still media scholars and journalists continue to provide their own definition of the overused term. Conclusively, for the scope of this research, the term 'fake news' is defined by Andrejevic (2020, p. 21) as a form of disinformation "that is published and circulated as truth in service of a political or economic agenda." Still, what needs to be noted is that a defining principle of 'fake news' is that factors for distinguishing between what is true and what is false relies on the predilections and preconceptions of the person consuming the information. For example, when the Trump Administration repeated false claims regarding the size of his inauguration crowd, supporters of the President fervently defended his claims on social media platforms, while critics of the President called out what they saw as a small crowd. Thus, the function of this false news was mainly to sow distrust in the media's counter narrative - allowing the President's supporters to render any media narrative that goes against Trump's assertions as suspect and counterfactual instead of corrective and true. This is a rhetorical style closely aligned with populism, defined by Muller (2016, p. 19-20) as "a particular moralistic imagination of politics, a way of perceiving the political world that sets a morally pure and fully unified – but . . . ultimately fictional –

people against elites who are deemed corrupt or in some other way morally inferior." Former counsellor to the president, Steve Banon, in order to "undermine the democratic quality of governance" so as to allow for political corruption to exist without repercussions, promoted "flooding the zone with shit," a tactic epitomized by President Trump's constant tweeting and insistence that the news media is the enemy of the people (Tucker et al, 2018, p.6; Agnew et al, 2020, p.10). Therefore, the term 'fake news' is both insufficient at describing the many forms of false information in academic research but effective when used by the Trump administration to create an environment shrouded in doubt. Some people believe the term describes bad reporting by the news media, others believe it refers to *any* false story, while some journalists imply that the term denotes anything with the objective to deceive. Altogether, the term is largely defective at describing the diversity of contaminated information infecting the media ecosphere.

Given the deluge of popular research and academic production regarding misinformation and 'fake news' paralleling the rise of President Trump's political ambitions, the press division of the Massachusetts Institute of Technology (MIT) published an anthology of perspectives that offers an unrivalled account of the spread of false information. Zimdars and McLeod (2020) set out to define false information as a symptom of inherent structural problems in the media ecosphere, a part of a much larger circuit of study that includes "political, cultural, and social issues of concern." The authors gift of amalgamating different sectors of misinformation studies through the lens of politics, journalism, social media, law, policy, and history helped cultivate potential solutions which include: managing the ways social media platforms allow shared content to spread, heightened civic engagement, and more financial support for using educational settings across the country to start thinking about ways to address the crisis of misinformation (Potter, 2020, p.320). Notably studies show that our ability to recognize false information is very

low. This combined with the popularity of news echo chambers, the personification of people seeking out information that already reinforces their beliefs, is a major issue that impacts the function of democracy (NPR Staff, 2016). Therefore, scholars promote media literacy education, the incorporation of learning skills that help people identify false information to then critically evaluate their role as members of the media ecosphere.

While this is a great starting point to addressing the misinformation crisis, simply asking existing systems to do better and promoting individuals to engage more with the government seems incomplete and lazy. It's easy for professional scholars to criticize other academic work and provide ideas for how current systems of communication and journalism can combat misinformation. What seems to be more difficult is how to spread potential solutions that are implemented into the real world as false information permeates social media platforms and the news media.

A group of media scholars at MIT found that false news travels faster on Twitter than real news. In an analysis of over 126,000 stories in 10 years, tweeted by over three million users, they found that false news consistently dominated truth and was 70% more likely to get retweeted than accurate news (Dizikes, 2020). This disturbing reality led the group of 16 political scientists and legal experts to ask the question: how can we create a media ecosphere that values and promotes truth? The answer is not simple, but requires a multidisciplinary approach that is willing to restructure the foundation of social media. As a society, we will neither fully understand the causes of misinformation nor make any progress in addressing it unless we start thinking about it as a part of a larger media ecosphere - an environment where political interactions, journalism, social media, 'fake news', and policy play important roles in influencing each other.

Social media plays a considerable role in the reasons why false information flourishes among Americans. Hendricks and Hansen (2013) studied the social-epistemic repercussions of the daily abundance of information that exists on social media and identified "processes that track truth imperfectly: pluralistic ignorance, informational cascades, and belief polarization" as potentially having psychological ramifications that ultimately impede democracy (Hendricks and Hansen, 2013, p. 301-313). Social media has fully optimized our ability to connect with other people on a global scale. This unprecedented access is crucial during public health emergencies where the communication of updated factual data and information is of utmost priority to every person in society. During the Ebola epidemic in 2014, the U.S. Centers for Disease Control and Prevention (CDC), in an effort to quell growing concerns of the virus, hosted a live Twitter chat session to correct misinformation and answer outstanding questions (Glowacki et al, 2016). A content analysis of this communication found that the most frequent emergent themes included understanding Ebola, combating Ebola, and managing information about Ebola. This forum of communication allows public health researchers and governmental agencies like the CDC an opportunity to collect real time user generated content and information that furthers pandemic management services' ability to formulate appropriate response strategies (Glowacki et al, 2016). However, social media is a double-edged sword; simultaneously shepherding creative structures for access to crucial health information while also providing platforms that spread both purposely deceptive content and more nuanced forms of misinformation.

The World Health Organization (WHO) declared the rapid influx of COVID-19 related misinformation as an 'infodemic' on February 15, 2020 (Au *et al*, 2020, p. 1-3). The term was first coined in 2003 during the SARS outbreak and has since resurfaced to describe an "overabundance of information," some factual and some not, that makes it increasingly difficult

for people to access reliable health information (Islam et al, 2020, p. 2-5). During COVID-19 an onslaught of rumours, conspiracy theories, stigma, pseudo-scientific cures, and misinformation hindered international health agencies' ability to spread cohesive and consistent messages about ways to keep safe during the pandemic, making consistent public health messaging compete for attention against false news and politicized communication (Islam et al, 2020) With the understanding that false information is mostly spread through social media platforms, the CEO of Facebook, Mark Zuckerburg, announced that the company would be "removing false claims and conspiracy theories flagged by global health organizations and...blocking people from running ads that try to exploit the fears of the public by promoting snake oil cures" (Chandler, 2020). This sentiment reflected a joint industry statement expressing their determination to disrupt false information by first illuminating the best information, censoring false information after it is posted, and banning advertisements from opportunistic companies trying to monetize COVID-19 (Islam et al, 2020).

If a person searches anything related to COVID-19 on the aforementioned social sites, a display of fact-checked, public health organization data appears, ushering users toward correct information. Furthermore, as Waddell (2020) discovered, social media platforms embrace two sets of contradicting rules for curbing the spread of false information. The first is complete removal of a post that is proven to be inaccurate through feedback from numerous official fact-checking sources like PolitiFact, the Associated Press (AP), and Reuters. This is important; definitively erasing false information ensures that it will not manipulate more people.

Nevertheless, some believe that the tactic is a form of censoring free speech. The second is attaching a warning label that states something along the lines of "the primary claims in the information are factually inaccurate." This rule only applies to posts linking an article or video

that is proven incorrect - written posts that share misinformation are usually flagged (Isaac and Frenkel, 2020). Consequently, Twitter will sometimes keep a tweet containing confirmed misinformation because they feel it is in the public's interest to keep record of the instance (Abusive Behavior, 2020). These rules did not apply to political elites until Twitter attached a warning label to a tweet issued by President Trump on May 26th, 2020, deeming mail in voter ballots as fraudulent (Wong and Levine, 2020). Moreover, Facebook and Twitter removed the President's post on August 5th, 2020, sharing an interview from Fox News stating children are "mostly immune from the disease." Therefore, while post COVID-19 social media platforms are becoming responsible for moderating truth between the news media and President Trump, many Republicans claiming that conservative speech is censored online are flocking to a new social media site, with no infringement on any speech, Parler (Lima, 2020). Our society is immersed in a modern institutional structure of social media consumption that provides a seemingly unlimited number of news options. The pressure that led to social media limiting misinformation has inevitably become politicized, further polarizing Americans.

Any academic scholarship linking media consumption with misinformation and political influence with behaviour analysis is vital in the study of the media ecosphere. Jamieson and Albarracin (2020, p. 5)) found that conservative media outlets like Rush Limbaugh and Fox News corresponded with higher levels of misinformation. Additionally, Democrats were more prone to believing COVID-19 is more lethal than the flu. Furthermore, Gullwitzer (et al, 2020) found that political ideology broadly determined whether a person would follow CDC guidelines, providing tentative evidence that suggests counties that voted for Trump in 2016 exhibited 16 % less physically distancing than counties that voted for Hillary Clinton. Overall, this literature review provided historical context for political leadership during public health

emergencies, and recognized the evolution of journalism so as to better grasp the modern media ecosphere.

Chapter 1

The Modern Media Ecosphere: Facebook, Twitter, Trump, and The News

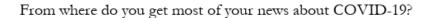
The arena of global connectivity through social media platforms like Facebook and Twitter has the capacity to both positively and negatively influence the function of American government. It is important to note that algorithms, the programmed computer coding system that decides what people see on their social media feeds, is designed to maximise user engagement and to increase the amount of time users spend on their feed (Avaaz, 2020). Therefore, this system of operation, in its attempt to keep people online as long as possible, intrinsically favours highly emotive content because the human brain is more attracted to discordant stimuli (Avaaz, 2020). Facebook and Twitter are different sides of the same coin, operational distinctions exist, yet their role in creating space for false information to spread and thrive is virtually the same. Unfortunately, after the Cambridge Analytica scandal, Facebook had proof that their algorithms promoted polarization, yet Mr. Zuckerberg shut down any possible solutions that were determined by his colleagues (Granville, 2018). Consequently, both platforms collect substantial amounts of original data and cookies from users "connections, preferences, interests and activities" to personalize suggested advertisements and recommend content that aligns with 'like' history and viewing habits (Facebook, 2020). This genetic makeup of the two most popular social media sites among American Millennials serves as both a place where emotive pieces of mis- and disinformation can flourish and as a filter bubble of information where political preference and susceptibility to inaccuracies informs the content a person sees (Bozdag, 2013, p. 210-214). As mentioned earlier, while social media is not particularly democratic or ant-democratic, political actors and the news media - some of which may have democratic or anti-democratic intentions - have learned ways to exploit preferential algorithmic

bias to broaden their power and influence, sometimes using misinformation to justify an end goal. So, Facebook and Twitter design naturally politicizes information as it is being reported by selectively showing its users content that aligns with their pre-existing beliefs.

Furthermore, specifically in relation to COVID-19, both Facebook and Twitter realized that their previously neutral role in policing false information, and predictive algorithms had to be assessed and ultimately updated to minimize partisan uncertainty of crucial public health information. The new method for dealing with this crisis first involves retroactively correcting all confirmed instances of false information and identifying people who have been exposed to inaccurate reports. Facebook has removed false claims that pose serious public health risks since a measles outbreak in Samoa in 2018 (Facebook, 2020). Moreover, since January, 2020, the company has promoted educational videos, and then in March they started labelling and removing misinformation that they deemed could cause harm. In addition, they also created a 'COVID-19 Information Centre' that featured officially fact-checked information at the top of users' feed. Similarly, although almost two months later, Twitter started labelling wrong information that was being deemed false by public health experts and that was believed to be inaccurate. Still, studies show that even after these protocols were implemented, 84% of medical misinformation went unlabelled at Facebook. Since COVID-19 has forced people to work from their homes, most of this misinformation content monitoring occurs through artificial intelligence (Baker, 2020). Twitter's reliance on what is basically automated fact-checking started to make mistakes, labelling tweets that surmised the emergence of 5g cellular towers was causing COVID-19 instead of completely removing these posts, increasing the false information's exposure (Hatmaker, 2020). Additionally, Facebook's cohort of over 15,000 content moderators had to adapt to a new at-home work environment and artificial intelligence has undoubtedly

triggered more false positive misinformation labels further inciting public distrust in social media's ability to tell what is right from wrong (Facebook, 2020).

Furthermore, it is interesting that both Facebook and Twitter do not notify users if they engaged with false information, and they also do not provide an option for users to contest their labelling of false information. Arguably, both Facebook and Twitter's decision to slow the spread of COVID-19 related false information is commendable and important, but still there is a lot of work to be done in order for information disorder to cease. How these platforms impact American Millennials interaction with COVID-19 is conceivably immeasurable. Nonetheless, the first observation from this survey data is that since Millennials use Facebook more than any other news and social media source for information on COVID-19, it is verifiable that they are interacting with false information at higher rates than their peers that mainly visit newspapers for their news.



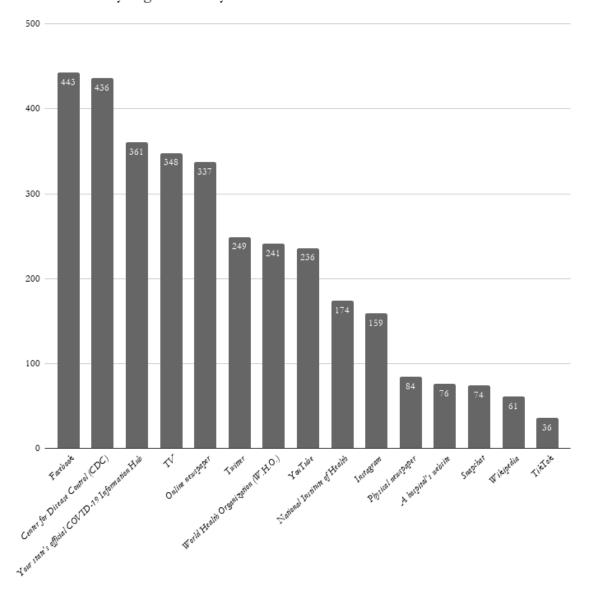


Figure 1.1 | Source: Eckstein/YouGov | Respondents could choose multiple answers

In corroboration with previous studies on Millennial news consumption, it was no surprise that Facebook was the most frequented platform for news. However, a few deviations

from prior knowledge exist here as well. It is important to note that American Millennials are going directly to the CDC's website (43.6%) at nearly the same frequency that they visit Facebook, showing that public health organizations and official scientific institutions are crucial for this demographics' understanding of the public health emergency. Conversely, it is possible that because of Facebook's promotion of the CDC's website and consensus that the CDC reports unbiased information, respondents could have felt a societal and cultural pressure to state that they visited the CDC's website when it is plausible that they either do not or interact with CDC sponsored content solely through Facebook. On the contrary though, it's interesting that both the WHO (24.1%) and the National Institute of Health (NIH (17.4%) are less frequented by Millennials despite Facebook's promotion of these organizations through free advertising space. It seems that Millennials are prioritizing more localized and community specific information coming from their state's government-run COVID-19 information hub (36.1%) over the WHO and NIH. Moreover, though the federal government and President Trump's administration use Twitter as their main channel to disseminate COVID-19 related information, only 24.1% of Millennials are using the site. Interestingly, more Millennials watched TV (34.8%) than relatively newer forms of social media like YouTube (23.6%), Instagram (15.9%), Snapchat (7.4%), and TikTok (3.6%). And, although mainstream print newspapers' effort to cease paywalls for COVID-19 related information is linked to higher exposure to factual knowledge, it was expected that less than 10% (8.4%) of American Millennials purchased a tangible newspaper (Brennan et al, 2020). Yet, this percentage is actually higher than anticipated because newspaper sales plummeted during COVID-19.

It is undeniable that most American Millennials (60.2%) think that social media companies should try to remove false information coming from politicians about COVID-19.

Do you think social media companies should try to remove misinformation from politicians about COVID-19 or do you think people should be responsible for evaluating whether messages from politicians about COVID-19 are accurate?

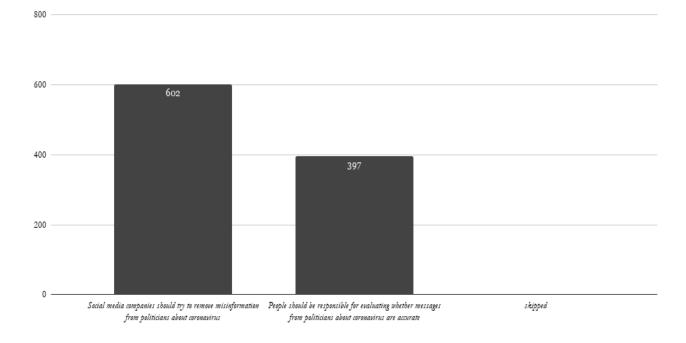


Figure 1.2 | Source Eckstein/YouGov

Generally, people want to hear the truth. And, because politicians throughout history have a propensity toward lying, Millennials want there to be accountability and a form of fact-checking that occurs in real time through social media. Yet, as mentioned before, it was not until a few months into the COVID-19 pandemic that social media platforms like Facebook and Twitter started implementing labelling and removing false information; and while their efforts are moving in the direction American Millennials call for, they are still faulty, allowing political actors to spread false information, mainly through publishing videos which contain false statements and deceptive content.

President Trump is known for his affinity toward Twitter. From the 2016 Presidential Inauguration until March 31st, 2020, Mr. Trump tweeted roughly 20,778 times. No Administration in the course of history has produced such unprecedented and unfiltered access to the stream of consciousness of a President and never before have constituents heard so much from their leader.

Between January 31, 2020, the day foreign nationals who travelled to China in the prior 14 days were banned from entering the United States, and March 31st, 2020, when the White House released estimates projecting the COVID-19 death toll to be around 100,000 to 240,000, President Trump tweeted a total of 1,860 times (Paz, 2020). 177 (9.5%) of these tweets referred to 'coronavirus', and 'the virus' in general, while another 57 (3%) tweets mentioned COVID-19 specifically. I collected and cross-fact checked these tweets using Snopes and PolitiFact, then coded them under character labels. Out of the 234 tweets coming from the President in this period, 37 are pieces of confirmed misinformation, spreading false hope and false narratives about COVID-19 to his over 86 million followers.

For the purpose of this research, I have determined that the president's insistence that the anti-malaria drug Hydroxychloroquine can treat COVID-19, the false admittance of invoking the DPA, and emphasis that the pandemic would go away with warmer weather as misinformation with the most notable and harmful potential impact to be analysed in this study. The definitions of misinformation as "false information shared by someone who believes it to be true" and disinformation as "false information shared with knowledge of its falsity with the intention to deceive" seem incomplete when trying to understand the President's motivations for spreading misleading content (Wardle, 2020). This is because the President consistently either says he was being sarcastic or that the information he circulated is in fact true; a sort of *polar*-information

where it is less significant whether the President believes the information to be true or not, than whether that information, true or false, corroborates his outlook, therefore exhibiting polarity in the sense that he is attracted to a specific kind of information that is sometimes false and sometimes true.

Table 1 labels the presidents 234 tweets during the research period, and Table 2 categorizes the 14 most relevant pieces of misinformation out of the total 37 misinformed tweets in total to further understand the motivations of this information and how this information is becoming politicized by the president's usage of Twitter.

Category	Type \ Count	Date(s)	Example
Anti-Democrat Party Attack	Misleading Count: 11	February 8, 25, 28 March 9, 23, 24, 27	PM *: "Do Nothing Democrats were busy wasting their time on the Impeachment Hoax, & anything they could do to make the Republican Party look bad, while I was busy calling early boarder & flight closings, putting us way ahead in our battle with the Coronavirus. Dems called it very wrong!"
Self-Praise	Exaggeration, promoting false hope, mostly accurate Count: 14	February 8, 25, 26, 27 March 5, 7, 10. 17, 25, 27, 30	RT: "I want to commend the President for how he has handled the CoronaVirus situation, especially his early decision to shut down access into our Country from China, despite strong opposition to that decision." @SenTomCotton Thank you Tom!
Anti-Media	Misleading, inaccurate, sowing distrust Count: 11	Feb 26, 27 March 6, 8, 9,	PM: "Such Fake reporting by the @nytimes, @washingtonpost, @CNN & others. They use a small portion of a sentence out of a full paragraph in order to demean. They really are corrupt and disgusting. No wonder the media is, according to polls, record setting low &

		11, 29	untrusted. #MAGA"
Factual Statement	Health related facts/Announcements Count: 106	Feb 26,29 March 2,4,7,9,10 , 12-15, 17-19, 21- 24,26, 27- 30	PM: "I will be having a 1:30 P.M. Press Conference at the White House to discuss the latest CoronaVirus developments. Thank you!"
Tweet emphasizes his role in process	Misleading Count: 29	Feb 7, 26 March 1,2,3,6- 9,13,14,1 7- 22,25,27, 28	PM: "I fully support H.R. 6201: Families First CoronaVirus Response Act, which will be voted on in the House this evening. This Bill will follow my direction for free CoronaVirus tests, and paid sick leave for our impacted American workers"
Links COVID-19 to "war"	Misleading Count: 6	March 17,22,23, 27	PM: "My Administration is actively planning the next phase in an all-out war against this horrible virus."
Cover up	Back track on calling COVID-19 'China- Virus'	March 23	PM: "It is very important that we totally protect our Asian American community in the United States, and all around the world. They are amazing people, and the spreading of the Virus is NOT their fault in any way, shape, or form. They are working closely with us to get rid of it. WE WILL PREVAIL TOGETHER!"
Criticism is verified	Mostly factual critical statement Count: 3	March 23, 27	RT: "WHO Spread False Chinese Government Propaganda: Coronavirus Not Contagious Among Humans"

References Economy/Military	Count: 10	March 3, 19, 22, 23	@WhiteHouse RT with video. "When this virus is defeated, our great American economy will bounce back rapidly."
Calls COVID-19 'China Virus' or 'Wuhan Virus'	Count: 9	March 13,16,17, 18,21,22	PM: "The United States will be powerfully supporting those industries, like Airlines and others, that are particularly affected by the Chinese Virus. We will be stronger than ever before!"
References 2020 election	Count: 4	March 13,22,24	RT of GOP Chairwoman, Ronna McDaniel: "Joe Biden has no ground to stand on politicizing coronavirus or attacking @realDonaldTrump."
Questions origin of virus	Count: 2	March 22	RT of Fox Anchor, Maria Bartiromo: "Why Tom Cotton and Others Are Right To Question Where Coronavirus Started The National Interest [LR] @ Sunday Futures [PD] [LR] @ Mornings Maria [PD] [LR]
Politicizing Virus	Count: 17	Feb 7,8,14,27, 28 March 9,13,16, 19,21,23	PM: The Do Nothing Democrats were busy wasting time on the Immigration Hoax, & anything else they could do to make the Republican Party look bad, while I was busy calling early BORDER & FLIGHT closings, putting us way ahead in our battle with Coronavirus. Dems called it VERY wrong!
Uplifting Message, Sincere 'thanks' to health care professionals	Count: 6	Jan 31 March 11,12	RT of Administrator for Medicare, Seema Verma: "Thank you @Humana for your dedication to public health and safety as we work to stop #COVID19."
References DPA	Count: 1	March 18	PM: The Defense Production Act is in full force, but haven't had to use it because no one has said NO! Millions of

Table 1 | Categories of President Trump's 234 tweets during research period | Source: Eckstein/ fact-check with PolitiFact and Snopes | *content removed by Twitter/PM - personal message from President Trump / RT – retweet

Туре	Examples used in analysis
Misinformation on Hydroxychloroquine	1. Mar 21, 2020 09:13:08 AMHYDROXYCHLOROQUINE & AZITHROMYCIN, taken together, have a real chance to be one of the biggest game changers in the history of medicine. The FDA has moved mountains - Thank You! Hopefully they will BOTH (H works better with A, International Journal of Antimicrobial Agents)
	2. Mar 21, 2020 11:16:25 AMRT @MichaelCoudrey: NEW DATA: A French study has demonstrated evidence that the combination of Hydroxychloroquine & Azithromycin are highly effective in treating Covid- 19. The patients enrolled in the study showed complete viral eradication around the 5th day of treatment.
	3. Mar 21, 2020 11:15:37 PMRT @realDonaldTrump: HYDROXYCHLOROQUINE & AZITHROMYCIN, taken together, have a real chance to be one of the biggest game changers in the history of medicine. The FDA has moved mountains - Thank You! Hopefully they will BOTH (H works better with A, International Journal of Antimicrobial Agents)
	4. Mar 23, 2020 11:10:05 PMRT @AndrewCMcCarthy: Our experience suggests that hydroxychloroquine should be a first-line treatment for

	Covid-19. We can use it to save lives and prevent others from becoming infected, write @DrJeffColyer and Daniel Hinthorn.
Misinformation DPA	1. Mar 18, 2020 04:37:22 PM I only signed the Defense Production Act to combat the Chinese Virus should we need to invoke it in a worst case scenario in the future. Hopefully there will be no need, but we are all in this TOGETHER!
	2. Mar 24, 2020 07:00:33 AM The Defense Production Act is in full force, but haven't had to use it because no one has said NO! Millions of masks coming as back up to States.
	3. <u>Mar 27, 2020 10:29:32 AM</u> Invoke "P" means Defense Production Act!
Misinformation Warm Weather	1. Feb 7, 2020 05:31:23 AMhe will be successful, especially as the weather starts to warm & the virus hopefully becomes weaker, and then gone. Great discipline is taking place in China, as President Xi strongly leads what will be a very successful operation. We are working closely with China to help!
Misinformation (General)	1. Mar 1, 2020 08:31:59 AMCoronavirus: In addition to screening travelers "prior to boarding" from certain designated high risk countries, or areas within those countries, they will also be screened when they arrive in America. Thank you! @VP @SecAzar @CDCgov @CDCDirector
	2. <u>Mar 1, 2020 07:52:06 PM</u> RT @TrumpWarRoom: Health and

	Human Services Secretary Alex Azar on the Coronavirus: "The risk to average Americans remains low. We are working to keep it low"
Misinformation (False Hope)	1. Feb 26, 2020 02:22:50 AMRT @realDonaldTrump:Democrats talking point is that we are doing badly. If the virus disappeared tomorrow, they would say we did a really poor, and even incompetent, job. Not fair, but it is what it is. So far, by the way, we have not had one death. Let's keep it that way!
Unverified	1. Mar 13, 2020 10:58:43 PMRT @TeamTrump: MUST READ: Joe Biden Plagiarizes President @realDonaldTrump's #Coronavirus Plan! https://t.co/nr5uEjOJUt
	2. Mar 9, 2020 09:47:59 AMSo last year 37,000 Americans died from the common Flu. It averages between 27,000 and 70,000 per year. Nothing is shut down, life & the economy go on. At this moment there are 546 confirmed cases of CoronaVirus, with 22 deaths. Think about that!
	3. Mar 24, 2020 05:38:49 AMRT @RealJamesWoods: Voter fraud by Democrats is the second most dangerous thing to happen to America since this virus.

Table 2 | President Trump's tweets containing misinformation used for analysis | Source: Eckstein/fact-checked with PolitiFact and Snopes | A complete list can be found here

Through this content analysis of findings illustrated in Table 1 and 2, it is evident that the President used his personal Twitter platform to spread false information regarding COVID-19. What is less apparent in the data is that the three Twitter accounts associated with the Trump administration - his personal account @realDonaldJTrump and the government official accounts @POTUS and @WhiteHouse - use videos of the President as the predominant method of spreading misinformation. This is because most of the President's COVID-19 related misinformation was disseminated through the televised 'Coronavirus Task Force' meeting that is shared on all three of these platforms, with absolutely no impunity from social media sites. Though during the research period 37 separate cases of misinformation were issued, some attached to press briefing videos of the President, most government official social media posts that are attached to Facebook and Twitter fly under the radar, never to be flagged by misinformation detection algorithms. Moreover, the three aforementioned Twitter accounts associated with President Trump are the primary communication platforms for the Administration. The accounts' respective Facebook pages mainly repost content that is already on Twitter, illuminating the dominance of Twitter in the President's life.

It is worth mentioning that @WhiteHouse never directly retweeted the President during the research period, tagging him only five times. Since the President assumed office this account has mentioned him 38 times, and the @POTUS account referenced him 59 times, whereas the President's personal accounts through both retweets and original tweets mentioned himself 10,821 times. Aside from reposting videos that contained misinformation, the @WhiteHouse account kept their written posts strictly to factual health information; the same went for @POTUS. Interestingly, of the 177 presidential tweets shared by @realDonaldTrump, 166 of them were retweeted from other accounts. Similarly, 18 of the 37 pieces of confirmed

misinformation from the president's personal account were also retweets. This clarifies an important feature of how the President spread misinformation, through the voices and opinions of other people that can be perceived as distant from the President's own voice.

The four instances of presidential misinformation regarding Hydroxychloroquine featured in Table 2 highlight the nuance of false information and the inherent political undertones apparent in the tweets. In March when the President first heard about the potential for the drug to be used in treating COVID-19, he seemingly jumped at the opportunity to provide hope to Americans stuck in a storm of depressing headlines. Rather, his tweets were examples of 'false hope' that further politicized a public health crisis. Largely, the scientific community did not place any credence on the drug because it lacked large scale data. Yet, smaller inconclusive studies started to appear and the President retweeted some of them in effect supporting the statement that Hydroxychloroquine "has a real chance to be one of the biggest game changers in the history of medicine. The FDA has moved mountains." Upon further inspection of this retweeted statement, the President is safeguarding his assertion by saying the drug has the chance to be effective, essentially not guaranteeing its efficacy. Nonetheless, the statement "the FDA moved mountains" implies the agency worked quickly to get the drug approved for the treatment of COVID-19 which is inaccurate. The FDA did allow Hydroxychloroquine to be used for terminally ill patients who were likely to die under the 'Right to Try Act' (2018). The President said:

It (Hydroxychloroquine) has shown encouraging early results. We are going to be able to make that drug available almost immediately. That is where the FDA has been so great. They have gone through the approval process. It has been approved. They did it...I spoke with Governor Cuomo about it at great length last night. He wants to be first in line. I

think there is tremendous promise based on the results and other tests, tremendous promise. Normally the FDA would take a long time to approve something like that. It was approved very quickly. It is now approved by prescription. Individual states will handle it. They can handle it. Doctors will handle it. I think it will be great. (President Trump, 2020).

At the time, the President had also tweeted anecdotal evidence from two studies hypothesizing that the medication could be used to treat symptoms of COVID-19. One was from a nonrandomized clinical trial of 20 people whose median age was 50 - causing leading scientific experts like the director of the National Institute of Allergies and Infectious Disease, Dr Anthony Fauci, to condemn definitive statements about the drug without a complete, large-scale trial. The other found that in-vitro activity between Hydroxychloroquine and COVID-19 vero cells could be helpful in reducing the cytokine storm that occurs at a later phase of the disease (Pennycook et al, 2020). Though, the study explicitly stated: "currently, there is no evidence to support the use of hydroxychloroquine in (COVID-19) infection." Still, the President's communication at the 'Coronavirus Task Force' briefing leads one to believe that Hydroxychloroquine was approved by the FDA specifically for treatment of COVID-19 - a statement that is untrue. Nevertheless, Trump's nominated commissioner of the FDA, Dr Stephen Hahn, who only assumed office in December, 2019, went on to thank the president, give a brief description of his qualifications, and assure the American people that he was doing everything in his power to be flexible in the safe approval and development of lifesaving treatments ('Coronavirus Task Force', 2020). The Commissioner showed solidarity with the 'Coronavirus Task Force' during this generationally unprecedented public health emergency, adding details to clarify and correct the President's dissemination of false hope and false information. Dr Hahn first clarified the limitations to the

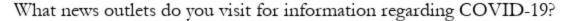
President's assertion that the drug was approved by the FDA and available immediately, citing the FDA's compassionate use rule which allows doctors to prescribe unapproved medicines to treat seriously ill patients in the special event that no treatment exists for the disease. A doctor would have to apply for usage of Hydroxychloroquine for dying patients and the FDA was promising speedy approval of a process legally permissible under 'The Right to Try Act', utilizing an end-of-the-line attitude that surmises the drug may help and probably would not hurt the patient. Dr Hahn continued by stating:

It's already approved, as the President said, for the treatment of malaria, as well as an arthritis condition. That's a drug that the President has directed us to take a closer look at, as to whether an expanded-use approach to that could be done to actually see if that benefits patients. And again, we want to do that in the setting of a clinical trial — a large, pragmatic clinical trial — to actually gather that information and answer the question that needs to be answered and — asked and answered.

Whereas the President explicitly deemed Hydroxychloroquine as approved by the FDA for the treatment of COVID-19, Dr Hahn veiled that misinformation by making it seem as though the President alluded to the drug's approval for the treatment of Malaria. The Commissioner continued by clarifying that the drug needed to be studied under a "large, pragmatic clinical trial". Instead of using the overwhelming scientific consensus that Hydroxychloroquine needed to be further studied, over the next few days, the President continued to praise the drug, tweeting on March 21st that the combination of Hydroxychloroquine and Azithromycin had a real chance to be one of the "biggest game changers in the history of medicine." This post, written by the President, received 443,000 likes, 43,000 comments, and 103,000 reshares on Facebook and over 372,000 likes, 27,000 quotes, and 100,000 retweets on Twitter. The President later retweeted this

tweet, giving it more exposure to his over 85 million followers. Using Google Trends, a data site that analyses interest over time spans on Google, it is possible to generally correlate search interest and President Trump's tweets and news media coverage. The number represents search interests relative to the United States. A value of 100 means that term was at peak popularity; whereas a value of 50 means that it was half as popular. A 0 means there was not enough searches and too little data on the term. So, for example, the term 'Hydroxychloroquine' in the first week of March, 2020, had relatively no searches and a score of '0'. The following week from March 8 to the 14th, when a small-scale survey released anecdotal evidence that the drug could treat COVID-19, the score rose to a '4'. Finally, when Trump talked about the drug's potential in a 'Coronavirus Task Force' meeting, the score jumped to '64' showing that generally people are independently going to Google as a means of internet fact-checking, discussed in more detail in 'Chapter 2'.

Before going into further analysis of information from Table 1 and 2, it is vital to understand the news media's role in this ecosphere of information. The majority of American Millennials surveyed visit CNN (10.3%), The New York Times (8.3%) and Other (8.3%) for their COVID-19 related information. It is no surprise that two of the largest and most reliably accurate news sources are frequented by Millennials, though what is of importance to note is that Millennials are presumably going to other non-mainstream outlets to acquire news. The influx in popularity of podcasts and niche blog sites is most likely a factor in why Millennials look to other outlets for their information.



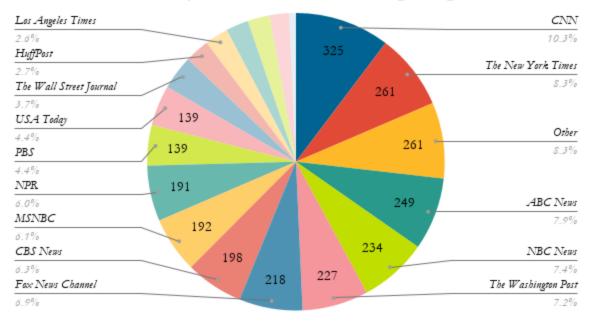


Figure 1.2 | Source: Eckstein/YouGov | Respondents chose three outlets

On February 24, 2020, four days after the global stock market crash began due to COVID-19 fears, President Trump issued a tweet stating "the Coronavirus is very much under control in the USA." A barrage of comments and memes made light of the President's desire to disseminate unfounded hope as Health officials predicted the virus would steadily increase over the coming weeks and months. Yet, Trump's public communication on the virus was a watered-down version of how he truly felt, as uncovered by Bob Woodward, conveying deep concern about the future of the country behind closed doors. In a top-secret intelligence briefing on January 28, 2020, Robert O'Brien, the Assistant to the President for National Security Affairs (APNSA), told the president that "this will be the greatest national security threat you face in your presidency." Ten days later, President Trump admitted to Bob Woodward, the Associate

Editor for The Washington Post, that he believed the coronavirus situation was far more alarming than he revealed to the public. "This is very deadly stuff" the president repeated (Pelley, 2020).

Over a hundred years ago, America's president was purposely silent when it came to a public health emergency and the media was complicit. Today, as the world undergoes another viral pandemic, President Trump and the media have a rather different response, mainly because new media technologies facilitate an unprecedented ease of communication. President Trump uses social media platforms as an alternative news agency to communicate directly with his followers, often spreading misinformation as means to insight his supporters and sow distrust in the media, ultimately causing the country to be more polarized. Consequently, the news media is saturated with content and exists in echo chambers where self-described liberals and conservatives visit sources that reinforce their opinions. Often news organizations use social media to promote their published content, sometimes unintentionally exacerbating political misinformation to trending status giving it unwarranted circulation. Specifically, regarding COVID-19, both the President and the news media are confronted with a circumstance that is testing the efficacy of their foundational pillars. The mainstream media, sometimes referred to as the fourth estate acting as a check and balance system for the official branches of government, is protected by the freedom of the press clause in the first Amendment of the Constitution. Similarly, before assuming the Presidency, Thomas Jefferson felt the preservation of the press as vital to the proper functioning of democracy. Yet, once he became President, his views changed stating: "Nothing can now be believed which is seen in a newspaper. Truth itself becomes suspicious by being put into that polluted vehicle. The real extent of this state of misinformation is known only to those who are in situations to confront facts within their knowledge with the

lies of the day." Though his criticism was restrained to letters, his feeling that the news media turned into a "putrid state" filled with sensationalism and slander are sentiments that are disseminated by President Trump on Twitter.

Furthermore, using the top three most frequently used news sites by American Millennials (CNN, The New York Times and ABC News), along with the Fox News Channel as political counterweight to these generally more neutrally progressive sources, I analyse how they responded and used social media to confront Trump's misinformation specifically on Hydroxychloroquine. After President Trump issued four tweets from March 21-23, 2020, proclaiming Hydroxychloroquine as a treatment for COVID-19, CNN published an article that was then shared on Facebook and Twitter titled: "Malaria drug will be one of the treatment options in coronavirus clinical trial, WHO officials say" (Holingsworth, 2020). After two paragraphs explaining the history of the drug and President Trump's optimism, Nigam and Howard (2020) state "currently there are no treatments — including chloroquine —that have proven safe and effective against Covid-19." Two days later, CNN shared an article containing a more fervent headline stating there was absolutely no treatment for COVID-19. Nonetheless, numerous studies have shown that Millennials and in fact people in general will simply read a news headline instead of reading the whole article. Because of this, CNN needs to do more than just share their online written content on Twitter and Facebook. An example of how journalism outlets can adapt content for a social media platform is how The New York Times reported on Hydroxychloroquine on Twitter on March 24, 2020. They attached an image of a short sentence that read "some of the drugs that doctors have been stockpiling - including chloroquine and hydroxychloroquine - are commonly used to treat malaria, rheumatoid arthritis, and other conditions" (Gabler, 2020). This background information was accompanied by a caption that

stated: "None of the drugs have been approved by the FDA to treat the coronavirus." Notably, content from a written article was adapted for Twitter, making it more shareable and clearer to the reader. Moreover, ABC News on twitter posted a video of Governor of New York, Andrew Cuomo, saying that he was optimistic about Hydroxychloroquine. Also, they published an article that stated "The rush to find a treatment for the novel coronavirus continues to intensify as the number of diagnosed cases around the world grows significantly" (Lantry, 2020). Framing the news information like this is crucial in not overstimulating feelings of false hope. Largely these three examples illustrate that information should be tailored to social media to fit the viewing habits of American Millennials who are most likely not going to the news source directly.

In contrast, Fox News did not post any news related to Hydroxychloroquine in the research period. They did however publish a live video of the 'Coronavirus Task Force' meeting from March 25th where President Trump again mentioned the promise of the drug (Fox News, 2020). This shows that even news organizations sharing of video is a subtler way of both unintentionally and purposely spreading false information.

Each part of the modern media ecosphere has a role to play in spreading misinformation. Mainly, as discovered thus far in this research political actors like President Trump use the inherent structure of social media platforms like Facebook and Twitter to spread misinformation, sowing distrust and furthering political division. And, although the President uses the mainstream news media as a method of politicizing the truth, news outlets broadly attempt to report honestly and correct factual inaccuracies.

Chapter 2: The Modern Media Ecosphere and the American Millennial

The COVID-19 pandemic has provided a time for American Millennials to reflect on their relationship with the modern media ecosphere because health information is more crucial than ever before in their lives. American adults under 40 are inheriting a post-COVID world that looks and feels different than before. This generation's trust in the media ecosphere's institutions of politics, news, and social media is diminishing. They expect more from social media sites to block and remove false information; like other generations they distrust politicians and the news media. Though as this research indicates, American Millennials largely feel that the news media is doing a good job of reporting on COVID-19.

Do you think that media coverage of COVID-19 has made you better informed regarding how to protect yourself against the virus?

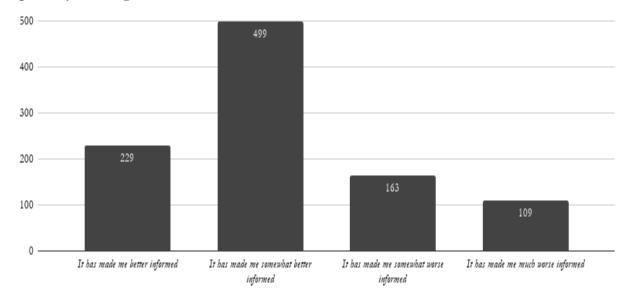
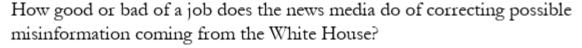


Figure 2.1 | Source: Eckstein/YouGov

Moreover, 49.9% of respondents felt that news media coverage has made them somewhat better informed of how to protect themselves against COVID-19. Additionally, 22.9% are more confident in their understanding of COVID-19, stating that news coverage had made them better informed. This is juxtaposed with roughly 24% of respondents who feel news coverage had made them either somewhat worse or much worse informed. In comparison, Millennial trust in the information coming from the news media is much higher than trust in information coming from the White House. On the contrary, even though most respondents feel the media has generally made them better informed, most American Millennials feel that the news media does a somewhat bad (31%) or very bad (22.2%) job at correcting possible misinformation from the White House.



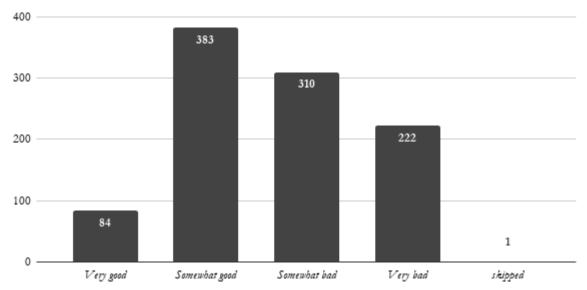


Figure 2.2 | Source: Eckstein/YouGov

How much do you trust information about COVID-19 coming from the White House?

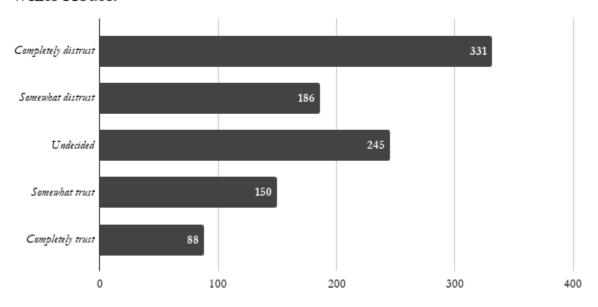


Figure 2.3 | Source: Eckstein/YouGov

Over 51% of respondent's distrust COVID-19 information from the White House. And, given the deluge of confirmed misinformation provided in this research study, this was almost expected. Though 23.7% of respondents consider themselves Republicans, and another 19.4% are Independents, this data proves that partisanship is not the only factor when it comes to trusting information from the White House that directly impacts the respondent's health.

Nonetheless, most respondents (54.8%) are not willing to hear information and advice related to COVID-19 from journalists and politicians whom they view as having different political beliefs than their own. This reinforces the importance people place on politics as an extension of their identities.

How willing are you to listen to COVID-19 information and advice from politicians and journalists who you believe hold different political views than your own?

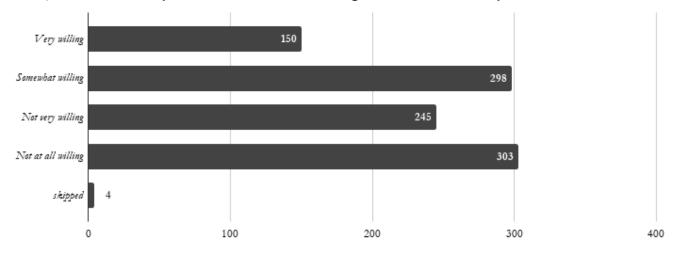


Figure 2.4 | Source: Eckstein/YouGov

Although this political preference exists where most of American Millennials are not willing to listen to news and information from journalists and politicians who do not hold their same views, this sentiment is untrue when it comes to respondent's friends and family on social media. This is because tangible real-life memories and a shared history of possibly going to high school together and Thanksgiving dinner allows people to see past politics and toward more wholesome human connections.

Have you unfriended or blocked friends and family on social media because of their views and posts regarding COVID-19?

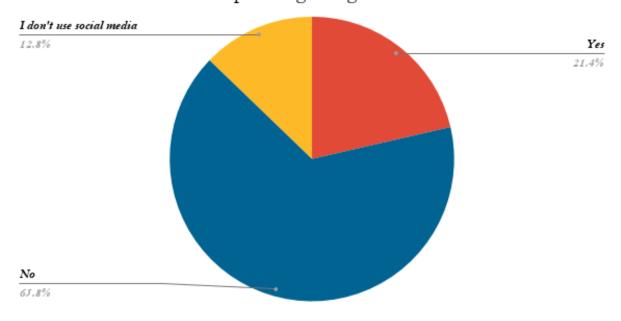


Figure 2.5 | Source: Eckstein/YouGov

Lastly, respondents answered an open-ended question offering deeply insightful information on steps they take to independently check whether the information they hear in the news and from politicians is factual. Their answers are fundamental reasons for why media literacy education should be implemented in every school across the country. Mostly, 40.6 % of Millennials check the information they receive in the news by referencing other news sources they deem to be credible. Figure 2.6 is codified with numbers that refer to categories in Table 3 provided below.

What steps do you take to check if the information you hear from politicians and the news media is accurate and factual?

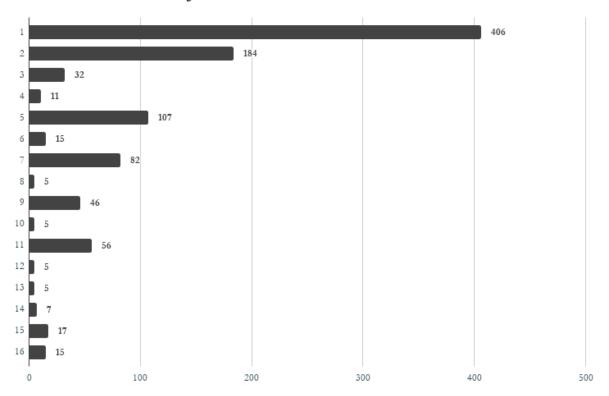


Figure 2.6 | Source: Eckstein/YouGov

1	Corroborates information coming from the news media and politicians with other news sources. Checks sourcing in articles.
2	The respondent does nothing to check the information they receive.
3	Confirms information through well-regarded Fact Checking websites and organizations like Snopes and PolitiFact.
4	Conservative comment that does not fully

	answer the question but expresses overall distrust in the entire media and political system.
5	Checks information through a search on web browsers like Google or Bing.
6	Checks information on social media sites like Facebook, Twitter, Instagram, and Reddit.
7	Consults peer reviewed scientific research, health/governmental organizations like the CDC/WHO/coronavirus.gov.
8	Checks information by personally consulting a doctor or medical professional.
9	Respondent does not listen to the news media and/or answered by stating 'Not Applicable'.
10	Consults with family and friends.
11	Incomplete response not addressing the question.
12	Memorable comment that does not necessarily answer the question but explains the respondents outlook on information regarding COVID-19.
13	'I think for myself', response does not fully answer the question.
14	Anti-Conservative politics comment that does not fully answer the question.
15	Respondents check information coming from the news media and politicians by using their own judgement to tell whether something is factual or not.

16	Respondent distrusts the news media and politicians completely.

Table 3 | Source: Eckstein

18.4% admitted to doing nothing to check whether the information they receive is accurate, and as one respondent put it, "there simply isn't enough time for this." Moreover, 10.7% look up the information in a search engine like Google or Bing. 8.2% of Millennials go directly to public health organizations like the CDC and the WHO to corroborate whether information they receive on COVID-19 is factual. Furthermore, a very small percent of the data (3.2%) shows that Millennials go to professional fact-checking websites like Snopes and PolitiFact. Nonetheless, although these more substantial percentages imply that Millennials check the news by referring to other news sites or by doing nothing at all, it is the seemingly insignificant percentages that I believe reveal a more interesting picture of how people feel about the modern media ecosphere.

There is inherent distrust in the ecosphere of politics and information. One respondent said "Politicians never speak truthfully, so I can safely assume what they say is inaccurate and that it's propaganda designed to screw the working class and benefits the billionaire donor class." Another felt that all news is sensationalism and that all politicians are corrupt. There is no question that many Millennials feel disenfranchised with the institutions of democracy causing overwhelming distrust in the entire system. Some respondents were disdainful toward the two-party system. One person said: "Usually I don't have to (fact-check). The GOP have made themselves notoriously unreliable in stumbling over themselves to avoid paying for being Trump supporters." More conservative Millennials felt different. One respondent said: "We can pretty much assume that if it comes out of the mouth of a Democrat or mainstream news media, it isn't

true." A lot of respondents admitted to simply not having the ability to tell whether information is true or false, some referencing their skills others pointing toward a philosophical debate on whether the truth exists. One great response stated: I think about things with my own brain and I think "would my mother in law fall for this" and if that is a yes, I think the opposite."

Surprisingly, a few people said they used their own judgement to tell whether the news they hear was true or false. One Millennial said: "I mostly just make sure it sounds correct."

Biasedly, my favourite comment lies within a respondent's invocation of an old idiom. In fact, a few people said this exact phrase: "I take it with a grain of salt." Interestingly, a theory exists that 2,000 years ago a naturalist, Pliny the Elder, discovered an antidote to a common poison. One of the ingredients was a grain of salt, thus suggesting that anyone suspicious they might get poisoned should just "take it with a grain of salt." What an appropriate metaphor for this dissertation. The many factors that compete for our attention in the modern media ecosphere, intent on 'poisoning' the public with dirty politics and misinformation, can not cause any harm if we simply "take it all with a grain of salt."

Conclusion

My younger brother Jordan plays on an American Football team where recently a teammate was found to have COVID-19. The school sent out an email stating that if parents and students though it be prudent, then they should go get tested, but that ultimately it was not necessary. To our surprise, we were the only family to quarantine, get tested, and wait for the negative results before re-integrating into everyday life. When we asked the Athletics Director, why he did not enforce a team-wide quarantine, he said: "Well, we can't get political?"

Arguably, the findings from this research illuminate that the modern media ecosphere, an environment where politicians like President Trump use their bully-pulpit to sow distrust and politicize America's response to COVID-19, is slowly eroding. Political commentators are worried that America is headed to a Second Civil War and it is plausible that the relationship between political sides is comparable to a Cold Civil War.

Overall, this dissertation focused on using the analytical framework of the modern media ecosphere to evaluate how President Trump, the news media, social media and the American Millennial interact. It is clear from this research that the inherent algorithmic structure of social media allows for political misinformation to flourish. Though this is not to say that social media is promoting misinformation. Instead, political actors like President Trump use COVID-19 misinformation to sow distrust in the media ecosphere, using Facebook and Twitter to spread false information. Finally, through a nationally representative survey in partnership with YouGov, this dissertation concluded many original findings about American Millennials. Most notably, the majority do not vote, do little to check whether the information they receive is

factual, and believe social media sites should be checking whether information coming from politicians and the news is accurate.

In conclusion, more research on a large-scale should be conducted into how innovative media literacy education can prepare Millennials and future generations with how to deal with mis- and disinformation. Consequently, more research needs to be conducted on how people with different ideological perspectives and disparate news consumption can find ways to agree on facts especially pertaining to public health crises. It is imperative that researchers find ways for Americans and all people to rise up and come together, or at least agree upon reality a little more.

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