

NARRATIVE SOLUTIONS TO CLIMATE CHANGE

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Climate change is one of the preeminent problems facing humanity today. It has the potential to cause incalculable damages, loss of life and property, and can create an almost unlivable habitat for humans on this planet. Governments need to act in order to stop future climate harms, but the electorate must be literate in the subject in order to do so. One of the jobs of the media is to inform the public, and so it is imperative that the media find a way to accurately inform the U.S. electorate about the changing climate in order to stimulate pro-environmental behavior and voting. It was hypothesized in this thesis that journalists should utilize narrative instead of simply relaying statistics and fact-based information to better engage the electorate and that it would prove a better way to educate them about science topics such as the climate. However, the politicization of such topics could not be ignored and so needed to be accounted for. A 2x2 factorial analysis was done using narrative versus fact-based stories with either conservative or liberal news outlet headers. These were then tested against three covariates: political ideology, narrative transportation, and locus of control. This research found that political ideology was far and away the best predictor of a person's stance on climate change cognitively, affectively, and cognitively, and it was not moderated by locus of control, frame, or source. While narrative showed significance when it came to emotional engagement, it did not show significance on other level.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
CHAPTER 1. INTRODUCTION	1
CHAPTER 2. LITERATURE REVIEW	6
The Role of the Media and the Fight Against Fake News	9
Politics and the Politicization of Science	16
Intuition, Belief, and Control	21
Narrative Framing	30
CHAPTER 3. RESEARCH QUESTIONS AND HYPOTHESES	34
CHAPTER 4. METHOD	39
Covariates	40
Dependent Variables	41
Independent Variables	42
Manipulation Checks	43
Post-Test Measures	44
Demographics	45
Open-Ended Question	45
CHAPTER 5. RESULTS	47
CHAPTER 6. DISCUSSION	60
APPENDIX A. SURVEY INSTRUMENT	68
APPENDIX B. OPEN-ENDED RESPONSES	83
REFERENCES	118

CHAPTER 1

INTRODUCTION

Climate change is an issue that continually grows in importance. However, without substantial changes in thoughts, attitudes, and behaviors in the United States, this issue will only get worse. The latest report by the Intergovernmental Panel on Climate Change (2021) asserts that humans have warmed the planet at an unprecedented rate, and many changes in the climate system will become larger in direct relation to increased warming, such as increases in the frequency and intensity of hot weather, marine heatwaves, heavy precipitation, agricultural and ecological droughts, strong tropical cyclones, and decreases in Arctic sea ice, snow cover, and permafrost. Those weather events could induce massive economic impacts and suffering on a global scale if not contained (Gates, 2021; Kolbert, 2021; Tan et al., 2021; UN Climate Change Conference, 2021). However, even though humans have known about the greenhouse gas effect and the possibility of climate change since the late 1800s and most Americans today agree humans are the cause, not enough has been done to abate its continual progression from bad to worse (Andrew, 2019; Chinni, 2021; Corfee-Morlot et al., 2007; Plumer & Popovich, 2021; Strozewski, 2021; Thomson, 2019; UN Environment Programme, 2021; UN News, 2021).

By reporting on such events as California wildfires, frequent and extreme hurricanes, and rising average global temperatures, the media can have a strong influence on public attitudes and are responsible for informing the public about how these problems relate to climate change (Bord, et al., 2000; Chinn et al., 2020; Environmental Protection Agency, n.d.; Liu et al., 2020; McCombs, 2005; NASA Global Climate Change, n.d.; Patterson & Seib, 2005; Strömberg, 2001). However, influence from outside sources such as politics can change how the media present those topics. Because citizens cannot directly observe politics in action most of the time,

the news media are one of the major windows for them to see it, “and what they see through it will affect not only what they think about but how they think about it” (Patterson & Seib, 2005, p. 192). In other words, the way the media present climate information can affect the way the public creates its political identity and votes on the topic (Cohen & Tsfati, 2009; DellaVigna & Kaplan, 2007; Dewenter et al., 2019; Levendusky, 2013).

However, misinformation campaigns and the politicization of science also affect the way the media inform the public on scientific topics like climate change by spreading doubt, emphasizing the inherent uncertainty of science, covering certain topics over another, destabilizing public trust, using polarizing speech, and putting undue emphasis on partisan beliefs (Bolsen & Druckman, 2015; Chinn et al., 2020; Druckman et al., 2017; Gauchat, 2012; Linde, 2020; Schmid-Petri, 2017; Union of Concerned Scientists, 2007; Waldman, 2019). Druckman et al. (2017) notes that even if a particular partisan media’s audience is limited, the dedicated audience members are especially likely to be opinion leaders who spread what they watch and disseminate the partisan ideas to a wider public. “Even with a small audience, the net effects of partisan outlets need not be small” (Druckman et al., 2017, p. 111).

Because these politicized strategies in the media have engendered an uninformed or misinformed public in the United States about scientific subjects such as climate change, the country ranked No. 20 in a 2018 Pew Research poll on countries that see climate change as a major threat (Biddlestone & van der Linden, 2021; Cook, 2019; Fagan & Huang, 2019; Lloyd, 2011; Treen, 2020). Since the United States is a large industrialized nation, it is difficult to mitigate these global issues without the support of the U.S. electorate. Therefore, the need to educate the population on the climate change situation is critical. In order to take appropriate actions for the economic and global problems that come with a warming climate, the U.S. media

must take measures to properly inform the voting public about climate change and how to prevent it from worsening. Bord et al. (2000) notes that

The key determinant of behavioral intentions to address global warming is a correct understanding of the causes. Knowing what causes climate change, and what does not, is the most powerful predictor of both stated intentions to take voluntary actions and to vote on hypothetical referenda to enact new government policies to reduce greenhouse gas emissions. (p. 205)

To fulfill the role of creating an informed public, the U.S. media must overcome the damage of misinformation and politicization and find a way to explicate this complicated issue.

Yet, climate change has many disparate and complex elements which are often difficult to interpret or fix, particularly because its effects occur over a long period of time (Bord et al., 2000; Chen, 2011; Frantz & Mayer, 2009; Marshall, 2014; McKibben, 2022; Weber & Stern, 2011; Woodward, 2019). “Global warming is a complex phenomenon characterized by great uncertainty, even for those bearing the ‘expert’ label” (Bord, et al., 2000, p. 205). Even when correctly and responsibly explaining climate change, the media typically uses numbers-heavy research with statistics to align more with the scientific verbiage of climate scientists. However, this type of language is difficult to understand, and non-scientists tend to underestimate the critical nature of the information or see it as hyperbolic, resulting in miscommunication between the media and the public (Bruine de Bruin et al., 2021; Frontiers, 2018; Howarth et al., 2021; Kamath, 2020; Shermer, 2008; Ye et al., 2020).

This research posits that narrative is a better way for the media to inform the public about climate change instead of using numbers and statistics. Humans use story to accomplish various goals, such as exchanging information, explaining the world and its phenomena, conveying changes, and describing the environment. In fact, recent studies suggest that language may have evolved specifically for this type of social interaction (Dunbar et al., 2007; László, 2008; Storr,

2020). Storr (2020) writes “We experience our day-to-day lives in story mode ... Story emerges from human minds as naturally as breath emerges from between human lips,” and it is impossible to understand humans without it (p. 3). Because of this inherent naturalization of story within the human mind, information presented in narrative is easier for humans to make sense of than straight numbers and can be very useful and persuasive for presenting scientific information, particularly on topics as difficult to grasp as climate change (Kirby, 2018; Liu et al., 2020; Menning, 2018; Morris et al., 2019; Sangalang & Bloomfield, 2018). Using narrative framing for climate change information, the media has a different way to present scientific information, which could enhance comprehension of its complex concepts because it is easier for the human mind to understand. “The human mind is a story processor, not a logic processor” (Haidt, 2012, p. 328). Because humans are hardwired for story, it is a very effective way to get people’s attention and explicate detailed, complex information to appropriately inform their opinions, choices, and potential future votes (Storr, 2020).

Research has found many examples of how the politicization of science has affected voters’ perceptions of subjects such as climate change, which in some cases has stunted efforts to curb its global problems. Research also indicates humans are naturally storytellers, and the human brain is hardwired to understand story in ways different from strict statistics-based information. However, up to this point, not much research has been conducted on how these two processes interact within the media and the public sphere. By synthesizing the politicization of science and narrative within a media context, this research will look at how these two processes interact within the minds of the public and how one might affect the other. To test whether narrative framing of climate change in the media is effective, even in the context of politicization, this research will use one narrative story and one statistics-based story written on

the same climate change topic. These stories will be shown to respondents with either a conservative FOX News title or with a liberal MSNBC title, cueing a political leaning to the respondents.

By testing for politicization within the context of narrative framing in climate change media stories, this thesis will add to the current literature by showing how the politicization of science and narrative framing interact within the population, if one can be influenced by the other and, if so, to what degree, as well as if narratives can be used to better inform the public about science topics opposed to statistics-based stories even when politicization is present. This information could potentially suggest how the media should write climate change stories to further the public's overall understanding of science concepts, possibly affecting its thinking, opinions, and voting habits, and humanity's ability to mitigate the damaging effects of climate change in the future.

CHAPTER 2

LITERATURE REVIEW

Climate change is one of the preeminent problems of our time (Gates, 2021; Intergovernmental Panel on Climate Change, 2021; McKibben, 2022; Schmid-Petri et al., 2017; Thunberg et al., 2021; UN Climate Change Conference, 2021). “The climate crisis is at all times the most important thing happening on earth, by far” (McKibben, 2022, para. 6). Scientists have been aware of the problems that greenhouse gas could inflict on the environment since the 1800s, starting with Joseph Fourier’s discoveries on the greenhouse effect in 1824 and 1836, Eunice Newton Foote’s 1856 discovery on CO₂ in the atmosphere causing a higher temperature, and John Tyndall’s research building on her findings three years later (Corfee-Morlot et al., 2007; Thompson, 2019). Science continued to build on those findings until the 1960s when most of the scientific knowledge needed to understand climate change became clear (Corfee-Morlot et al., 2007). However, a warming climate has brought a complex set of problems, such as drought in some areas and severe storms in others, that converge in ways even top scientists cannot always predict and that can be too difficult for the media to cover (Bord et al., 2000; Chen, 2011; Frantz & Mayer, 2009; Marshall, 2014; McKibben, 2022; Weber, 2015; Weber & Stern, 2011; Woodward, 2019).

Part of the reason that climate change could potentially reach catastrophic levels despite human knowledge about its existence for decades is the fossil fuel industry, which knew about the problems it was creating in the climate but actively capitalized on the inherent difficulties of the topic and fought to keep these problems either hidden or in a constant state of confusion in the eye of the public (Brulle, 2014; Curran, 2005; Dunlap & McCright, 2011; Franta, 2021; McGreal, 2022; McKibben, 2022; Pattee, 2021; Supran & Oreskes, 2017; Supran & Oreskes,

2020; Union of Concerned Scientists, 2007; Waldman, 2019; Wright & Nyberg, 2021; Zhang, et al., 2018). For example, Exxon employed scientists to write papers on the subject, and one of them, hired in the 1980s, was a co-inventor of the lithium battery now used in electric cars (Pattee, 2021). “They could have easily built huge factories to make lithium batteries to facilitate the transition to electric cars. Instead, they fired this guy. They shut down all their energy work. And they started funding climate deniers” (Pattee, 2021, para. 8). The industry had used the media to run misinformation campaigns and increase the politicization and polarization of science in the eye of the public over decades to make sure that action was not taken to curtail its activities regardless of their effects on the planet and had set up difficult-to-fix circumstances that would take tremendous efforts from countries around the world to cure (Brulle, 2014; Dunlap & McCright, 2011; McGreal, 2022; Pattee, 2021; Plumer & Fountain, 2021; Plumer & Friedman, 2021; Supran & Oreskes, 2017; Supran & Oreskes, 2020; Zhang, et al., 2018). “The fossil fuel industry ran an enormous disinformation campaign over decades, using its resources to muddy the waters and playing into journalism’s cult of objectivity to make it a he-said/she-said story for as long as possible” (McKibben, 2022, para. 3).

Starting mostly in the 1960s and 1970s environmental movements, the United States has tried to inform its citizens of environmental problems that needed immediate action, leading to environmental campaigns, the Clean Air Act, the Clean Water Act, and other actions and legislations intended to protect the planet. However, these actions and laws could not prevent the release of greenhouse gases enough to protect the atmosphere from warming to unprecedented levels (Ogrodnik & Staggenborg, 2016). Even though most Americans today are concerned about climate change and 57% believe it is caused by humans, many people still do not understand the threats posed by climate change, and not enough has been done to stop rising

temperatures (Chinni, 2021; Climate Action Tracker, 2021; Leiserowitz et al., 2022; Plumer & Fountain, 2021; Plumer & Friedman, 2021). Even at COP26 in Glasgow, which was the most recent global event concerning climate change actions, many scientists agreed that still not enough is being done and the success or failure of any deals made at COP26 “will hinge on whether world leaders now follow through with new policies to cut greenhouse gas emissions” (Plumer & Friedman, 2021, para. 2).

It is too late for individuals to make personal changes that will significantly slow climate change. “What can we, as individuals, do? ... Eat local? Green our homes? Buy green? All of this is fine and necessary, but the most important thing is missing: political action! To an enormous degree, governmental action outweighs and shapes individual actions” (Lakoff, 2010, p. 77). The human race is now at the point where large-scale government interventions are necessary to make a difference in how the earth’s climate will change over the next 100 years. Even if countries keep their climate promises, the earth could still be on track to warm about 2.7 degrees Celsius since pre-industrial times (Climate Action Tracker, 2021; Hersher, 2021; Plumer & Fountain, 2021; Plumer & Friedman, 2021). Additionally, even over 60 years after science discovered the reasons that the climate was warming, the majority of climate anxiety, the responsibility of stopping it, and the most to lose from failing fall to younger generations who did the least to cause it: Millennials and Generation Z (Mier, 2020; Thunberg et al., 2021; Tyson et al., 2021). In a *New York Times* article, Thunberg et al. (2021) states that

Young people like us have been sounding this alarm for years. You just haven’t listened ... For children and young people, climate change is the single greatest threat to our futures. We are the ones who will have to clean up the mess you adults have made, and we are the ones who are more likely to suffer now. (paras. 2, 4)

Although greenhouse gasses emitted from human actions have been allowed to build in the atmosphere for over 100 years, past generations and current administrations simply have not

done enough to abate them. Making sure the earth does not get even hotter requires that governments completely fulfill their promises on climate action and that the U.S. electorate continue to pressure them by voting for candidates with pro-environmental policies that prioritize the environment over problem industries (Plumer & Fountain, 2021; Plumer & Friedman, 2021). However, in order to have an informed opinion, voters must first be properly educated about climate change, including what it is, how bad the problems are, and how they can stop it.

The Role of the Media and the Fight Against Fake News

A functioning democracy requires freedom of the press. Thomas Jefferson wrote in a letter to James Currie in 1786, “Our liberty depends on the freedom of the press, and that cannot be limited without being lost” (Founders Online, n.d.). Cook (2005) notes in *The Press*:

Political communication receives special treatment in the United States for a simple reason: it is vital to the consent of the governed ... officials’ communication with the public—and with one another—is crucial to the two central elements of representation: knowing how to act on behalf of the people and being responsive to their needs and concerns. (p. 115)

Creating an informed electorate is a part of why a free press is necessary for a democracy to work. The voting public must be informed of politics, policies, and candidates to make a rational decision about whom to vote for in elections. But even when a press is considered free, is it still fulfilling its functions within a democracy? Curran (2005) writes that broad consensus about how the media can best serve democracy includes keeping people informed and adequately briefed about public affairs and the processes of self-government, being the “fearless watchdog,” providing an open platform of debate, facilitating the formation of public opinion, and being the voice of the people (Curran, 2005). “In short, the primary democratic tasks of the media are to inform, scrutinize, debate, and represent” (Curran, 2005, p. 120).

However, while this view of the media is not wrong, he discusses some stipulations about

what the media actually do and some prerequisites that must be met within the media as well as the electorate before a free press can fulfill these duties in a democracy. First, the relationship between the media and politics is not as cut-and-dried as it might seem. He argues that governments devote time and resources to influencing the media “in order to communicate official policies and concerns and win public approval” and in this way, the media would better be looked at as a two-way channel of communication between governments and the publics (Curran, 2005, p. 121). He states that the media needs to be understood in relation to a wider political environment as opposed to an isolated spotlight.

Another function of the media within a democracy is creating a place of public debate, but this function does not always work as intended. Curran (2005) points out that the media tends to be dominated by elites and their voices may overwhelm public discourse. “This can assist them to present their own special interests as being in the interests of all, and to win popular consent for the policies, social arrangements, and ideas they favor” (Curran, 2005, p. 126). He states that in order to curb this process, the media should represent dissenting, marginalized, or minority voices on a topic. However, in the climate change debate, this idea has been weaponized by the very elites who wished to muddy the waters on science. Curran (2005) warned of what he calls “adversarial journalism” and its negative effects, saying that “it can lead to the circulation of scurrilous information” with no basis in the truth and “partisan values can also penetrate the workings of large media conglomerates and distort the functioning of democracy” (p. 127). While Curran was not specifically discussing the topic of climate change and the misinformation being spread through the media about it, he has pinpointed exactly how the media was used by elites, interest groups, and politicians who wish to further their special interests against actions that can mitigate climate change.

To fulfill its function, the media must also act as the information and truth provider. In this context, Curran does not discuss climate change, specifically, but another worldwide health hazard from tobacco. Here, he discusses how the media played a role in informing the public about health and science information as it was being discovered, and therefore fulfilling its duty. “This informs the people about the risks involved, but also helps to build consent for government action against smoking” (Curran, 2005, p. 130). In this way, it is the media’s responsibility to report scientific consensus to the public and will aid them in making correct and appropriate decisions about government policies. However, “partisan media are essentially propagandist, advancing at best partial truths” (Curran, 2005, p. 130). It was precisely in this way that partisan media outlets propagated misinformation at the behest of fossil fuel industries and special interests to make sure the public was not fully aware of the dangers they presented to the climate. The media covered climate change as if it were a contested issue even though it was not, and in this instance the media did not fulfill its obligation to keep the public informed.

Curran also notes that the blurring of lines between the media and entertainment affects society. He states that media entertainment can influence how people view themselves within a social context because people’s sense of social identity, or how they define themselves in terms of membership within diverse communities of religion, ethnicity, class, gender, and generations, “is a key dynamo driving politics, influencing both political affiliation and belief” (Curran, 2005, p. 136). However, Curran (2005) gives the following warning:

In short, media entertainment and politics are so closely intertwined that it is difficult to understand why they should be viewed as distinct and separate. ... Media entertainment does not provide an adequate way of being informed about what is happening in the world. Nor does it provide a suitable media for evaluating alternative policy options. ... If coverage and analysis of public affairs is eclipsed by entertainment, democracy becomes starved and anorexic. (Curran, 2005, p. 136)

When the media turns from being information and truth provider to entertainer, then a

democracy can no longer sustain a healthy existence.

Today, the line between legitimate news and entertainment is almost non-existent, which makes it difficult for the media to fulfill its obligations to the public. Many news organizations, including conservative outlets like Fox News and liberal outlets like MSNBC, have opinion shows that only present one-sided coverage of a topic (Smith & Searles, 2013). While opinion shows can be very persuasive and can exert a significant effect on viewers by focusing primarily on attacking the opposition, people who watch them tend to already be of a like mind to the presenter and cannot always tell they are watching opinion. Therefore, the audience of an opinion show tend to think they are watching news (Mitchell et al., 2018; Smith & Searles, 2013). In a recent Pew Research Poll, U.S. Americans could only correctly identify factual statements 26% of the time and opinion statements 35% of the time, and the majority could only make correct identifications roughly equivalent to random guessing (Mitchell et al., 2018). How correct a person was at differentiating opinion from fact depended on how politically active or tech-savvy they were. Yet, both Republicans and Democrats “were more likely to classify both factual and opinion statements as factual when they appealed most to their side” (Mitchell et al., 2018, p. 8).

U.S. Americans were also much more likely to believe a statement was accurate when they believe it to be factual, whether it was actually factual or not, and they were more likely to disagree with a statement when they incorrectly classified it as opinion (Mitchell et al., 2018). This finding indicates that U.S. Americans on the whole believe what they want to believe in line with their political ideology regardless of its factual accuracy. This effect can be seen in partisan news shows on both sides of politics. For instance, this specific situation happened in a recent controversial opinion piece in *The New York Times* that led to the resignation of one of its

editors. The paper published an opinion essay written by U.S. Senator Tom Cotton about using the military to put down protests, which sparked outrage among readers and caused the opinion editor James Bennet to resign (Lerner, 2020). Although the essay was published in the opinion section, “that’s a distinction often lost on the public, whose criticisms during the recent incident were often directed at the paper as a whole, including its news coverage” (Lerner, 2020, para. 4). U.S. Americans, including even those who regularly consume news, are not always able to tell the difference between hard news fact and opinion, which can result in real-world consequences, such as what happened with *The New York Times* editor.

Therefore, U.S. Americans are susceptible to fake news, which refers to fabricated information that mimics news content, lacks editorial norms and processes for ensuring accuracy, and overlaps with misinformation and disinformation (Lazer et al., 2018). In 2020, false and misleading information about COVID-19 was spread 142 times more than information from expert sources such as the CDC and WHO (Impey, 2020). Because people today have a vast range of options in watching both the news and entertainment, they tend to watch or read whatever content aligns with how they already think (Lazer, et al., 2018; Prior, 2005; Smith & Searles, 2013; Tong et al., 2020). This phenomenon indicates that people tend to spread disinformation about COVID-19 and other topics more frequently than more reliable information of legitimate organizations because they already believe the disinformation material and have no reason to dispute it.

According to a Pew Research Poll in 2016, while 64% of U.S. Americans say fake news causes a great deal of confusion, 84% said they were either somewhat confident or very confident in recognizing fabricated news (Barthel et al., 2016). However, the same poll also found that about a quarter (23%) of those surveyed admitted to sharing fake news, 16% said they

did so inadvertently, and 14% said they did so purposefully. This self-reported information from U.S. Americans contradicts the results from the Pew Research Poll in 2018 that showed less than half of them could decipher fact from opinion. In other words, U.S. Americans may overestimate their ability to be able to tell what is fake from what is real.

Fake news can be powerful because people tend to watch media they already align with and tend to not fact-check information consistent with their pre-existing beliefs. In fact, research has shown that the perception of truth increases when misinformation is repeated (Balmas, 2014; Lazer et al., 2018). Tong et al. (2020) looked at how respondents, specifically ordinary citizens, understood the term “fake news,” finding that 34.2% of the survey respondents had a politicized definition of it as opposed to a descriptive definition and over 70% of all politicized respondents identified at least one particular media outlet as the perpetrator of fake news (Tong et al., 2020). They also found that Republicans and Democrats had an equal tendency to blame the other side, highlighting “fake news articulation among the public has consequently become polarized, in yet another example of how elite polarization in the U.S. can influence mass opinion” (Tong et al., 2020, p. 769). Although President Trump’s use of “fake news” is one of the more well-known examples of the phrase, Tong et al. (2020) highlights how both sides of the political spectrum have weaponized this verbiage and as a consequence have influenced and polarized how the public views political information. They note that the tendency for people to discuss fake news within ideologically homogeneous networks “could hinder efforts to counter the spread of misinformation and prevent a rational exchange of opinions” (Tong et al., 2020, p. 770).

However, fake news is not simply a news anchor’s opinions or a disparagement of the political opposition. For example, QAnon believers go beyond “fake news” and into conspiracy theories, which can also be spread by mainstream news organizations and other media. QAnon is

a social media phenomenon that started on a site called 4chan in 2017 (Davies, 2021). It is a conspiracy theory that an alleged government insider named “Q” exposes government secrets as the “truth,” installed President Trump as the messianic leader, espouses authoritarianism, and spreads misinformation and disinformation about a myriad of topics, all of which are enhanced by the use of both the social and mainstream media (Davies, 2021; MacMillen & Rush, 2021; Tollefson, 2021) “The movement is engaged in an enterprise of fictionalizing the world of power, through processes of storytelling” (Guénoun, 2021, p. 308). The social media platforms used by QAnon members, as well as stories from mainstream media outlets, create an echo chamber, allowing for disinformation to spread. Disinformation on such platforms as Twitter, Facebook, and TikTok particularly about election fraud, was also spread by family members and other right-wing influencers, which created an atmosphere of mistrust and resulted in at least half of all Republicans questioning the outcome of the 2020 election at one point (Tollefson, 2021).

In a recent NPR poll, 21% did not know or believed that humans do not play a significant role in climate change, 39% did not know or believed that some recent mass shootings were staged hoaxes, and 54% did not know or believed that a group of Satan-worshipping elites who run a child sex ring is trying to control our politics and media, which is a key tenet of QAnon (Rose, 2020). These claims have been pushed on social media by Trump and other conservative party members, and “Conservative media also have devoted hours of coverage to exaggerated or debunked claims” (Rose, 2020, para. 12). Even U.S. congresspeople use media platforms to further a myriad of conspiracy theories. Representative Marjorie Taylor Greene, a QAnon enthusiast, endorsed the executions of Democrats, suggested school shootings were staged, and said Jewish space lasers were responsible for California wildfires (Battistella, 2021; Edmondson et al., 2021). From this evidence, it is clear that the media has become entangled with

misinformation, disinformation, conspiracy theories, entertainment, and opinions in ways that the U.S. public cannot distinguish facts from opinions, lies, and falsehoods, particularly when touted by government officials and members of the media who represent themselves as discussing news facts while spreading one-sided opinions and conspiracy theories.

Politics and the Politicization of Science

Just as news and opinion can become blurred to the point that Americans have a hard time distinguishing them, the media and politics can also become entangled. Gauchat (2012) notes that scientific knowledge and its production embodies various interests including institutions, social actors, scientists, universities, organizations, funding agencies, and legislators, and as a result political interests of these actors and organizations are assumed to be part and parcel of the production of scientific knowledge. “Simply put, *science has always been politicized*. What remains unclear is how political orientations shape public trust in science and how these dynamics might influence the way science is organized” (Gauchat, 2012, p. 168). Gauchat (2012) states the production of science has implicit political origins, which may affect how the science is organized and how the public views it. The political leanings of the impetus of science production can influence how people perceive that science and its findings through how they see it in the media. This happened when fossil fuel industries funded climate change science research only to negate it (McKibben, 2022; Pattee, 2021; Supran & Oreskes, 2017; Supran & Oreskes, 2020; Union of Concerned Scientists, 2007; Waldman, 2019). The industries were the source and impetus for the creation of climate research and then specifically clouded the information in the eyes of the public, politicizing and polarizing it at the same time.

Many studies to date have found evidence of this. McCright and Dunlap (2003), Schmid-Petri (2017), Bolsen and Druckman (2015), Chinn et al. (2020), and Linde (2020), to name a

few, found evidence that the politicization of science has been increasing over time, paying particular attention to how trust in science among Republicans has significantly decreased since the 1970s. They found that political ideology plays a significant factor in how the public perceives climate change and that these ideologies have been indicated to them through elites and party leaders through the media. As in the case of climate change, what matters is not if what is being said in the media is correct or not but whether or not it aligns with individuals' beliefs. "Polarization intensifies the impact that partisan elites have on individuals' issue attitudes while decreasing the impact of their substantive information, leading individuals to become more confident in their less substantiated beliefs" (Chinn et al., 2020, p. 115).

Since humans have a tendency to pay more attention to media outlets that already align with their belief systems, they are more likely to believe politically aligned opinion as fact, and today more partisan media choices than ever are available to them, then it is no wonder why people are becoming more and more polarized, particularly on scientific topics. This polarization resulting from party cues on both sides works to the point that partisan preferences can become more important to people than even their own knowledge and in the context of climate change, can even overshadow their own experiences with weather events (Dunlap & McCright, 2008; Linde, 2020).

However, recent polls indicate that although Americans overall are concerned with climate change, that concern is highly polarized and divided between high concern among Democrats and low concern among Republicans. While over 75% of Democrats in 2020 said climate change was a top priority, less than 25% of Republicans said the same (Pew Research Center, 2020). "The partisan gap over climate change was the widest to date in 2020 ... Political messaging from party leaders and the media has been a major driver of the divide" (Popovich,

2020, paras. 6–7). While political messaging from party leaders for both Democrats and Republicans are setting the examples to be followed by citizens within each group, conservatives have taken the steepest drop and tend to be much more skeptical about science than Democrats (Chinn et al., 2020; Gauchat, 2012; Linde, 2020; McCright & Dunlap, 2003). “President Trump has set the tone for Republicans by deriding climate change, using White House resources to undermine science and avoiding even uttering the phrase” (Friedman, 2019, para. 7).

Because this type of messaging from party leaders primes conservatives not to think about climate change, they are less likely to see climate change as a threat. Gauchat (2012) found that “public trust in science has not declined since the 1970s except among conservatives and those who frequently attend church” (p. 182). This is a change from previous decades as in 1974, conservatives had more trust in science than either liberals or moderates did, which then began to diminish as science became more and more polarized (Gauchat, 2012). More recently, this effect can be seen specifically from Trump as the percentage of Republicans who thought protecting the environment should be a top priority for the president and the Congress took a sharp decline from 2015 to 2016 upon Trump’s getting elected (Pew Research Center, 2020). This phenomenon can even be traced to voting habits and policy agendas as Republican “officials who once supported climate reforms have moderated their policy positions” and others “have lost their seats to primary challengers opposed to climate action” (Mildenberger et al., 2017, p. 540). While the decrease in trust can be seen most dramatically in conservatives, the change in belief and trust in science due to political messaging in the media is not specific to Republicans but can be seen in liberal Democrats as well.

Lee’s (2021) study drew upon the information found from Gauchat (2012) and looked specifically at Democrats and how their trust in science has changed over time. Lee contends

that, while previous research found politically conservative groups undermined regulatory science by calling scientists liberal, and therefore biased against conservatives, was correct, they did not do research to find out if Democratic elites were doing the same thing by publicly remarking about the trustworthiness of science. His results showed that over half of the gap between Democrats and Republicans' partisan views over science was a result of the increase in trust from Democrats and that the mechanism behind these partisan trends could be a growth in selective media exposure, particularly among the ideologically extreme or committed partisans (Lee, 2021).

Lee (2021) states that this happens because people from both political spectrums use motivated reasoning to choose what they watch in the media, and the more polarized the person the more likely they are to engage in this behavior.

Conservative Republicans and liberal Democrats are the most likely to seek out attitude-consistent sources of information. In the 1980s and 1990s, partisan news networks and media companies proliferated (e.g., Fox News, MSNBC); today, there are more options for partisan viewers than ever before. These partisan media outlets often selectively invite party officials, legislators, and other elites to share views that are largely consistent with the outlet's preferred political leanings ... In sum, the most ideological partisans are the most likely to selectively consume information from these attitude-consistent sources; be exposed to consistent partisan elite messaging (without encountering disconfirming evidence) on science, among other issues; and ultimately hold views that are more in line with those of their party's elites. (Lee, 2021, p. 4)

Lee's research indicates that it is not just Republicans who are primarily informed by their exposure to polarized media, but Democrats are too, to the point that "at least on certain issues, the views of independents may be more aligned with those of Republicans than those of Democrats," but specifically these findings are concerned more with conservative Republicans and moderate to liberal Democrats on the people on the fringes opposed to those more in the middle ideologically (Lee, 2021, p. 10).

Lee's (2021) findings highlight that political messaging does not just affect one side or

the other, but both, creating an even wider division as it is not just the science skeptics causing a decline but those bolstering science causing an increase. However, Democrats' higher level of trust or belief in science does not necessarily translate into an increase in behavior change. For example, Bill Gates (2021) uses a private jet, as do many wealthy Democrats, although they are harming the planet. Al Gore and Justin Trudeau have been accused of hypocrisy by owning palatial mansions or continuing to sell coal to burn (Gunster et al., 2018). Such accusations of hypocrisy can be emotional from both sides, can harm pro-environmentalists' credibility, and lead to distractions within climate discourse about what the real problems are (Gunster et al., 2018). And while it is not necessary for anyone to have a private jet or palatial mansion, the fact that humans have created a carbon-based world cannot be ignored. Gunster et al. (2018) notes the following:

Talk of hypocrisy has become an inescapable, if often repressed, aspect of climate change discourse ... frank recognition of the hypocrisy of those who possess environmental sympathies can open up space for understanding the structural forces that generate the gaps between intention and action and thus promote a more complex understanding of the relations between social and political change and individual practices ... Engaging with hypocrisy discourse, in other words, might both help us to blunt the attack of those seeking to stall climate action and help us intensify the positive affective commitments to climate action. (p. 12)

While Gunster et al. (2018) points out how intense and emotional hypocrisy verbiage can be, it can also increase polarization on climate change and detract from getting to the point and making progress.

The politicization and polarization of science has been happening for several decades, and as the media landscape continues to promote more and more targeted political programs, it is increasing the divide between conservatives and liberals. However, a wedge between groups happens not in a vacuum, but because of how humans are wired to see the world. The systems that control how our brains work and how we view ourselves and other people, form opinions,

and create narratives involves a look into how people create their identities and judgements around their intuition, belief, and control.

Intuition, Belief, and Control

One of the earliest signs of human evolution began over 4 million years ago with the ability to walk on two legs, but advanced traits such as complex expression, art, and cultural diversity did not emerge until about 100,000 years ago (Smithsonian, 2022). For most of humanities' evolution, early hominids relied on more primal instincts and intuitions in order to survive. It was not until humans developed into *homo Sapiens*, what is considered the modern human, about 40,000 years ago, that they are believed to have developed the same reasoning and rational mind as humans do today (Wayman, 2012). The timescale of human evolution is heavily weighted to rely on instinct and intuition rather than on reason, which is a relatively new addition to the human mind.

Jonathan Haidt makes this argument in his book *The Righteous Mind* (2012). Haidt illustrates the idea that reason is too new to be in control of human thought with the metaphor of an elephant and a rider. The elephant represents the instinctual, intuitive, and emotional parts of the human mind and the rider is the rational newcomer. Out of the two, it is the elephant that is actually in control and the rider, while able to sometimes mediate and offer advice to the elephant, is still subservient to it; that reasoning is often the servant of emotions (Haidt, 2012). “Intuitions come first, strategic reasoning second” (Haidt, 2012, p. 61).

Brains evaluate everything in terms of potential threat of benefit to the self, and then adjust behavior to get more of the good stuff and less of the bad. Animal brains make such appraisals thousands of times a day with no need for conscious reasoning ... We can have multiple intuitions arising simultaneously, each one processing a different kind of information ... The bottom line is that human minds, like animal minds, are constantly reacting intuitively to everything they perceive, and basing their responses on those reactions. (Haidt, 2012, pp. 64–83)

In other words, the elephant makes instinctual decisions all the time, and the rational rider is only present in a secondary capacity. The rider, who was the late-comer evolutionarily speaking, can not make decisions but can only to serve the older, more emotional and intuitive elephant in a capacity similar to a lawyer or publicist (Haidt, 2012). “The thinking system is not equipped to lead—it simply doesn’t have the power to make things happen—but it can be a useful advisor,” (Haidt, 2012, p. 66).

Haidt (2012) states that this is the process by which humans make immediate instinctual judgements about others and ideas, and only then does the rider immediately begin to rationalize the emotional reaction of the elephant. “When we see or hear about things other people do, the elephant begins to lean immediately [to one judgement or another]. The rider, who is always trying to anticipate the elephant’s next move, begins looking around for a way to support such a move” (Haidt, 2012, p. 83). According to this model, when it comes to topics such as climate change, when a person hears something about it their elephant will immediately make a gut judgment and then the rider will do whatever it can to rationalize that decision whether it is accurate or completely false. It is not the rider’s job to make a rational decision, but to rationalize the elephant’s emotional one. During this rationalization, the rider will come up with arguments in favor of whatever decision the elephant has made regardless of its truth and is willing to defend those arguments to others.

Mercier and Sperber (2011) looked at how people reason in the context of discussion and argument, and found that people tend to be proactive and anticipate situations in which they might have to argue to convince another person that their claims are true and their actions are justified. This is what they refer to as argumentative theory and could be the reason behind confirmation bias and motivated reasoning. They argue that confirmation bias, which is when a

person seeks or interprets evidence based on preexisting beliefs, is not a flaw of reasoning but is a consequence of the function of reasoning and is actually a feature of it when used for producing arguments (Mercier & Sperber, 2011).

In cases that deserve the label confirmation bias, people are trying to convince others. They are typically looking for arguments and evidence to confirm their own claim, and ignoring negative arguments and evidence unless they anticipate having to rebut them. While this may be seen as a bias from a normative epistemological perspective, it clearly serves the goal of convincing others. (Mercier & Sperber, 2011, pp. 63)

Motivated reasoning is also a useful tool used by the rational rider in supporting the elephant's beliefs. Mercier and Sperber (2011) said that people pay attention to beliefs when they think they might not be universally shared or could be contentious. If they are likely to be challenged, then it makes sense to find arguments for them before they need to be defended; if successful they are ready and if not, they might adopt a weaker stance that is easier to defend (Mercier & Sperber, 2011). In these ways, motivated reasoning and confirmation bias aid in argument formation, arguments that are not geared toward finding the truth, but are after supporting a person's already held beliefs (Mercier & Sperbman, 2011).

Using motivated reasoning and confirmation bias makes sense when it is understood that the intuitive elephant is in control and then the rider must find reasons to prove that the elephant is correct. However, Haidt (2012) notes that the elephant is neither dumb nor a tyrant, but can be swayed by the rider or, most often, by other people's riders. "Intuitions can be shaped by reasoning, especially when reasons are embedded in a friendly conversation or an emotionally compelling novel, movie, or news story" (Haidt, 2012, p. 83). But, even though according to Haidt's model, humans are ruled more by emotion than by reason, that does not mean that reason does not play a role and can not make changes in how people think and behave with the appropriate means, it is just that the means needs to be directed at the elephant, not the rider.

This idea is substantiated by Tversky and Kahneman (1981) when they looked at the psychology of choice. They tested how people reacted to questions that were logically equivalent but written differently as either positively framed or negatively framed. When a question regarding an outbreak that could possibly kill 600 people was posed in regards to lives saved, people were risk averse, but when a numerically equivalent question was posed framed as lives lost, people were risk taking (Tversky & Kahneman, 1981). The numbers and probabilities of lives saved or lost were exactly the same in both scenarios, the only difference was the framing of the questions, or in other words, how the questions made the respondents feel.

Rational choice requires that the preference between options should not reverse with changes in frame. Because of imperfections of human perception and decision, however, changes of perspective often reverse the relative apparent size of objects and the relative desirability of options. (Tversky & Kahneman, 1981, pp. 453)

This lends credence to Haidt's rider and elephant theory because if the rider was making the decision, then the results for the loss or gain frames should have been equivalent, but they were not. The framing of the question affected the respondents and made a difference on their decision making, meaning the elephant was in control, not the rider and that their perceptions of options can be changed based on frame.

Moving this idea from a simple choice to active participation and behavior change, Lavidge and Steiner (1961) measured how people are affected by advertising through a series of steps from initial stimulus to long-term effects. They describe seven steps that take a possible consumer from completely unaware of a product, to discovering its existence and becoming knowledgeable, to actual purchase. In the context of environmental learning in the population, these ideas can be transposed from knowledge of and desire to purchase a product to knowledge of climate change and the desire to change habits in order to stop it. Lavidge and Steiner (1961) said that the distance between each step can be small or large depending on the person, or in

some cases a person might make multiple steps at a time. However, “the greater the psychological and/or economic commitment involved in the purchase of a particular product, the longer it will take to bring consumers up these steps, and the more important the individual steps will be” (Lavidge & Steiner, 1961, p. 60).

The steps outlined indicate the three major functions of advertising—information or ideas, attitudes or feelings, and action—and these functions are directly related to a psychological model that divides behavior into three components (Lavidge & Steiner, 1961). The psychological models are 1) cognitive, the intellectual, mental, or rational state 2) affective, the emotional or feeling state and 3) conative, the motivational or “striving” state relating to the tendency to treat objects as positive or negative goals (Lavidge & Steiner, 1961). This model starts with the cognitive dimension of making sure the consumer is aware of the product, moves then to the affective or emotional dimension involving the consumer making a preference or judgment about the product, and then finally to conative where the consumer has a conviction about a product and takes action to purchase it (Lavidge & Steiner, 1961).

In their model, the cognitive dimension is only responsible for awareness, not for making a decision. The responsibility of judgment is left up to the affective emotional dimension, or to parallel Haidt’s model, the elephant. Lavidge and Steiner (1961) explain that a great deal of advertising, or in the case of this research, media stories regarding climate change, are designed to move people up the final steps toward purchase, or rather making behavioral changes in order to stop climate change. However, they note that attention must be paid to the affective level in order to facilitate consumer behavior changes and action.

Storr (2021) builds on Haidt’s idea, but refers to the rider as the “narrator,” the voice in a person’s head that narrates their experiences as well as provides the arguments that explain the

elephant's beliefs. As a person grows up, their narrator grows and explicates what happens in the person's life, and those stories that are told to the person by the narrator become more and more permanent until they become facts and beliefs (Storr, 2021). Once a person becomes an adult, their ideas become less plastic and are harder to change; the narrator starts to protect those beliefs and defend them (Storr, 2021). The narrator, like a storyteller, is "tying all the events together into a coherent tale that tells us who we are, why we're doing what we're doing and feeling and what we're feeling. It's helping us feel in control of our thrilling neural show" (Storr, 2021, p. 109).

This narrator strings together reasons that people feel a certain way, and then the reasons become beliefs, then a person's truth. All of the beliefs that a person builds during their life make for a world that is predictable and controllable, they create the person's overall 'theory of control' (Storr, 2021). "Brains have to perceive the physical environment and the people that surround it in order to control them. It's by learning how to control the world that they get what they want" (Storr, 2021, p. 12). However, when a person's control or beliefs are threatened, they feel discomfort and try to fight to regain a stable position, and when a person encounters evidence that they might be wrong, "we can find it deeply disturbing," and rather than changing its neural models by acknowledging others' perspectives, it seeks to deny them (Storr, 2021, p. 85). The 'models' represent the defended emotional beliefs that arise from the elephant's judgments over a person's lifetime, and once they are challenged, humans feel discomfort.

Our threatened neural models generate waves of sometimes overwhelming negative feelings. Incredibly, the brain treats threats to our neural models in the much same way as it defends our bodies from a physical attack, putting us into a tense and stressful fight-or-flight state. The person with merely differing views becomes a dangerous antagonist, a force that's actively attempting to harm us. (Storr, 2021, pp. 87)

Humans feel cognitive dissonance when they feel their beliefs are threatened and they are losing

a certain amount of control. Even when others say a person is wrong, their mind will find a way to dismiss them (Storr, 2021). “We know we’re right. We feel we’re right” (Storr, 2021, p. 62).

However, it is also important to look at what is meant by “we” in Storr’s statement. While it might make sense to think that a person’s narrator or elephant will act and think selfishly, Haidt (2012) discussed how a person’s self-interest can actually be a weak predictor of policy preference. “Rather, people care about their groups, whether those be racial, regional, religious, or political ... Our politics is groupish, not selfish” (Haidt, 2012, p. 100). When confronted with a single body of information, people with differing partisan leanings actually move further apart to conform more with their group, and this can explain why people will defend ideas that go against their own self-interest but are a part of a certain group’s platform (Haidt, 2012).

This feeling of harm when a person’s beliefs are questioned can be seen in Western et al. (2006), who forced partisan respondents to feel cognitive dissonance about their chosen political candidate by showing them evidence of their candidate’s apparent hypocrisy while in an fMRI machine (Haidt, 2012). They found that the emotional centers of the brain, not the rational part of the brain, lit up in response to the threatening information (Haidt, 2012; Western et al., 2006). Once they were shown evidence contradicting the apparent hypocrisy of their chosen candidate, they felt pleasure and their brains released dopamine, indicating that humans feel threatened when their views are threatened, but get a neural reward of dopamine when they are released from that feeling of being wrong (Haidt, 2012; Western et al., 2006). If this is the case and humans feel like they are being physically threatened when confronted with evidence that their current neural model is wrong, then it follows that it would be difficult to change a person’s mind only using numerical and statistical evidence. “Each individual reasoner is really good at

one thing: finding evidence to support the position he or she already holds, usually for intuitive reasons” (Haidt, 2012, p. 105). When it comes to climate specific statistics and logical reasoning, making a person feel attacked or like they were losing control of their environment would likely do little to change their mind on the topic or change their behavior.

In 1966, Julian Rotter looked at the differences in learning when subjects felt either external control or internal control from action reinforcement. External control is when a person perceives reinforcement for an action to be the result of luck, chance, fate, or the control of powerful others, and internal control is when a person perceives that their own behavior resulted in the reinforcement (Rotter, 1966). If subjects perceive reinforcements to be due to chance or luck, then they are less likely to raise expectations following successes as high or to lower expectations as low after failures (Rotter, 1966). However, individuals who have a strong belief in their own control are likely to be more alert to environmental aspects that can inform future behavior, take steps to improve their environment, place greater value on skill or achievement reinforcements, be more concerned with their ability, particularly failures, and be more resistive to attempts at influence from outside sources (Rotter, 1966).

Levenson (1974) looked at the usefulness of a locus on control scale that further separated belief in powerful others in regards to participation in activism and found this scale was useful in understanding perceptions of control. Sapp and Harrod (1993) also looked at locus of control by building on Levenson (1974), Lumpkin (1985), and Lumpkin (1988) by using shortened Likert scales. The study tested the effectiveness of a shorter Levenson scale, Rotter scale, and both shortened scales proposed by Lumpkin, as well as their own proposed shortened scale. The scales tested for three components affecting a person’s locus of control, internal, chance, and powerful others, which in turn affected perceived risk. They found significant results

for internal, chance, and powerful others as well as for perceived risk and locus of control, indicating that shortened tests for a person's locus of control can be a reliable alternative to the longer locus of control scale.

Rotter (1966) and Levenson (1974) showed that how people learn and function within the world can be affected by their perceptions of control and Sapp and Harrod (1993) showed that a shorter version of the locus of control test can be valid. Tversky and Kahneman (1981) showed that the framing of a question could change a person's choice, which is not necessarily controlled by reason. Because of this, it is worth testing for a person's locus of control and whether they feel external or internal validation when it comes to the environment and climate change as well as testing for framing effects. By testing for a person's locus on control when it comes to climate change while also testing to see whether or not a person is affected more by narrative than numbers, then this research could potentially provide validation to narrative stories as a way to better communicate science topics in a more rounded way opposed to straight facts alone as they would communicate with people more holistically and take into account how people feel about the subject on multiple levels.

We should not expect individuals to produce good, open-minded, truth-seeking reasoning ... And if our goal is to produce good behavior, not just good thinking, then it's even more important to reject rationalism and embrace intuitionism. Nobody is ever going to invent an ethics class that makes people behave more ethically after they step out of the classroom. Classes are for riders, and riders are just going to use their new knowledge to serve their elephants more effectively. (Haidt, 2012, pp. 105–106)

Haidt (2012) notes that changing an elephant takes a long time, but changing the path the elephant is on can be achieved by designing an institution where emotional and intuitive human beings will naturally behave more ethically.

Narrative Framing

Haidt's (2012) research indicates that in order to change people's behavior, it is their emotional and intuitive side that must be engaged rather than their reason and rationality. Storr (2021) built on those findings and added the importance of narrative. In order to utilize these ideas, communication must be correctly framed. When things are framed in a certain way people could feel more or less in control, which would change the way they act in response to certain stimuli, or in other words, the elephant's path can be changed by the application of the appropriate framing methods (Lavidge and Seiner, 1961; Lakoff, 2010; Levenson, 1974; Rotter, 1966; Tversky and Kahneman, 1981). Frames are unconscious structures that include semantic and relationship roles and they permeate language and conversations (Lakoff, 2010).

The old view claimed that reason is conscious, unemotional, logical, abstract, universal, and imagined concepts and language as able to fit the world directly. All of that is false. Real reason is: mostly unconscious (98%); requires emotion; uses the "logic" of frames, metaphors, and narratives; is physical (in brain circuitry); and varies considerably, as frames vary. (Lakoff, 2010, pp. 72)

Lakoff (2010) echoes Haidt's claim that the emotional and intuitive elephant must be engaged to sway a person's judgment. However, many people focused on environmentalism still believe in the old, false theory of rationalism, and think that if just given the facts, people will reason to the right conclusion (Lakoff, 2010). However, "what actually happens is that the facts must make sense in terms of their system of frames, or they will be ignored. The facts, to be communicated, must be framed properly" (Lakoff, 2010, p. 73).

Lakoff (2010) notes that, as a scientist, he already has many years of scientific framing language as a foundation for that type of information, and because of that can understand scientific framing more readily than those that do not already have a scientific base built up. But because most people are not scientists, relaying numbers and statistical information has little

chance of being understood as they were intended to the lay person. However, humans, even children, are already able to understand narratives, and so the narrative framing of environmental communication could provide the level of scientific understanding that was once expected from simply relaying climate statistics. “Don’t just give numbers and material facts without framing them so their overall significance can be understood. Instead find general themes or narratives that incorporate the points you need to make” (Lakoff, 2010, p. 79–80).

Narrative framing in particular involves characters, plot, causal relationships, and can be more effective than non-narratives at impacting reader’s attitudes on topics, including political or controversial ones (Lakoff, 2010; Mazzocco, 2010; Shen et al., 2017; Vafeiadis et al., 2019). “Narrative news is more engaging and therefore more likely to draw audience interest ... narratives affected individuals by transporting them into the narrative world and involving them cognitively and emotionally” (Shen et al., 2017, p. 4018). Narrative transportation, a combination of attention, imagery, and feelings where a person becomes immersed in a narrative world, is a part of narrative’s success in impacting readers and has been shown to be more effective at persuading individuals and triggering feelings of concern, sympathy, interest in others’ suffering, and can trigger higher donation intentions (Escalas, 2004; Green, 2021; Green & Brock, 2000; Irimiás, 2021; Shen et al., 2017; Vafeiadis et al., 2019). “When transported into narratives, audiences are more likely to respond to messages positively and are less likely to engage in reactance or counterarguing” (Vafeiadis et al., 2019, p. 4366). Transportation into narrative worlds interacts with people’s emotions and makes them more likely to identify with characters and therefore more likely to adopt the beliefs, attitudes, and behaviors that are implied in the story and less likely to have their need to argue or to defend a differing position activated

(Green, 2021; Green & Brock, 2010; Mazzocco et al., 2010; Shen et al., 2017; Vafeiadis et al., 2019).

Narrative transportation can also increase attitudinal yielding by decreasing the need to argue, not just against information presented, but from persuasion tactics as well (Escalas, 2004; Mazzocco et al., 2010). Mazzocco et al. (2010) tested attitudinal change in participants who read persuasive narratives promoting tolerance toward homosexuals. To test the respondent's attitudinal change, they used the Narrative Transportability Scale, a 19-item scale that tested chronic motivation and the ability to become transported into a narrative regardless of content (Mazzocco et al., 2010). They found that persuasive narratives were effective, but that effectiveness was mediated by emotional responses opposed to rational appraisals, and suggests that when people become immersed in narrative worlds their attitudes and beliefs are changed in the process (Mazzocco et al., 2010). "Such changes tend to be based on emotional rather than rational responses. Our results, in particular, highlight the important role that empathy plays in eliciting attitude change" (Mazzocco et al., 2010, p. 366). However, the extent to which a person was transported in the story was mediated by their transportability, and some people were more likely to be transported than others which made a difference in the resulting emotional changes exhibited by the participants (Mazzocco et al., 2010). Therefore, also testing for a person's transportability by using the Narrative Transportability Scale is needed.

The results from Mazzocco et al. (2010) again provide supporting evidence to Haidt's model that the intuitive elephant is in control of attitudinal changes, not a person's rational rider, and that appealing to a person's empathy and emotions is a better predictor of judgment and behavior changes than appeals to their reason with statistics and numbers. Narrative transportation and narrative persuasion prime a person to be less defensive and more open to new

ideas, making them an ideal way to introduce new information to a population that might be resistant to other forms of communication of the same facts. While previous studies found narratives to be more successful than other communication strategies at changing people's attitudes, they only compared narrative to non-narrative. This study will add to this current knowledge by not just testing for political lean, but by integrating that lean into the research itself through the use of political titles. This will test to see if priming a person to either feel for or against a narrative before they read it will have any effect on the narrative persuasion itself. This could potentially lead to more effective ways to frame media communications about environmental topics and a new way to communicate this important information across the isles and to the greater voting public.

CHAPTER 3

RESEARCH QUESTIONS AND HYPOTHESES

Many organizations and individuals argue that nothing is more important to the survival and future of the human race than stopping climate change (Gates, 2021; Intergovernmental Panel on Climate Change, 2021; McKibben, 2022; Schmid-Petri et al., 2017; Thunberg et al., 2021; UN Climate Change Conference, 2021). Putting in the effort now to stop climate harms will in the long run save humanities' future and in the short term save money on the costs of damage from extreme weather events (Gates, 2021; Kolbert, 2021; Tan et al., 2021; UN Climate Change Conference, 2021). Although it seems on the surface that protecting the planet from rising temperatures is a proverbial "no brainer," the oil and gas industry as well as others with vested interest have made plenty attempts to curtail information being spread to the public about the true dangers of a rising climate (Bolsen & Druckman, 2015; Brulle, 2014; Chinn et al., 2020; Curran, 2005; Druckman et al., 2017; Dunlap & McCright, 2011; Franta, 2021; Gauchat, 2012; Linde, 2020; McGreal, 2022; McKibben, 2022; Pattee, 2021; Schmid-Petri, 2017; Supran & Oreskes, 2017; Supran & Oreskes, 2020; Union of Concerned Scientists, 2007; Waldman, 2019; Wright & Nyberg, 2021; Zhang, et al., 2018).

The efforts from private companies to stop public understanding of climate change in order to gain short-term profits has gradually turned climate change into a political issue (Bolsen & Druckman, 2015; Chinn et al., 2020; Druckman et al., 2017; Gauchat, 2012; Linde, 2020; Schmid-Petri, 2017; Union of Concerned Scientists, 2007; Waldman, 2019). In other words, the politicization of scientific topics like climate change has turned a problem that could have been fixed decades ago into a political tool for both sides of the aisle. This politicization and polarization of climate change, which has been shown to the public via the media, has delayed

action to stop climate harms, created a confused and ignorant public, and resulted in a situation that is very difficult to fix (Biddlestone & van der Linden, 2021; Bolsen & Druckman, 2015; Chinn et al., 2020; Cohen & Tsfati, 2009; Cook, 2019; DellaVigna & Kaplan, 2007; Dewenter et al., 2019; Druckman et al., 2017; Fagan & Huang, 2019; Gauchat, 2012; Levendusky, 2013 ; Linde, 2020; Lloyd, 2011; Schmid-Petri, 2017; Treen, 2020; Union of Concerned Scientists, 2007; Waldman, 2019).

The politicization of climate change in the media has been pervasive and plays a large, important role in how people vote on it (Bord, et al., 2000; Chinn et al., 2020; Cohen & Tsfati, 2009; Curran, 2005; Environmental Protection Agency, n.d.; DellaVigna & Kaplan, 2007; Dewenter et al., 2019; Levendusky, 2013; Liu et al., 2020; McCombs, 2005; NASA Global Climate Change, n.d.; Patterson & Seib, 2005; Strömberg, 2001). In either an attempt to be “objective” or by presenting incorrect information from private industries, the media has damaged its own ability to properly function in society (Bolsen & Druckman, 2015; Chinn et al., 2020; Curran, 2005; Druckman et al., 2017; Gauchat, 2012; Linde, 2020; Schmid-Petri, 2017; Union of Concerned Scientists, 2007; Waldman, 2019). Additionally, opinion presenters have spread misinformation about climate change through partisan media channels and have further politicized it (Bolsen & Druckman, 2015; Chinn et al., 2020; Druckman et al., 2017; Gauchat, 2012; Linde, 2020; Schmid-Petri, 2017; Union of Concerned Scientists, 2007; Waldman, 2019).

However, even when media outlets present accurate information regarding climate change, they almost always present it by facts and statistics, which people may find it difficult to fully understand (Bruine de Bruin et al., 2021; Frontiers, 2018; Howarth et al., 2021; Kamath, 2020; Shermer, 2008; Ye et al., 2020). Climate change is already a difficult concept for the human mind because of its long timescale, and by presenting this information with only numbers

makes it even more difficult to contextualize (Bord et al., 2000; Chen, 2011; Frantz & Mayer, 2009; Marshall, 2014; McKibben, 2022; Weber & Stern, 2011; Woodward, 2019). This media practice creates a scenario where even people who want to act to stop climate change still do not fully understand it and do not know what they can do to help.

However, research into narrative indicates that it could be a way to improve public understanding of climate change through story, not numbers. Because the human mind has evolved to inherently understand narrative, stories can present climate information in a way that is much easier than numbers for people to understand and contextualize (Dunbar et al., 2007; Haidt, 2012; Kirby, 2018; László, 2008; Liu et al., 2020; Menning, 2018; Morris et al., 2019; Sangalang & Bloomfield, 2018; Storr, 2020). The decision-making power of emotions and feelings, which can be triggered by narrative is demonstrated by Tversky and Kahneman (1981), who found that people reacted differently to logically equivalent questions depending on framing. In their experimentation on framing, how the question made people feel changed how they acted in response to it. Haidt (2012) digs further into this concept by claiming that people are controlled mainly by their emotions, not their logic. In other words, a person's mind can be changed through emotion, not logical fact. Therefore, narratives can be useful in increasing public understanding of how to stop future climate harms.

However, narrative can affect each person differently as narrative transportation is different from person to person. The current literature has not tested how the politicization of climate change in the media can affect the use of narrative or narrative transportation theory.

Therefore, this research presents the following questions:

RQ1. Do partisan news-source labels affect belief in or the reception of climate change information within the use of narrative stories in the media?

RQ2. Do partisan news-source labels affect narrative transportation in climate change media stories?

Even though narrative media stories have the potential to increase public knowledge of climate change science, knowledge does not always translate to action and belief in climate science does not guarantee that people would want to change their lifestyles or behaviors. Lavidge and Steiner's (1961) stair-step model of advertising effectiveness outlined the several steps it takes to get people to act after stimulus as they move through the cognitive, affective, and conative dimensions before they finally take action. Thus, the following questions are also asked:

RQ3. Do narrative and statistics-based media stories differentially affect people's intent to change behavior regarding climate change?

RQ4. Is people's intent to change behavior affected by political label?

The politicization of climate science has been a consistent problem in the media and political messaging since at least the 1970s (Ogrodnik & Staggenborg, 2016). Because people tend to be more groupish than selfish, even people who have seen the damaging effects of climate change for themselves may still deny either its existence or threat to the human race in order to stay in line with their political party's beliefs (Haidt, 2012). Because of the pervasiveness of politicization in climate change information and because of people's tendency to be groupish opposed to selfish, these questions are asked:

RQ5. Does narrative increase belief in climate change and intent to change in both conservatives and liberals?

RQ6. How do the answers from conservatives and liberals compare in response to narrative?

Rotter (1966) and Levenson (1974) looked at ability or lack thereof to control the world and created scales that tested for this control. Sapp and Harrod (1993) created a shorter but effective scale to measure a person's locus of control, which can be used to test how much or

little people feel in control regarding climate change and how their locus of control affects the effect of narrative. Therefore, this research asks the following question:

RQ7. How does a person's locus of control affect their reception of or intent to change behaviors regarding climate change?

RQ8. How does a person's locus of control affect the effect of narrative as opposed to statistics-based information?

The politicization of climate change has affected people's perceptions and understanding of its processes, which has had many effects on people's behaviors to either try to stop its progress or to do nothing (Brulle, 2014; Dunlap & McCright, 2011; McGreal, 2022; Pattee, 2021; Plumer & Fountain, 2021; Plumer & Friedman, 2021; Supran & Oreskes, 2017; Supran & Oreskes, 2020; Zhang, et al., 2018). However, narratives also have a profound effect on humans, and narrative framing can lead to an understanding of scientific concepts that are outside of politicization and can create a scenario that produces understanding and compassion regardless of politics (Green, 2021; Green & Brock, 2010; Lakoff, 2010; Mazzocco et al, 2010; Shen et al., 2017; Vafeiadis et al., 2019). Because of the great effect that both politics and narrative have on humans, these two hypotheses are posed:

H1. Partisan news-source labels will affect beliefs and intent to change regardless of lean.

H2. Narratives will lead to higher beliefs and intent to change regardless of lean, but likely by differing degrees between conservatives and liberals.

CHAPTER 4

METHOD

Sample

This research had an experimental design which tested respondents through a Qualtrics survey consisting of a 2 x 2 factorial analysis of the effects of different news sources and frames. Respondents were randomly placed into one of four conditions, each one presenting them with one of two news frames, either narrative or fact-based, and one of two news sources, either conservative Fox News or liberal MSNBC. Out of these sources and frames, the four conditions possible were: narrative/conservative, narrative/liberal, statistical/conservative, and statistical/liberal. However, before the respondents were shown the stimulus, they had to answer several pretest questions regarding their locus of control, narrative transportation level, and one question each testing their cognitive, affective, and conative levels. In total, there were 368 participants, but after removing incomplete responses, 357 were analyzed.

Participants were taken from several University of North Texas journalism courses and were compensated with extra credit by their instructors. Of the 357 analyzed, 49% were either freshman or sophomores, 49.9% were juniors or seniors, and 1.1% were graduate students. Ninety-four point one percent were age 18-29 and 65.3% were female. Since one of the main objectives of this research was to look particularly at the effects of politics, it is important to note that 13.4% described themselves as slightly, moderately, or strongly conservative and 65% as slightly, moderately, or strongly liberal. The single political ideology with the highest percent overall was moderately liberal at 31.4% and 21.6% classified themselves as neither conservative nor liberal.

Covariates

Since one of the main variables of this research was to what degree people are affected by narrative, how a person is transported by a narrative, or to what level they allow themselves to engage with and be affected by it, the narrative level for each respondent needed to be accounted for before the stimulus. This was achieved with the 12-point narrative engageability scale developed by Bilandzic et al. (2019). This measure is consistent with the previous narrative transportability scale that includes four distinct dimension measures of presence, emotional engageability, propensity for curiosity and suspense, and ease of accepting unrealism (Bilandzic et al., 2019). Respondents were shown 12 statements and were told to rank the degree to which they either agreed or disagreed on a scale from (1) *strongly disagree* to (7) *strongly agree*. Mean values ranged between $M = 4.60$ ($SD = 1.289$) and $M = 5.70$ ($SD = 1.135$), and the narrative transportation index resulted in $M = 5.15$ ($SD = .836$). Cronbach's alpha for the narrative transportability scale was .815, indicating that this scale generated reliable information.

A person's locus of control, whether they feel like they control their destiny or whether what happens in their life is controlled by outside sources, affects their perception of the world around them and how they act within it, so it was important to determine each subject's locus of control in order to see how likely they were to act differently or to change behaviors in regard to climate change, particularly after a stimulus like narrative (Rotter, 1966; Levenson, 1974). However, a shorter version of the original locus of control scale was used to keep the amount of time spent on the survey as a whole as short as possible. To test this, Sapp and Harrod's (1993) 9-item locus of control scale was used to see whether each respondent was either more internally focused, meaning they have a higher degree of focus on their own capabilities, or were more externally focused, meaning that they attributed more of what happens in their life to external

factors making them less likely to change habits. Respondents were shown nine statements and asked the degree to which they agreed or disagreed on a scale from (1) *strongly disagree* to (7) *strongly agree*. Three were statements indicating internal control, such as “my life is determined by my own actions,” and six indicated external control, such as “my life is chiefly controlled by powerful others.”

Since the scale was the same but the statements made opposite assumptions, an answer of 7 for internal would equal an answer of 1 for external, so one of these scales needed to be reversed. Since a respondent with a higher internal locus of control would be more willing to change their behaviors, the external answers were reversed. After reversal, an answer of (1) *strongly disagree* to an external statement was switched to a (7), indicating a higher level of internal control. However, when Cronbach’s alpha was found for this scale including all nine items, the three internal statements and the reversed external statements, it was .623. If the internal questions were isolated, they had a Cronbach’s alpha of .287, so it was decided to throw out those three statements and keep only the six reversed external locus of control answers. It is unclear why the internal questions had such low reliability, but once they were removed the remaining six external statements had a Cronbach’s alpha of .659. The reverse locus of control index showed a mean of $M = 4.27$ ($SD = .941$).

Dependent Variables

During the pretest, the respondents were shown three questions from Lavidge and Steiner’s (1961) hierarchy of effects model, which included one question each testing the respondent’s cognitive, affective, and conative levels and were all centered around climate change. These were also tested on the same scale from (1) *strongly disagree* to (7) *strongly agree*. The cognitive question stated “nearly 100% of climate scientists believe in climate

change,” and had a mean of $M = 5.04$ ($SD = 1.56$). The affective question was “I feel scared of consequences of climate change in the near future,” and had a mean of $M = 5.65$ ($SD = 1.47$). The conative question read “I generally try to change my behaviors in order to stop climate change, such as recycling whenever possible,” where $M = 5.19$ ($SD = 1.427$). All of the pretest questions (excluding the very first question which contained the directions for the section) were randomized, so each respondent saw a different mix of narrative and locus of control questions.

Independent Variables

After the pretest, each respondent was randomly categorized into one of the four total stimulus categories. They were shown either a narrative story or a statistics-based story, each centered around the same climate change information. These stories were written specifically for this study instead of being pulled from existing literature to ensure that they covered exactly the same content, which was about the 2020 Texas freeze. The fact-based story simply stated some information about weather patterns and the damage it caused to the state. The narrative story included a tale about a couple frozen in a boat on the lake with their dog. There were descriptions about the couple and how they had to live on a boat in a frozen lake for several days with no hot food or ability to flush a toilet. It also included the same weather and statistical information as the fact-based story, but it was imbedded within the narrative of the couple. Both stories had the same facts and information, they were simply presented in different formats. This ensured that the content between the two stories was exactly the same, the only difference between them was the frame.

In order to create the different news sources, banners were pulled from the websites of both Fox News and MSNBC. These banners were placed at the top of the news stories so they could be seen by the respondents in the survey. Only the banners were shown at the top of the

story pages, there was no other visual material added. The idea behind this structure was to make the stimulus as believable as possible, leading the subjects to truly believe that each story came from whichever news site was shown to them since it was legitimate material produced by those sources. It was thought that simply writing a header in plain text might not be enough to convince them that the story came from either site, but taking real content from the sites themselves should have been convincing enough for the respondents to believe the content was real. However, after running a two-way ANCOVA on the data, it was clear that neither the news source or news frames had any effect on the respondents. When looking at the cognitive index, news source had a significance of $p = .868$ and frame was $p = .743$, showing that neither had any significance whatsoever. This result was similar across both the affective and conative indices as well.

Manipulation Checks

After the respondents were shown the stimulus, they answered two manipulation check questions and an independent variable t-test was done. The first, “this story is emotionally engaging,” resulted in $M = 4.53$ ($SD = 1.403$) for those that saw the factual stimulus and $M = 5.33$ ($SD = 1.085$) for those that saw the narrative stimulus. Levene’s test resulted in $p < .001$, indicating that equal variances cannot be assumed. Therefore, the result for this question was $t(333.025) = -6.036$, $p < .001$. Despite the narrative stimuli not having an effect on a person’s emotions, thoughts, or actions about climate change, it does appear that the narrative did have some significant effect on the reader’s engagement with the story. When this question was compared with the stimuli of Fox and MSNBC, the results were not significant. However, it is interesting to note that the mean for Fox was $M = 5.01$, which was slightly higher than the mean of MSNBC, which was $M = 4.85$.

The second read “this story is biased,” and resulted in $M = 3.24$ ($SD = 1.442$) for the factual stimulus and $M = 3.72$ ($SD = 1.29$) for the narrative stimulus. Levene’s test for equality resulted in $p = .006$, indicating that equal variances cannot be assumed. Those results were $t(350.217) = -3.347$, $p < .001$. Therefore, there were significant results for those who thought the stories were biased between the stimuli of narrative versus factual, with the narrative stories being thought of as more biased. When news source was the independent variable, again there was not much difference between the means. The data showed a $M = 3.59$ ($SD = 1.479$) for MSNBC stories and $M = 3.37$ ($SD = 1.284$) for Fox. Levene’s test for equality resulted in $p = .266$, so equal variances can be assumed. These results were $t(355) = 1.509$, $p = .066$ (one-sided). These results indicate that there wasn’t much variation between these two variables when it came to thoughts on bias. However, it is interesting to note that the mean for bias, while not significant, was slightly higher for MSNBC than for Fox.

Post-Test Measures

After being shown the stimulus and the manipulation check questions, the respondents were shown nine additional randomized post-test questions from Lavidge and Steiner’s (1961) hierarchy of effects model – three conative, three affective, and three cognitive – to test how these measures were affected by the stimulus. Each one of these questions began with the prefix “based on the article I read.” This forced the respondents to remember the stimulus article as opposed to answering the questions without regard or thought to what they read, hopefully keeping them engaged and thinking about the article as they answered the post-test questions. These questions, like all previous, had the same (1) *strongly disagree* to (7) *strongly agree* scale.

Cronbach’s alpha for the cognitive index was .735, for affective it was .764, and for the conative index it was .620. The conative index was the lowest, but it is still reliable. Across all

dependent variable measures, cognitive, affective, and conative, the only items to have any significant findings are each variable's corresponding pretest questions, the narrative transportability scale, and ideology. All indices had values of $p < .001$, excluding one score of the narrative transportability index from the conative index measure, which had a significance of $p = .17$. Neither news source or news frame had any significant findings and did not appear to affect the respondents. Far and away, the most significant factor for measuring the respondent's cognitive, affective, and conative attitudes toward climate change was their preexisting ideology, which did not appear to be moderated by either stimulus.

Demographics

Following the post-test, each respondent was shown six demographic questions. The first question asked about political ideology and is the final covariate of the study. It asked them to rank their political position from (1) *strongly conservative* to (7) *strongly liberal*. This question was asked after the stimulus in order to not predispose the respondents to political thinking prior to stimulus and was the only mandatory demographics question. The other demographic questions included gender, race, education, current collegiate grade level, age, and income. After the demographics questions, the respondents were shown a debriefing page that revealed that the stories they were shown were not actually stories written by either of the media outlets, but instead written and created for the specific purpose of the survey. This was to make sure that the respondents were fully informed about the experiment and will not believe any false information going forward.

Open-Ended Question

The final question regarding climate change shown to the respondents was open-ended and allowed them to explain their ideas about it in their own words. The question read "Please

share your opinion about the issue of climate change. For example, how important do you think the issue of climate change is? Do you think our world will find a timely solution? How do you describe people who hold an opposite opinion to yours? What media outlets do you think they consume?” Thirty-three people out of the analyzed group did not respond, which left 324 answers to this question. These were coded into five non-exclusive categories including those who thought climate change was an important issue that needed to be addressed, those who mentioned feeling negative, those who mentioned feeling positive, those who had negative feelings toward the opposition or blamed a specific group, and those who claimed that climate change was either not real or not human-caused. It is important to note that there were 16 that were not coded with any category. These usually cited ignorance on the topic and so they did not have any real answer to share, or that they simply did not care about the issue. One such response was “I dont care about climate change im here for a good time not a long time.”

There were three additional non-exclusive codings that cited if a respondent mentioned either governments or large companies as either the cause or the solution to climate change, those who said that the opposition likely viewed social media to get their information, or those who said that the opposition likely did not consume any media at all. In general, the results were overwhelmingly clear that the respondents overall believed that climate change is very important and felt strongly that something needed to be done to stop future climate harms, but many felt like it was either too late or they simply did not know what to do to stop it.

CHAPTER 5

RESULTS

In order to investigate the data, a two-way ANCOVA analysis of covariance was used for all three levels of cognitive, affective, and conative as compared to their corresponding pretest questions, the narrative transportation index, the reversed locus of control index, ideology, news source, and news frame. The first test run was for the cognitive index, and Levene's test of equality gave a nonsignificant result of $F(3, 353) = .925, p = .429$. The ANCOVA was run and found significant results for three factors including the cognitive pretest question, the narrative transportation index, and ideology. The pretest cognitive question resulted in $F(1, 349) = 23.97, p < .001$, partial $\eta^2 = .064$, and the narrative transportation index with $F(1, 349) = 21.051, p < .001$, partial $\eta^2 = .057$. The most significant factor out of the three though, was ideology with $F(1, 349) = 44.202, p < .001$, partial $\eta^2 = .112$. Ideology had a high effect size and a very high F score, indicating that ideology was the best predictor, even more so than the cognitive pretest question, of a person's cognitive understanding of climate change information. However, the reverse locus of control index did not result in any significant findings with $F(1, 349) = .325, p = .569$, partial $\eta^2 = .001$, indicating that a person's locus of control does not affect their cognitive understanding of the climate.

What was surprising was that neither news source nor news frame had any significance for the cognitive variable. News source had a result of $F(1, 349) = .027, p = .868$, partial $\eta^2 < .001$. Whether or not the stimulus came from either Fox or MSNBC simply did not have any significant effect on cognition. News frame resulted in $F(1, 349) = .108, p = .743$, partial $\eta^2 < .001$. Again, it seems as though neither a narrative frame nor a fact-based frame had any

significant relationship to the respondents' cognitive understanding of climate change information.

The results that followed for both the affective and conative variables were very similar to the cognitive variable. Levene's test for equality for the affective index resulted in $F(3, 353) = .589, p = .623$. Again, the ANCOVA showed significant results for the same three variables, the corresponding affective pretest question with $F(1, 349) = 67.131, p < .001, \text{partial } \eta^2 = .161$, the narrative transportation index with $F(1, 349) = 27.138, p < .001, \text{partial } \eta^2 = .072$, and ideology with $F(1, 349) = 46.987, p < .001, \text{partial } \eta^2 = .119$. The reverse locus of control index was again nonsignificant with a result of $F(1, 349) = .048, p = .827, \text{partial } \eta^2 < .001$. The difference with the affective model was that this time, the pretest question was a better predictor of the affective results over ideology, but ideology still had a very high F score and a high effect size, meaning it is still a large factor in people's emotional perception of climate change. And again, neither news source nor news frame had any significant findings where news source resulted in $F(1, 349) = .064, p = .801, \text{partial } \eta^2 < .001$ and news frame resulted in $F(1, 349) = .078, p = .78, \text{partial } \eta^2 < .001$.

Levene's test for equality for the conative index resulted in $F(3, 353) = 1.381, p = .248$. The results were again similar to the previous two, but with the exception of a nonsignificant finding for the narrative transportation index. This result was $F(1, 349) = 1.891, p = .17, \text{partial } \eta^2 = .005$. This indicates that while narrative transportation might have an effect on a person's cognitive understanding and emotional understanding of climate change, it does not have any significant effect on their behavioral intentions regarding it. This is particularly interesting to note when considering H2 and the hypothesized effect of narratives on behavioral changes. The

reverse locus of control index was nonsignificant and resulted in $F(1, 349) = .62, p = .432$, partial $\eta^2 = .002$.

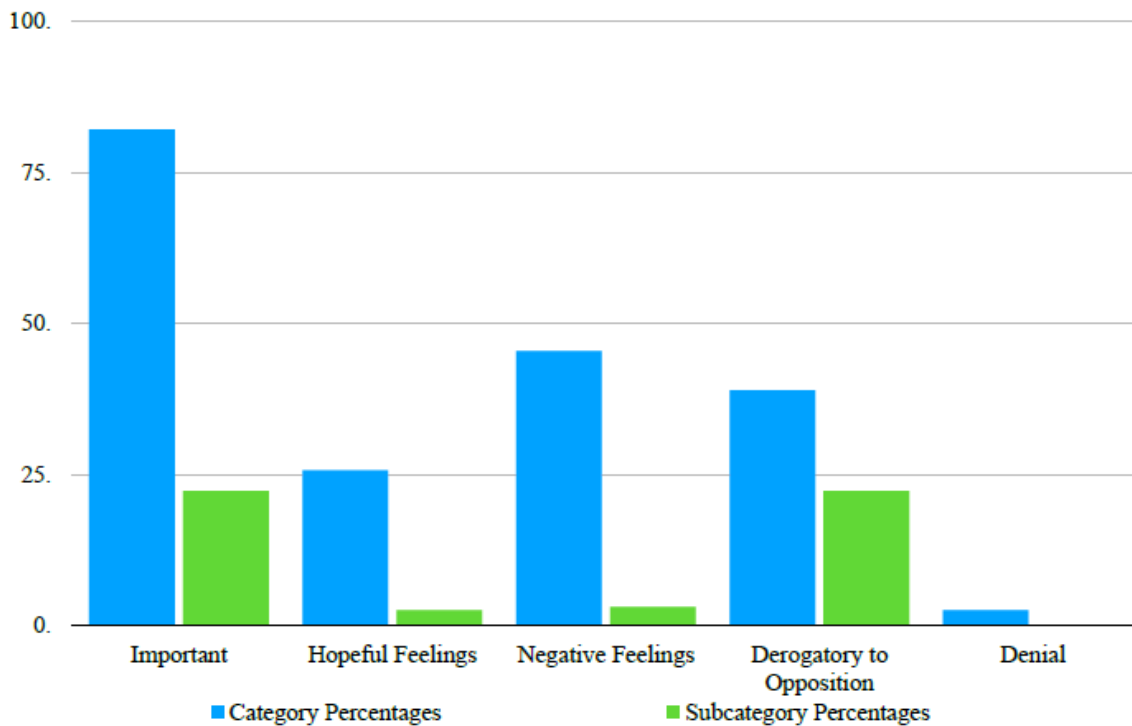
The other results were similar to both cognitive and affective indices. The pretest conative question had a significant result of $F(1, 349) = 35.306, p < .001$, partial $\eta^2 = .092$ and ideology had a significant result of $F(1, 349) = 21.922, p < .001$, partial $\eta^2 = .059$. News source had a nonsignificant result of $F(1, 349) = .207, p = .65$, partial $\eta^2 = .001$, news frame had a result of $F(1, 349) = .611, p = .435$, partial $\eta^2 = .002$. Once again, it appears as though that apart from the pretest questions for each variable, ideology was the best predictor of each respondent's thoughts, feelings, and behaviors on climate change and was not moderated by news source, frame, or locus of control.

The answer to RQ1 regarding partisan labels affecting belief in climate change is no, it does not affect belief. An independent samples t-test was run to find the answer to RQ2, which showed no significant difference in narrative transportability depending on news source. The answers to both RQ3 and RQ4 regarding changing a person's intent to change behaviors regarding climate change are also no, which is not affected by either narrative or fact-based stories or political label. The answer to RQ5 is again no, narrative does not increase believe in or intent to change regarding climate change. A person's locus of control was also found to be nonsignificant in any findings, which means that the answers to both RQ7 and RQ8 are again, both no; nothing was affected by it.

The answer to RQ6 is a little more interesting, as it compares the answers between conservative and liberals in response to narrative. When an independent samples t-test is run with the narrative engageability index against those who identified themselves as either moderately conservative (23) or strongly liberal (61) there is a significance of $p = .036$. This

indicates that there is some significant difference between a person’s narrative transportability and their ideology between conservative and liberal. However, this was the only pairing that was identified with a significant result and no other pairing between conservative, liberal, or neither held any significance. H1 stated that partisan news source labels will affect beliefs and intent to change regardless of lean, but across all measures of cognitive, affective, and conative levels, news source was never significant. H1 must be rejected and the null hypothesis supported. H2 must also be rejected since news frames also never had any significant result. The null hypothesis is again supported. But, despite the results indicating that neither narratives nor news sources have much if any effect on how a person feels, thinks, or acts regarding climate change, the answers to the open-ended question did reveal quite a bit more about people’s feelings on the issue, and a mixed qualitative and quantitative analysis was done on their answers.

Non-Exclusive Category Percentages Out of All 324 Responses



	Category Percentages	Subcategory Percentages	Subcategory Group Names
Important	82.1	22.22	only coded important
Hopeful Feelings	25.62	2.47	only coded hopeful
Negative Feelings	45.37	3.09	only coded negative
Derogatory to Opposition	38.89	22.22	mentioned conservative media
Denial	2.47		

For the total 324 open-ended responses that were coded, all of which are quoted exactly how they were typed including typos, 266 (82.1%) felt that it was an important issue that needed to be addressed. A typical answer from this group, would include phrases such as “I think climate change is an important issue” or “we need all hands on deck.” One hundred forty-seven (45.37%) had negative feelings about the issue with statements such as “I do not think our world will find a timely solution” or “I worry a lot about about our planet becoming uninhabitable in my lifetime.” Ten answers out of the 147 from that group were not coded with any other label, meaning the answer was wholly negative on the subject. One such answer read “people don’t care, they think oh well I won’t be here let the youth deal with it.” Hopeful answers included phrases such as “I would like to believe our world will find a timely solution” and were included in 83 (25.62%) responses. Six out of those 83 were coded as solely hopeful. “I feel like if we take the proper steps we can help the planet,” wrote one such response, but most of this category was in conjunction with those who thought it was an important issue. However, there were also some coded as only hopeful and negative. These were interesting responses with an example being “we’re screwed but maybe we can prolong it.”

Many responses also included negative feelings toward those that held an opposing viewpoint from the author, which totaled 126 (38.89%). Generally, the words that made up these

descriptions included calling the opposition stupid, delusional, naive, uneducated, ignorant, etc. Out of these 126 responses, 72 (48.98%) cited conservatism or Fox News specifically as part of the problem, usually in conjunction with the negative words listed above. Only eight (2.47%) responses were coded as stating that climate change either did not exist or was not human-caused. These answers were a bit varied though and ranged from “I don’t believe in climate change or global warming,” which came from a person who identified as moderately conservative, to thinking climate change is a problem but humans either aren’t the cause or can’t do anything about it. An example of this category is:

I think climate change is most definitely negatively impacting our planet, but extremely slowly. I think it would honestly take thousands of years for our environmental harm to affect living conditions to the point where there is little life and habitats.

That specific answer was coded only in the denial category and was from a person who identified as slightly conservative, but only five out of the eight were coded as such. There was one coded as both important and in denial which read “I do think climate change is an issue and we all need to be better, but I also do believe that this issue is not entirely our fault,” from a person who identified as slightly liberal. Another one was coded as both in denial and negative, which read in part “I think that climate change is somewhat over blown and through the years, it has been manipulated for political gain. Therefore I don’t believe there can be one timely solution” from a person who is neither liberal nor conservative. Another answer coded as in denial was also coded as thinking climate change was an important issue and included negative feelings, which read “i am a conservative. i agree climate change is a problem. i don’t think us humans are the problem. i don’t think we will find a solution. i feel like climate change is going to progressively get worse.”

Out of all 324 responses, six cited the Earth’s natural processes as part of the reason for

climate change. Interestingly though, only one of these had any direct denial of climate change and was coded as such. The other five mentioned Earth's natural processes as being a part of the whole with one person, who categorized themselves as moderately liberal, even stating that climate change was a good thing:

I do think climate change is good, especially to reverse humanities doing of speeding up this process. However, someone pointed out to me that the world naturally fluctuates temperatures and sometimes even into extremities like the ice age. So I think we should reverse our doings but if the Earth continues to have extreme temperatures then we will just have to wait this one out. I don't think we will find a timely solution, people are greedy, and maybe they' regret it but it will already be too late then. Well I think if people have a different opinion than me I'll listen and if I think it's logical I'll think about it and if it's not logical I'll just think they're dumb. No offence but based on experience, I would think they would consume fox news.

One person from this group also mentioned the deterioration of the ozone layer as being another problem, and one other person also mentioned the ozone layer for a total of two out of the 324, but the second did not cite the Earth's natural climate processes. Their response read:

I personally believe that climate change is extremely important. I fear the validity of our climate diminishing is a major issue because the world could very easily lose its necessary ozone layer that protects our atmosphere.

This particular respondent classified themselves as slightly liberal. It seems as though that on the whole, this group of respondents were either uninformed, misunderstood what climate change is, or simply attributed much more to natural factors than actually occurs. These responses also ranged politically from slightly conservative through strongly liberal with only two coming from the conservative category. This indicates that being misinformed or uninformed is not confined to conservatives, but there are liberals who attribute climate change to natural occurrences due to lack of knowledge or a general misunderstanding of the climate and its natural forces.

The number of responses that discussed social media as being a part of the problem, i.e. that those who get their news from social media were misinformed, was interesting and

unexpected. Eighteen (5.56%) out of the 324 mentioned social media like Facebook and TikTok as from where people who held opposing views likely got their information. These statements were sometimes written in conjunction with disparaging remarks of the opposition such as calling them stupid, selfish, or mentioning Fox News. Here is an example of these statements:

I think that climate change is a huge issues, especially when you see how it is affecting populations that don't have the infrastructure or economy to handle the issues that come with it. I think that we will only find a solution when it affects a larger group of people that everyone can sympathize with. I think that people that hold an opposite opinion to mine are gullible, in denial, and maybe a little dumb. I think that they only consume right-wing media and facebook articles that are easily disproven if they could take to seconds to google.

There were 13 (4.01%) who said that people with opposing views likely did not consume any media at all, such as this person:

I believe climate change is a very serious topic that needs to be taught to everyone. Unfortunately, I don't think our world will find a timely solution. Those who hold on to the opposite opinion of mine are still valid, however it's affecting the whole world, not just them, it's a bit difficult for me to understand why they think that way. I don't think they consume any media outlets if they don't believe climate change is real. Every news source I have seen has given me some type of evidence that the world is warming up.

This is interesting to note as these people seem to believe that most media is to at least some degree in agreement with their ideas on climate change including conservative media like Fox.

However, there were also some that said the opposition either watched no news at all or conservative news like Fox, such as this person:

I think the issue of climate change is the single most important issue in the world right now, solely because it affects every single person on Earth. I think we have already found solutions (or at least reductions) to climate change, but they are not being acted upon because their results are not in the best interests of powerful corporations. People who deny climate change are either old/rich enough to not be affected and completely lack empathy for the people who will have to live through the climate change crisis in the next few decades. I would guess that they either consume no news or right-wing biased news sources.

It seems that these types of respondents thought that all media including social media are in line

with their opinions on climate change except for conservative outlets.

Another interesting observation was how many respondents felt like this problem was in the hands of governments and large companies as opposed to being something any regular person could do anything about. A total of 61 (18.83%) of participants mentioned this, so close to one fifth of the survey population felt like this is a part of either the problem or the solution.

An example of this type of answer includes:

Climate change is an issue that I would have on top of my list. I believe companies are too involved with what solutions government leaders propose. I believe it's us to younger generations to lead the charge towards a more sustainable environment. People that would have an opposite opinion would be Ultra-MAGA Republicans who only consume Fox or more extreme networks.

Some of these responses only mentioned companies or corporations, but often companies were mentioned in conjunction with the government, or even one person who wrote about “deniers in power,” which could mean either government officials or powerful people in general such as the Koch brothers. It's interesting to note that almost 20% of respondents placed the blame for or the ability to help stop climate change in the hands of powerful others, but that locus of control had no significant effect on any of the dependent variables. Perhaps it's not a person's locus of control that makes them feel this way, but more simple realism about the situation.

After going over what the respondents wrote, it became clear that the stories might not have represented what was intended to the respondents. Most answers did not mention them, but a few did and they revealed what those respondents thought about the stories they were shown.

One such person stated that they would have answered differently if they had not disagreed with the story they read, saying:

I believe climate change is a serious issue, though messages I hear in the media can sometimes make me doubt those beliefs because I do not know what is true. I think our world will find a solution, but I do not think major companies or politicians will allow the solution to be put into place, leading to our downfall. I think people who hold a different

opinion from me have simply heard different facts from me, either from people or the media. It's impossible to know which facts about climate change are true. If I may add a comment, I think the choice of article for this survey was weak. Not only is MSNBC an extremely biased news source, causing people who know its bias to likely discredit it immediately, the article also gave only a basic explanation of the science behind climate change, and it didn't discuss anything about laws that could lessen climate change or corporations' effect on climate change, which is why I disagreed with most of the statements in the second half of the survey even though I would normally agree with those statements.

This person self-described as strongly liberal and read the MSNBC/factual stimulus. They called MSNBC "extremely biased" even though it would supposedly align with their preexisting ideology, but both media outlets were chosen to be on opposite ends of the spectrum, so it appears as though in this respect for this respondent the media source stimulus was effective. However, they continued that the explanation was "basic," which led them to disagree with statements they would normally agree with. The information in the factual story was meant to be somewhat basic and simply informative, so again it appears it was fulfilling its intended purpose, except that it led the respondent to answer in ways they normally would not have. This might have had a similar effect on other respondents as well and led to some of the confounding results of this experiment.

However, the responses that mentioned the stories were not always negative. Some, like this person, mentioned the story in a way that aligned with their views and used it to support them in their explanation:

I think climate change is a really big issue because of instances like the story I just read. Not just families, but animals are being severely effected by the strong weather changes. I think eventually, with a lot of research and preparation, we will find a solution. I think people who don't believe in this are oblivious to what the world actually is and how it could effect people in a huge way. I think they consume very conservative news outlets that are mainly worried about everything else happening in the world than what is happening to earth itself.

This person also self-identified as strongly liberal and read an MSNBC source stimulus, but they

read the narrative stimulus instead of the factual one. This may or may not have had an effect on how they viewed the stories, but for these two instances the only difference in the survey was the narrative versus factual. However, more information and likely interviews would be necessary to come to any substantial conclusions.

Another person who self-described as moderately liberal and read a Fox/narrative article, spoke about the story not making them feel like they needed to do anything about the issue. They stated:

I think climate change is an extremely important topic. I think the world will find a timely solution, but I think governments, our country's government specifically, will not implement the solution to its full extent if at all. To be clear my answers to the article in the survey about whether I would change my behavior had more to do with the fact that the article did not move me or provide me with information to make me feel like I needed to do so. In reality I already implement many of those behaviors. People who are hold an opposite opinion to my climate change view, simply do not know the science behind climate change. I've met people who've watched both FOX and CNN who disagree with my views, but the common thread was the lack of education about climate change, not who they were getting their news from.

The narrative may have been moderated by the Fox source, but it seems as though the narrative did not have the intended effect. This is particularly relevant when considering this person scored a 6.33 on the narrative transportability index, meaning they are usually quite engaged with narrative.

But, news source may have played a role since there are examples of when news source might have had an effect on someone who was ideologically similar, such as this person:

Before this article I never thought much about climate change. I think climate change is a really big issue that needs to be resolved quickly in order to sustain the health of the planet and its producers and consumers. I think I would describe people who hold on opposite opinion as people who think more short term than long term seeing as climate change does not have an immediate effect on the planet. So, not narrow minded but not mindful thinkers either. I think our world would probably struggle to find a timely issue but as the years go on we'll find ways to make the problem less prevalent. I think they probably consume more liberal media outlets because those are more prone to discussing environmentalist issues.

This person identified as moderately conservative and read a Fox/fact story. It appears as though the stimulus had an effect on them, but since it was a fact-based story it had nothing to do with narrative. They also identified those that held different beliefs likely watch more liberal media outlets because they are more likely to discuss environmental issues. So perhaps the news source did have some effect, but again, the confusing results may have occurred because this survey was simply not equipped to interpret them properly.

There was also an example of someone who identified as neither conservative nor liberal and who noted that the article did not make them believe climate change was real, even though that is what they currently believe. They wrote:

I am not very educated on climate change, which is why I answered the way I did. The article was not very factual in the sense that it didn't truly make me believe climate change is "real". Although I do believe in climate change, I feel people can over exaggerate it quite a bit, making it less impactful when it is being explained correctly. I personally do not think we could get enough people on board to actively be able to make a difference due to our world being so divided.

This person read a Fox/narrative stimulus. It's hard to say without an interview why the narrative did not have an effect on the person, but notably they scored a 4.75 on the narrative transportability index. This is a roughly median score, indicating that they do have some ability to be engaged by narrative, but it appears as though this particular narrative did not do the trick for this particular respondent. Perhaps this person might have been better swayed with a factual story rather than a narrative one, but when looking at the disparate results, it could just as easily be a problem with the stimuli themselves.

Another interesting result is a person who identified as slightly liberal and who does believe climate change is important who noted that those who thought differently than they did likely watched far left news outlets such as MSNBC. Their answer stated:

I believe climate change is important and most people don't even realize what it is. There

are many things we can do that can help to slow climate change. I think our world could find a timely solution but they won't get people to do it since people either don't understand or care. I describe people who hold an opposite opinion of me to be different and I don't quite understand them or their thinking. They probably consume far left news outlets such as msnbc or cnn.

This person read a Fox/factual stimulus, so they may have thought if a Fox news article was in line with their beliefs, then those that opposed them might watch the far left outlets. However, they also may have read the ideological question backwards, or simply didn't understand the open-ended question.

In summary, according to this research, a person's preexisting ideology is one of the best indicators of their knowledge, feelings, and actions regarding climate change. This did not seem to be moderated by any other covariate or any stimulus that was shown to them. All the results across the three dependent variables were nonsignificant for both frame and source. It seems as though that it simply did not matter whether the respondents saw narrative or fact-based stimuli, conservative or liberal, their minds were already made up about the issue and they never wavered from their belief structure.

CHAPTER 6

DISCUSSION

From this research, far and away a person's political ideology has the largest effect on their views of and actions regarding climate change, and those views are very unlikely to be moderated by outside news sources or by different news frames. It appears as though that on the subject of climate change, once a person's mind is made up, which is likely based in large part on their political affiliations, it is not likely to change from any outside source such as the media. The basic conclusion of this research is that media have very little impact over how the public view and interpret climate change information once their minds have been set on a certain belief. This is because how they see the topic might already be "set in stone" in the person and it does not matter what they see in the news, their view is very unlikely to change regardless. Most in this experiment who already believed climate change was an important issue did not appear to believe it was more so after any stimulus, and those who did not believe climate change was a problem at all also did not waver in their opinion. News frame and source simply did not matter to the respondent's views of climate change.

While ideology had the largest effect out of any covariate, narrative transportation also showed significant results. Both the cognitive and affective variables were affected by the narrative transportability index, meaning that this research indicates that there could be a future for narrative in science reporting. However, it did not affect the conative variable, meaning that even though narrative might engage people emotionally and cognitively, getting people to act on that knowledge or emotion is something different. It is possible that narrative could be used in this way, but more research would be needed to understand that particular application.

It was also interesting that the reverse locus of control index had no effect on any of the

variables, meaning that whether or not a person believes they control their destiny or whether it is controlled by powerful others did not make a difference to how they felt, thought, or acted about climate change. This was the case regardless of the presence of narrative or political label. This indicates that while this might make a difference in other aspects of people's lives and decision making, it does not appear to make a difference for these variables in regard to these media labels or frames. But, this might be because there was no significance shown for either frame or label for any measure, so perhaps under different circumstances or in a different experiment, locus of control might make a difference.

These results could be explained, at least in part, by motivated reasoning. Lee (2021) discussed that both liberals and conservatives engage in motivated reasoning and watch media outlets that align with their preexisting beliefs. This is supported in the open-ended answers from the respondents, who very often said that those who disagree with their opinion likely watched media from the opposing political ideology. One person who rated themselves conservative, but who did believe climate change was a problem, said that those who disagreed likely watch liberal media. It is fairly well-known that liberals tend to be more environmentally concerned, but this person said that the other side, meaning those who did not believe climate change was a problem, was likely liberal. This person seemed to have been engaging in motivated reasoning by rationalizing their own views as being correct and the other side, regardless of the common knowledge that liberals generally believe more in climate change than do conservatives, as being incorrect and believing the opposite of what they believe. This could just be one representation of how many of the other respondent's rationalized their thoughts on the climate.

Mercier and Sperber (2011) also looked at motivated reasoning and confirmation bias in the context of argument creation, and in many cases the respondents used argumentative

language in their open-ended answers. However, none of the respondents, even those who had a high degree of frustration and argumentative language regarding climate change, were affected by either news source or frame. It appears as though their position on the subject of climate change was already set and not changed by the information they read or from which political media outlet they read it. People might only identify with one ideology and then use motivated reasoning to rationalize their agreement or disagreement with what they read in their open-ended response.

As far as the conative variable, Lee (2021) said that liberal's higher belief in science topics did not necessarily translate into behavioral changes, which appears to be supported by this experiment. This variable, unlike affective and cognitive, had no significant correlation to narrative transportation and had the lowest F value and effect size out of the three. Even though over 82% of the participants stated in the open-ended responses that climate change was an important issue that needed to be addressed, it appears as though their behavioral levels were affected the least out of all the dependent variables. Slacktivism, where people say they support an idea but actually do very little action to show it, may account for this. It is much easier for them to write on a survey that they think an idea is important and want to change it, but it is another thing completely to march or vote in order to create any of the real changes needed. There were even a couple answers that stated they think it is important, but they do not change their behaviors because of it. Their practiced behaviors of simply living their lives as they prefer may be something that is too set in stone to be changed by either narrative or news source.

When looking specifically at cognition, the open-ended answers indicated that most respondents agreed that climate change is a huge problem that needs to be addressed. Most were also fairly knowledgeable about what it is and understood the general concept of what is

happening to the planet. Almost 20% of the respondents mentioned governments and powerful companies having much more control over climate change than do most people, which at this point is a fairly accurate assumption. According to Curran (2005), it's the role of the media to be the intermediary between governments and the governed, but many respondents mentioned partisan media as being a part of the problem, such as conservative groups or Fox News specifically, because they continually tout anti-environmental rhetoric. This was often described in derogatory ways, thus blurring the lines between truth and fiction. It appears as though people are noticing problems within the media, but because this experiment got nonsignificant results for any news source, it is unclear from this research how much that actually matters to people's understanding, emotion, and behaviors regarding the climate, at least when looking at these results from a quantitative standpoint. Qualitatively, the results indicate that almost 40% of people are thinking about the media in a negative way in connection with the climate.

When looking at the manipulation check question regarding emotion, the result was that narrative was thought of as significantly more emotionally engaging, but it was also seen as significantly more biased. Regarding the affective variable, perhaps the fact that people were more emotionally tied to this story meant that they read it as more biased, as in they may have simply put more emotion on the story itself, which increased their feelings about it including their doubt. It is also interesting to see that even though these results are nonsignificant, Fox was considered to be more emotionally engaging than MSNBC, and MSNBC was thought to be more biased compared to Fox. Again, while this was not statistically significant from a quantitative standpoint, qualitatively there was at least one respondent who rated themselves as liberal who mentioned MSNBC as being a "biased" news station. Most of the respondents rated themselves as liberal, so this thought may have been present in more than one person even if they did not

discuss it in the open-ended answers. Likely interviews with the respondents could give deeper insight into whether this is the case or not.

Some limitations to this research include the sample, which was almost entirely made up of undergraduate students age 18-24. This may have had an effect on the results because their political ideology might be different than that of adults, who have spent more time solidifying their views and ideological choices. The younger adults here may also have differing opinions about the news sources or the climate, which may have confounded the results. There likely was also a problem with the narrative and fact-based stories themselves, so even this exact experiment redone with different stories could also yield different results. The same could be said for the source stimuli. They were relatively small compared to the rest of the story, and perhaps were not noticed by all respondents. That could be a reason for the scattered and nonsignificant results for any variable. The fact that the students were journalism students may also have been a factor as they may have a different understanding of the media or climate change compared to the broader U.S. population.

It also seems as though people's understanding of climate change varies, and maybe there are enough people who simply do not have a good enough grasp of the subject to confound the results of an experiment such as this. The respondent's understanding of the stimulus stories also varied, and perhaps enough of them misunderstood what they read or maybe did not even bother to read the whole thing, which may account for neither news source nor news frame having any effect. Some specifically said they disagreed with or simply did not like the stories, so they answered differently than they normally would have. Others did not care about the topic or did not understand it, so why would they be affected by it regardless of narrative or news source? This variance in perceptions on the topic and the variance in people's personal responses to the

stimuli may account for the nonsignificant results for either frame or source. Or perhaps, their already established ideology was just too strong for any of the stimuli to overcome, at least as this experiment was written.

It may also be that Haidt's (2012) idea that people's reasoning is ruled more by their emotional responses than by logic. The respondents were significantly more engaged with the narrative, it just did not seem to change their perceptions. It might be that their emotional reaction to topics such as climate change have already been set to the point where they are primed to emotionally react to climate change in a certain way. If so, this research indicates that this priming factor is not changed by any emotion that would be elicited from a narrative story regardless of whichever news source from which they read it. People may indeed be ruled by their emotional reactions, but buzz words or well-known topics such as climate change, which they already have a preexisting stance on, will likely elicit the same emotional reaction regardless of whatever stimulus sparks it. Whereas, if this study was done on a relatively unknown topic on which people did not already have any preexisting stance, narrative versus fact or liberal versus conservative may have had a very significant result. But, climate change may already be one which is too cemented in the public zeitgeist to be changed by either narrative, source, or perhaps at this point by any media at all. It seems as though people's perceptions over what they read simply ranged too far for this study to accurately quantify, and perhaps the answer to these questions lies more in qualitative analyses than in numerical ones.

Future experiments might want to use an older population, one that is not strictly journalism students at a university and who might be more aware of and concerned with news sources. An audiovisual presentation may also work better at getting a more pronounced response from respondents. They would still be narrative, but would perhaps work a little better

than written stories. They could also include realistic solutions to climate change such as descriptions of real technologies that could reduce greenhouse gases such as focusing efforts on reducing emissions from the world's top producers CO₂. They might also want to shy away from using the phrase "climate change" as it might just carry too much of a connotation for people. Perhaps using indicator words or descriptions of what's happening instead of trigger words or phrases might yield more significant results. This could lead into the conceptual decomposition of climate change by discussing smaller problems such as ride sharing within the larger context of the overall climate. Perhaps focusing on those smaller issues could yield different results as well. They could also look more closely into the connection between people's ideology and how it can be affected by the media. These connections between belief and emotion could yield interesting results for presenting science information, and research looking into Haidt's (2012) idea about changing people's minds through other people's riders could improve science communication in the future.

However, regardless of stimuli and covariates, this research did find solid evidence to support a connection between ideology and thoughts, feelings, and behaviors regarding climate change. It appears that finding the answer to influencing or informing the public on the climate is more complex than simply presenting information using facts or narrative, and that whichever media they watch will likely not affect their preexisting ideology. It might be that a person's mind is only changed on topics as ideologically cemented as climate change by the opinions and minds of other people they respect, or in other words, the already respected riders of other known people such as friends and family. If that is the case, and simply presenting truth and fact about science is not enough to convince anyone of anything they do not already believe, then climate reporters might have an even more difficult job than they already think that they do. Statistician

and author Jim Frost spoke of the differences between story and statistics saying that:

Humans are more likely to tell and remember dramatic, extraordinary personal stories. Throw in some emotion, and you're more likely to believe the story. In psychological terms, statistical analysis of data that scientists collect carefully from well-designed experiments lacks that emotional kick. Sad but true. (Frost, 2019, p. 11)

Perhaps there is hope for story and narrative in the world of science reporting with data and statistics, if not for any other reason than its effect on humans and the power that it holds. But, it just might be some time before statisticians can get their well-designed and emotionless numbers to actually affect the human mind cognitively, affectively, and connotatively, at least when it comes to climate change.

APPENDIX A
SURVEY INSTRUMENT

Informed Consent Notice

TITLE OF RESEARCH STUDY: Narrative Solutions to Climate Change

RESEARCH TEAM:

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You are being asked to participate in a research study. Taking part in this study is voluntary. The investigators will explain the study to you and will answer any questions you might have. It is your choice whether or not you take part in this study. If you agree to participate and then choose to withdraw from the study, that is your right, and your decision will not be held against you.

You are being asked to take part in a research study about whether or not narratives can be used to present climate change information in the news.

Your participation in this research study involves taking a survey. There are some pretest questions, then you will read an article, then answer some posttest questions. It should take about 10-20 minutes. More details will be provided in the next section.

You might want to participate in this study if you are interested in the news. However, you might not want to participate in this study if you do not want to read about climate change or are sensitive to political topics.

You may choose to participate in this research study if you are an American adult age 18+.

The reasonably foreseeable risks to you if you choose to take part include loss of confidentiality. You are not expected to directly benefit from participating in this study but the researcher hopes that this study will lead to more effective news articles in the future. You could possibly receive course credit at the discretion of your professor.

DETAILED INFORMATION ABOUT THIS RESEARCH STUDY: The following is more detailed information about this study, in addition to the information listed above.

PURPOSE OF THE STUDY: The purpose of the study is to find out if narrative stories about climate change can be an effective way for people to understand how it works.

TIME COMMITMENT: Participation in this study is expected to last approximately 10-20 minutes.

STUDY PROCEDURES: You will be asked to take a survey consisting of several sections.

Section one will consist of 24 pretest questions.

You will then be asked to read a news article about climate change.

You will then be asked 11 posttest questions followed by a few demographic questions.

POSSIBLE BENEFITS: The possible benefits of completing this survey include making news articles more effective at presenting climate change information to the public. You are not expected to experience any direct benefits if you choose to take part in this survey, apart from the possibility of course credit at your professor's discretion.

POSSIBLE RISKS/DISCOMFORTS: Participation in this online survey involves risks to confidentiality similar to a person's everyday use of the internet and that there is always a risk of breach of confidentiality.

This research study is not expected to pose any additional risks beyond what you would normally experience in your regular everyday life.

However, if you do experience any discomfort, please inform the research team.

Participating in research may involve a loss of privacy and the potential for a breach in confidentiality. Study data will be physically and electronically secured by the research team. As with any use of electronic means to store data, there is a risk of breach of data security.

If you experience excessive discomfort when completing the research activity, you may choose to stop participating at any time without penalty. The researchers will try to prevent any problem that could happen, but the study may involve risks to the participant, which are currently unforeseeable. UNT does not provide medical services, or financial assistance for emotional distress or injuries that might happen from participating in this research. If you need to discuss your discomfort further, please contact a mental health provider, or you may contact the researcher who will refer you to appropriate services. If your need is urgent, helpful resources include the Centers for Disease Control and Prevention mental health directory, which can direct you to immediate and appropriate health resources. If you are in Denton or at UNT, you may also contact these resources: Denton County MHMR crisis hotline at 1-800-762-0157; UNT Mental Health Emergency line at 940-565- 2741; Family Violence Shelter of Denton County Crisis Line at 940-382- 7273; National Suicide Prevention Hotline at 1-800-273-8255; UNT Survivor Advocate for students effected by Violence or Sexual Assault at 940-565-2648.

COMPENSATION: You could possibly receive course credit at the discretion of your professor.

CONFIDENTIALITY: Efforts will be made by the research team to keep your personal information private, including research study, and disclosure will be limited to people who have a need to review this information. All paper and electronic data collected from this study will be stored in a secure location on the UNT campus and/or a secure UNT server for at least three (3) years past the end of this research on a password protected computer. Research records will be labeled with a code and the master key linking names with codes will be maintained in a separate and secure location.

Participation in this online survey involves the potential for the loss of confidentiality similar to a person's everyday use of the internet.

This research uses a third party software program called Qualtrics, and is subject to the privacy policies of that software program noted here: <https://www.qualtrics.com/privacy-statement/>

CONTACT INFORMATION FOR QUESTIONS ABOUT THE STUDY: If you have any questions about the study you may contact Kate Pezzulli at katherinepezzulli@my.unt.edu or Dr. Koji Fuse at koji.fuse@unt.edu. Any questions you have regarding your rights as a research subject, or complaints about the research may be directed to the Office of Research Integrity and Compliance at 940-565-4643, or by email at untirb@unt.edu.

Please check the box below to indicate your consent prior to moving forward with the survey:

I have read the consent information and agree to take part in the research.

I agree

I do not agree

Pre-Test

Please choose how you feel about the statement on a scale from 1 (strongly disagree) to 7 (strongly agree):

I am often impatient to find out how a story ends.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I am often glued to a movie, yearning to see how everything plays out.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Films arouse my curiosity easily.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

It is easy for me to get involved with the feelings of the characters in a movie.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I am often affected emotionally by movies and TV shows.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I often feel happy when a character succeeds, and I feel sad when they suffer in some way.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I often become very involved in a movie that I would otherwise consider unrealistic, just for the fun of it.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I can easily immerse myself even in unrealistic stories.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I often find myself accepting events that I might have otherwise considered unrealistic.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree

- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

While watching a movie, the story world is often closer to me than the real world.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I often feel that a movie creates a new world, and then that world suddenly disappears when the movie ends.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

When I watch a movie or a TV show, I often feel that my body is in the room, but my mind is inside the world created by the story.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

My life is determined by my own actions.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I am usually able to protect my personal interests.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I can pretty much determine what will happen in my life.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

To a great extent, my life is controlled by accidental happenings.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Often there is no chance of protecting my personal interest from bad luck happenings.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

When I get what I want, it's usually because I'm lucky.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree

- 6 Moderately agree
- 7 Strongly agree

People like myself have very little chance of protecting our personal interests where they conflict with those of strong pressure groups.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

My life is chiefly controlled by powerful others.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I feel like what happens in my life is mostly determined by powerful people.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Nearly 100% of climate scientists believe in climate change.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I feel scared of consequences of climate change in the near future.

- 1 Strongly disagree

- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

I generally try to change my behaviors in order to stop climate change, such as recycling whenever possible.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

[news articles redacted for copyright protection]

Post-Test

Manipulation Check

This story is emotionally engaging.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

This story is biased.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Con/Aff/Cog

Based on the article I read, I will start using public transportation or walk to reach a destination as much as I can.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Based on the article I read, I will raise my room or home temperature by 2 degrees Fahrenheit.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree

7 Strongly agree

Based on the article I read, I will support legislation that raises my tax to subsidize companies investing technologies to suck carbon dioxide out of the air.

1 Strongly disagree

2 Moderately disagree

3 Slightly disagree

4 Neither agree nor disagree

5 Slightly agree

6 Moderately agree

7 Strongly agree

Based on the story I read, I dislike climate deniers.

1 Strongly disagree

2 Moderately disagree

3 Slightly disagree

4 Neither agree nor disagree

5 Slightly agree

6 Moderately agree

7 Strongly agree

Based on the article I read, I am sad that climate change causes harm to people.

1 Strongly disagree

2 Moderately disagree

3 Slightly disagree

4 Neither agree nor disagree

5 Slightly agree

6 Moderately agree

7 Strongly agree

Based on the article I read, I am angered by companies that do not actively try to stop climate change.

1 Strongly disagree

2 Moderately disagree

3 Slightly disagree

4 Neither agree nor disagree

5 Slightly agree

6 Moderately agree

7 Strongly agree

Based on the article I read, I understand that climate change is linked to severe weathers.

1 Strongly disagree

2 Moderately disagree

- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Based on the article I read, I understand that climate change is a settled science.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Based on the article I read, I understand that without drastic measures, climate change will soon cause an irreversible cycle of frequent global natural calamities to eventually wipe out human habitats from the earth.

- 1 Strongly disagree
- 2 Moderately disagree
- 3 Slightly disagree
- 4 Neither agree nor disagree
- 5 Slightly agree
- 6 Moderately agree
- 7 Strongly agree

Demographics

Please choose the option that best describes you: Ideology

- 1 Strongly conservative
- 2 Moderately conservative
- 3 Slightly conservative
- 4 Neither conservative nor liberal
- 5 Slightly liberal
- 6 Moderately liberal
- 7 Strongly liberal

Gender

- Female
- Male
- Non-binary

Other

Race

- Caucasian or white
- African American or Black
- Hispanic or Latino/a
- Asian American or Asian
- Other

Education

- Less than high school
- High school graduate
- Some college
- Associate degree
- Bachelor's degree
- Master's degree
- Doctorate

If you are currently a student, what is your grade level?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate

Age

- Under 18
- 18-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70 or older

Income

- Less than \$30,000
- \$30,000 to less than \$60,000
- \$60,000 to less than \$90,000
- \$90,000 to less than \$125,000
- \$125,000 to less than \$150,000

\$150,000 or higher

Please share your opinion about the issue of climate change. For example, how important do you think the issue of climate change is? Do you think our world will find a timely solution? How do you describe people who hold an opposite opinion to yours? What media outlets do you think they consume?

Please write your name, the course name, and the course number for which you took this survey here. This is so you can be counted for your course credit. If you can't remember your course name or number, please write a description of the class to your best ability.

APPENDIX B
OPEN-ENDED RESPONSES

I think climate change is an important issue that the world and leaders in power need to get on. Because I think we are slowly running out of time for a solution.

I don't think that enough of us are taking measures to change the way we interact with the climate for any timely solution to take place. Too many people still think it's a hoax. We need all hands on deck.

I think it's a very important issue because without a world to live on we have nowhere to go so we should take care of our planet. People who deny climate change should educate themselves on the topic before speaking out. I think they mainly consume conservative platforms.

I think climate change is very important and we should start taking action if not, we will be in big trouble and see a lot of changes. People who have the opposite opinion are probably not educated on what is going on. I believe that they consume media outlets that are biased.

The climate change is a big issue and we should all be working towards it. We need to make earth a better place for not only humans but also animals and all human live. I don't know if people that have an opposite opinion than me it is because they consume a certain type of media outlets. Some people are just selfish and don't care about others and their surroundings.

8

The issue of climate change causes extreme anxiety for me. It saddens me that people rather value economic gain than the protection of our home, Earth. (6) fox fact

I do not think that a timely solution will be made in time to save the earth from the tragedy humans are causing.

I believe the issue of climate change is vastly important and needs to be discussed more in media. As of now, I do not think our world will find a timely solution, however, there can be steps taken to reduce the likelihood of climate change chaos.

I feel like the issue of climate change is very important. If we do not act fast, it will affect the planet sooner than we expected.

The scary part was when they published that clock in NYC with the time we have till climate change can change the world. Knowing that drastic events can occur with climate change and we still have not seen change is eye opening.

I think climate change is very important to be aware of, I think that we should all start taking steps to be more aware and help finding solutions. (People who hold an opposite opinion are entitled to that opinion whether I disagree with it or not. In my honest opinion I don't think it's fair to take that away from them even if I disagree with them...) (5)

I believe climate change is extremely important, considering that the drastic changes effect each continent around the globe. I hope that in our generation, the world will successfully locate a timely solution; in terms of people upholding an opinion opposite of mine, I consider them to be ignorant solely because climate change is a very real crisis occurring, a prime example being the "Snow-VID" incident in Texas last February. They most likely consume media outlets like FOX News, which dominates the primarily conservative community as their primary source.

It is a very important problem we should all be attempting to fix, judging by how many individuals deny climate change, I doubt we would be able to rapidly fix climate change, they can have their opinion as

long as they do not deny multiple facts and studies conducted and supported by researchers, I cannot say.

I think it's important to consider the younger generations future.

I believe the issue with climate change is very important and affecting us way more than we think. Sadly, I don't think our world will find a timely solution to this problem. People who hold the opposite opinion than me is considered selfish, self absorbed, clueless, irresponsible and inconsiderate.

I believe that climate change is a real issue that will effect our world in the near future. I'm hoping the people with power in our world will start to take climate change seriously considering it is real and it is happening. My parents don't believe in climate change and i can't convince them it's real, however, every time they complain about the heat in the summer or the cold in the winter I continue to explain to them that it is only gonna get worse. My parents are very heavy right leaning so they get their main source of news from Fox News.

H

6 # MSTVC Marika

I think climate change is an issue in our world, but the way each side presents their ideas and movements can cause clashes and ultimately lead to no progress. If people take a stance of looking at facts and numbers to where a good compromise can be reached first, then at least there's SOME progress versus fighting. There needs to be steps before there can be a full solution. People who hold opposite opinions to mine would be "extremists" on either side of the argument. I think they confined very right or left wing media outlets and don't see much outside of the content they publish.

I think climate change is very important. I hope we find a solution. I find non believers slightly dumb and why do they not believe. Prob conservative

Climate change is absolutely an issue that needs to be far more prioritized than it currently is because it has the most likely chance of doing us all in. I can be understanding of people having different opinions on a great many matters, but climate change is absolutely a real, tangible issue that NEEDS to be worked on for the sake of the Earth.

X

~~Climate change is absolutely an issue that needs to be far more prioritized than it currently is because it has the most likely chance of doing us all in. I can be understanding of people having different opinions on a great many matters, but climate change is absolutely a real, tangible issue that NEEDS to be worked on for the sake of the Earth.~~

I do think climate change is something our country needs to focus on especially since the tragedy last year in Texas is the evidence of increasing climate change.

i think it determines the fate of our generation, as well as the rest of the world. it is at the hands of the rich, and those in power to use their influence and monetary tools to help us. 7

I think climate change is a very important issue we need to tackle, but i fear that (due to the high waste amounts of large corporations) it will not be resolved. I think climate change will get significantly worse in say 20-40 years. I would say the people who hold an opposite opinion to me would be heavy consumers & perhaps not even believe in climate change. I assume they consume niche subreddits & watch Fox News

20 ③ I think climate change is most definitely negatively impacting our planet, but extremely slowly. I think it would honestly take thousands of years for our environmental harm to affect living conditions to the point where there is little life and habitats. MSNBC Narrative

I think climate change is a very big issue happening that most people don't even realize is not only affecting them but our futures and our children's future. If we don't change now then there will be irreversible damage.

It is very important that we try to figure out a solution.

I do think climate change should be addressed but maybe in a less extreme way that does not affect individuals livelihood, however the worse it gets may require more drastic measures. Yes I believe we will. just people with other opinions I try not to label people. most likely more conservative news outlets.

I think the issue of climate change is very important, but I don't think we'll find a solution in time. I think that people who hold an opinion opposite to mine are willfully ignorant of the effect we are having on the planet, and probably consume more "conservative" media, like Fox News.

I think climate change is a major issue and that if the world doesnt come up with a solution quickly we are going to be completely out of luck. I think people who dont believe in climate change are either uneducated or misinformed.

Climate change is the most pressing issue we are facing. I do not think our world will find a timely solution. People who think otherwise are misguided or willfully ignorant. I believe the consume conservative leaning media outlets like Fox News.

33 ⑤ It's an extremely important issue. Changing weather patterns alone, minus the rising water levels and decreasing availability of fresh water, present extreme danger to those in poor communities. I do think we will find a solution. Humanity has overcome plenty. People that hold different opinions than me can be frustrating. I know that they think the same way I do for the most part, however, so I never get irritated at them. They probably consume media like The Daily Wire and Fox News. This has left them with opinions that are equal and opposite to mine. MSNBC Narrative

Climate change is a major issue that is causing so many world problems. I think as a world we should do way more to help save the world we live on.

I think the issue of climate change is a very significant and serious topic that people should consider putting more thought into. I believe our world is able to find a timely solution upon acting quickly. I believe that people who hold an opposite opinion from myself are either working for specific industries who are the main cause of climate change or haven't found time to consider researching about climate change. Some media outlets they may consume could be very opinionated.

~~We need to make change~~

I think that issue is very important and I don't think our world will find a timely solution because not everyone believes it is a real thing. I would describe them as uneducated and not wanting to be educated. I think they consume conservative channels and don't read articles that have proof in it.

I think the issue of climate change is the single most important issue in the world right now, solely because it affects every single person on Earth. I think we have already found solutions (or at least

reductions) to climate change, but they are not being acted upon because their results are not in the best interests of powerful corporations. People who deny climate change are either old/rich enough to not be affected and completely lack empathy for the people who will have to live through the climate change crisis in the next few decades. I would guess that they either consume no news or right wing biased news sources.

Climate change is important because it is a topic that is often put to the side but it affects all of us.

I think the biggest contributors to climate change are big corporations that use harmful manufacturing processes. We need to help make the cost of things more affordable so we have less fast fashion and less fast furniture so we as a country can produce less waste. We need less plastic. We especially need less single use plastic.

I am not very educated on climate change, which is why I answered the way I did. The article was not very factual in the sense that it didn't truly make me believe climate change is "real". Although I do believe in climate change, I feel people can over exaggerate it quite a bit, making it less impactful when it is being explained correctly. I personally do not think we could get enough people on board to actively be able to make a difference due to our world being so divided.

FOX Narrative

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4.75
NTInd

I believe that climate change is an important issue but I believe that we're on the edge of reversing climate change, when it comes to time/emissions. I would describe the people who hold an opposite view from me as narrow minded, where they're only seeing what's going on in their lives rather than seeing future impacts. I believe that people who intake more conservative media outlets have this view.

Climate change is important in my opinion because it will determine how the mother nature will react in the present and future compared to the past. Eventually there will be a way to reduce the amount of Carbon Dioxide being left in the atmosphere but that will take some time unfortunately. Everyone has their own opinion about this topic and feel that they should know the facts at least and accept that the climate change has change dramatically in the last 100 years. Anyone can find the facts from government websites, newspapers, or the news with all the information that has been gathered to conclude their final response.

I think that climate change is a huge issues, especially when you see how it is affecting populations that don't have the infrastructure or economy to handle the issues that come with it. I think that we will only find a solution when it affects a larger group of people that everyone can sympathize with. I think that people that hold an opposite opinion to mine are gullible, in denial, and maybe a little dumb. I think that they only consume right wing media and facebook articles that are easily disproven if they could take to seconds to google.

The issue of climate change is extremely important and should be taken seriously. Do I think the world will find a timely solution? If I'm being completely honest—No, I don't think a timely solution will be found. In my opinion, with a society like ours (contaminated by greedy, power thirsty individuals) it will most likely be a while before any effective method is put into place and willingly carried out. As for people who have an opposing opinion (regarding the issue of climate change and/or its very existence), I would describe them as unrealistic, delusional, stubborn, and stuck in their ways. Personally, I think people who don't acknowledge that climate change is in fact a real thing are individuals who think it's someone else's problem and not theirs. I would compare these types of people (those who believe climate change doesn't exist) to those who believe the Earth is flat since they have to see it to believe it even though it's happening right in front of their eyes. I've met a few people that have this mind set and it's very saddening because there is so much evidence and data behind this issue, yet they continue to

42

discredit all of it. I would assume that these individuals would consume media that shares their beliefs such as online forums or groups. I often wonder why some people constantly deny the existence of climate change—is it perhaps rooted by the fear of what is yet to come or do they believe their denial will make it disappear?

I think climate change is a very big issue and we need to take steps in order to prevent the worst of it.

Climate change is a concern but not so much that I am obsessed with it. We do what we can to do our part and hopes everyone else will too in order to make sure our childrens childrn and beyond have a net to enjoy.

I think that issue of climate change is truly important, and I feel like we are not acting as quickly or efficiently as we should to save the planet.

I feel like climate change is pretty important and I feel as though people should take it more seriously. I use to think everything was just scientifically based, but recently that has changed. Not everything in this world can be scientifically proved and odd things happen everyday, so we cant really predict what will happen to the world. I can respect how people who have differing opinions to me, because its interesting to gain more insight from others. I think alot of people my age get all their information from social media.

Outside of the Nuclear Potential of North Korea, the active aggression of China towards Taiwan, the aggression of Russia, the continued rise of the Alt/Far Right, Climate Change is one of the biggest issues that should concern everyone. I do not think we will find a timely solution. I think that people that hold an opinion opposite to mine are entitled to that opinion, but they are careless and oblivious. I would think that they consume Fox/DAN/Newsmax.

I believe that the issue of climate change is incredibly important and vital to the continuation of our time on earth. I think that many people choose to ignore major (or minor) issues out of ignorance rather than facing the problems head-on.

Climate change is already impacting human health. Changes in weather and climate patterns can put lives at risk. Heat is one of the most deadly weather phenomena. As ocean temperatures rise, hurricanes are getting stronger and wetter, which can cause direct and indirect deaths.

Climate change is very important and we aren't doing enough however we have made great strides, we just need to push even more.

Climate change is an extremely urgent issue that may be too late to reverse. The corporations like to pin the blame on consumers, meanwhile they are the ones doing the brunt of the damage.

I think climate change is very serious and I am concerned if the world will find a timely solution. I think that the people who disagree with climate change are not paying attention or doing real research about the world around them.

I am very passionate about climate change. I am saddened and have immense anxiety for the world because of the way that humans disregard our planet.

58

I need to do my research on it [we are not taught about climate change] so I cant answer this question. It would be very vague.

P15MBC
Hanetiv

3.75 NT

4

I think it's somewhat important. I do think the world can find a timely solution? I think of them as opinionated. I think they use what the general public use such as televised news and the internet.

I believe that climate change is an important issue, but am in the middle when it comes to finding a timely solution. I don't think there will ever be a solution that satisfies either political side. Either the government will be spending too much or too little money, depending on what side you choose. Those who disagree with me are entitled to their opinions, and I respect that. All media outlets seem so heavily biased that it doesn't matter to me what anyone else watches.

Honestly, I do not know much about climate change, but as a Texas resident, became more interested following the 2021 winter storm. I think it is very important. I see it the same way I see most diseases actually, by the time you start to really see the damage done, it's too late to reverse it. I hope and pray that we are able to find a solution in my lifetime. People who have an opposite opinion on climate change are usually right leaning in my experience. Most things are attached to money and climate change is being used as a "hoax" to claim their tax dollars...of which they don't pay anyway. Others are simply ignorant and we say ignorance is bliss.

I believe climate change will be the thing that untimely causes us the most harm

Climate change is an issue that I would have on top of my list. I believe companies are too involved with what solutions government leaders propose. I believe it's us to younger generations to lead the charge towards a more sustainable environment. People that would have an opposite opinion would be Ultra-MAGA Republicans who only consume Fox or more extreme networks.

I believe the issue of climate change is important since it affects all forms of life and the Earth itself. The drastic changes and severe weather reveals the disaster we are headed toward due to Climate Change. I am hopeful that we will find a solution, which at this point may be a bit unrealistic, but as evolving organisms hopefully we find a way to adapt somehow. I am an open-minded person and like to see things from multiple perspectives so I respect the opinion of others. They probably mostly consume social media platforms.

I think climate change is an extremely important issue, but I'm not sure we will find a timely solution. I think people who deny climate change are delusional and blind to truth. I think they mostly consume all right media or Fox news.

I think climate change is a big issue that is not being addressed enough. I don't know if we will find a timely solution to reverse the decades of harm human kind has done to Earth, but I hope that we do. Not just for my sake but for future generations. I think people who deny climate change are ignorant and are selfish. I think they view very conservative media, and I think they are not open to different point of views.

I think Climate Change is real and extremely important to take seriously. In Colorado, we've been having horrible droughts and wildfires due to climate change, and our winters have continually become more and more bitter.

I think that climate change is not being taken seriously by society as a whole. There is not a lot being done to help the issue.

Climate change is pressing, nearly irreversible or avoidable. I don't think our world will reach harmony to find a solution in time. I strongly think which outlets you consume will decide what you think.

For me personally, I would say climate change is something that I do think about and yes it's an issue that should be fixed. I really hope our world does find a solution because then what's going to happen to us in the future. I respect people's opinions and I know sometimes there's people who might not agree to mine and that's totally fine. Most likely those people use the news like a lot of people do.

72

I think while climate change is certainly an issue that needs to be addressed, other issues such as poverty and world hunger hold a higher importance. Specifically in America, large companies have such a strong hold in our legislation that I'm not sure that a timely solution can be found with other, powerful interests actively working against it. I can't say I know for certain what they look like, but I imagine those who hold a contrary opinion to mine to be pro-business conservatives who get their news from Facebook and Fox News.

Fox Narrative 3.17 MI

5

I think big corporations need to stop focusing on how much money they're making and how much of an impact their company has on the environment.

I think that Climate Change is incredibly important, it is having very real and very obvious effects on the planet that cannot be denied by anybody. I do not think our world will find a timely solution, there are still too many climate deniers in power for there to be a genuine push for change.

I am aware of the great importance climate change has on us, I am witnessing the changes in temperature and am scared. I feel like we need to come together to take companies that worsen the situation.

I believe the issue of climate change is critical. We must address it before the issue becomes unmanageable, which seems like that time is coming sooner than what most originally thought.

I think that climate change is a very important issue. Unfortunately, with many deniers and large corporations unwilling to take any action, I think that our world will not find a timely solution. I would describe deniers of climate change as either ignorant or scared. I feel that some deniers genuinely aren't aware of informed enough about the issue, so they just say that climate change isn't real. This could lead to the fear aspect of denial. I think that others are aware of climate change but continue to deny its existence anyways. Maybe because they're convinced that people are making it a 'political issue,' but really, I just think that they might be scared. And not to stereotype or anything, but I'm pretty sure climate change deniers primarily consume right-wing media outlets like FOX News.

79

I think climate change is one of the leading bipartisan issues that we should be focused on, and the government should do everything in its power to hold corporations accountable for lowering their carbon footprint and slowing the rate of climate change. And, while I do believe that we as individuals should be more conscious of our effects on climate change, I believe that some campaigns seek to place the brunt of the issue on the working class rather than the companies mostly responsible. I have met a few people that deny the legitimacy of climate change and they seem to stick to right-wing media like Fox or The Daily Wire.

6

Yes, Climate Change is a big issue, regular people like us can do something to help but that is only if a large amount of people do it together. The ones who can help the most is large companies because they are the ones that use most of the resources to make their products. Regular people like us can only do so much. Politics has also a big role because I believe that those who deny or don't want to help fight

against climate change does not want to lose money or wants to make more money even if it's hurting the planet. Unlike Japan, there are trashcans and recycling bins almost in every corner and it is frowned upon to litter in the street. There's even jobs where there are workers picking up left over trash from the streets. It's best for the U.S. to look at what other countries in Europe or in Asia are doing to keep the streets clean.

We need to take a step towards stopping climate change. Every summer there's another record breaking summer, it is getting hotter every year. We eventually will boil alive! I use public transportation to get to school, which everyone should do. Anyone who ignores climate change, wants the earth to get worse. That is simply stupid. On my walk, I try and pick up trash along the way, unless it is nasty. Picking up paper and empty bags helps.

I think that climate change is a very important issue. It affects us daily and will continue to do so until everyone decides to take action and steps towards actually solving the problem, but everyone has to do it. I think we're running out of time for a solution, we've known this to be an issue for a long time now - and people still actively don't believe in it. People with the opposite opinion are most likely uneducated on this subject matter and most likely refuse to hear anything but what they want to hear, which is why the media they consume is probably tailored to their exact beliefs causing them to be fed only the things they would agree with.

The issue is very important and can be concerning for other people in the future and the present. I will describe the people who hold an opposite opinion to mine will be understanding cause it's their opinion and you got to learn how to respect it at the end of the day.

I think the climate crisis should be one of the most important issues focused on in politics. I think we may find a solution if leadership continues to be liberal. I believe those holding an opposite opinion watch Fox News, and I would describe them as conservative, selfish, and ignorant.

I think that the issue of climate change is very important. I don't think that our world will find a timely solution, because everyone acts like it's so hard to come together to make a change. I believe everyone is set to have their own opinions and I can't get upset just because someone doesn't think like me.

I think it is an issue that should have been taken more seriously decades ago. The fact that there are even people that believe climate change isn't a thing frustrates me. I am also afraid to have children when I think of such a bleak future for our planet.

I think climate change is a real issue that will not be addressed until it affects those who benefit from the practices that make it worse.

I think in today's world, climate change has become an inescapable conversation. When we were younger, we of course learned the steps of recycling and learned that recycling is good for the Earth. Now, with technology and social media, I think I have learned more about climate change while watching two Tiktok videos compared to years of schooling. With that being said, I have found myself trying harder to do things to help our environment. I do not think our world will find a solution unless specific rules/laws are applied.

I think changes in human behavior to combat climate change is crucial to the existence of mankind. I don't have a lot of faith in our abilities to make impactful changes before many more suffer and die due to the effects of climate change such as fire, floods, drought, freezes, famine, etc. The ones who hold an opposing view are typically holders of conservative beliefs. They probably consume media from

conservative news outlets such as FOX news with skewed opinions on the existential crisis we are all facing.

Climate change is important because it affects the air that we breathe and the environment in which humans and animals live in. Frequent weather changes are a side effect of climate change and the irregularity is something that people are now paying attention to. I think in time our world will find a timely solution to solve the issue of climate change, but it will be a little while before then. People who don't realize or are blind to what is happening to our planet are either being living denial or showcase a naivety towards our slowly deteriorating planet. I'm not very sure in which media outlets they consume.

Climate change is extremely important however, I believe corporate America will be the main cause for climate change to take the planet. I make sure everyone can understand my opinions and I believe most climate deniers consume media outlets like FOX News

I think climate change is an important issue that isn't frequently covered in the media as urgently as it needs to be. However, I feel like the situation can be solved with hard work. I just don't think that hard work will ever actually get done. I can't fully blame the people who think opposite of me either because the news sources they consume likely don't cover the topic too much anyways.

Climate change is extremely important-- it's one of, if not the biggest issue of our generation. After all, we can't solve any of our other problems if we don't have a suitable planet to live on. I don't think our world will find a timely solution-- I think we'll find a solution, but it won't be enough (fast or big enough) and I think we're already past our "time limit". I can understand those who have different ideas than me on how to solve the climate problem, however I think those who deny that there is a climate problem at this point are completely delusional and not informed at all. At this point, I don't think any media outlets would be bold enough to say that climate change isn't real. However, in the past, conservative outlets (like FOX) have denied or sowed doubt about climate change. Any media outlets that still say climate change isn't real are most likely very obscure and extremist on the conservative side (reactionary).

As I read climate change is big problem. It's everyone's responsibility to learn about that and try to avoid doing the things that can cause problems. If other people are opposite it's okay everyone has their own opinion but we should try our best to be a helper not cause the problem.

People should respect each other's ideas.

Climate change is a good topic to know about even if it is just the basics. I do not mind other opinions that do not match with mine because everyone thinks and believes in different things, so it is hard for people to all think the same.

a7

[We're screwed but maybe we can prolong it.]

(4)

I think climate change is a very important thing to look out for. If everyone works together and prevention protocols are made, I think a solution will be found. If anyone disagrees about climate change, I would tell them to start doing research and look at the changes of the Earth. I think they consume social medias based on opinions, such as Twitter

i think it's very important and we all need to understand how are over consumption harms the earth

| There is also evidence that water moisture in the air accounts for 60-70% of the greenhouse effect. There was been a drastic increase of water moisture released into the air from oceanic volcanic

(4)

100

eruptions. Co2 emissions hardly contribute to global warming. Climate change is a cycle that happens every 100,000 years and we are currently on the edge of such a cycle. There is also a thing called major current shifts which also are a major impact to climate change. However, I do what I can to conserve energy because as little of an impact humans cause, its still negative. I do recycle A LOT, I have energy efficient cars, house etc. My home stays very hot in summer and very cold in winter. I HATE litter and actually attempting to start a non-profit to save Texas beaches and gulf ocean life. FOX FACT

4

3.67

Extremely important, definitely not, wouldn't say they are unintelligent but possibly not consuming the right kind of information (not necessarily their fault), usually if it isn't conservative media (liberal and nonbiased medias do not do a good job of covering climate change either) then they are often in the pop culture influence sphere

I don't really know much about it so I can't necessarily comment on it, but I'm hoping people can find a solution to it

103

I believe Climate change is a good thing for multiple purposes such as food growth , plants ect and for the human body everything can have a negative outlook on it but for the most part if the climate did not change and if we didn't have seasons that would affect a great amount of things in our nation

4

4.75

THINK MARRON

I think climate change is a very important issue. I do not know if we will find a timely solution, but I hope so. I think our world leaders, especially in America need to start making big changes in regard to policy around climate change. Large companies are contributing to the output of CO2. While citizens dialing back on transportation makes small differences, with America's terrain variation (cities v. rural), it is not possible for everyone to dial back -- many towns and cities are simply not walkable and rural towns offer little to no public transport. I think that people who deny climate change are ignorant. The research and data is at our fingertips with access to the internet, and the fact that people are in denial is outrageous. I think they consume conservative news outlets that are heavily right wing biased.

I think the climate change issue is very important and definitely something that everyone should be worried about and trying to control it. Those who do not believe in climate change I want to think are too afraid to face the truth and would much rather stay in their safe bubbles.

104

I think the issue of climate change is extremely important. I do think there are solutions out there but not enough people are willing to make these changes to save the Earth. I would describe people who hold the opposite opinion to mine on the subject as ill informed or ignorant. I think they probably consume stuff like Fox news which shares misinformation.

I think climate change is an important topic that many individuals overlook. I don't think there is going to be a solution in my lifetime, but I hope there will be one before there is no reversal. People who hold an opposite opinion to me I think are selfish and don't understand the impact climate change is truly making. These individuals probably believe most information they read on fake news outlets and don't consider others opinions.

108

As a Christian, I believe it is good to treat what God has created and gifted us (the Earth) well. However, when people place too much importance on the Earth over His people, an issue arises. Many of the policies or steps to take better care of the Earth have a great economic cost, which must come from somewhere--the people. We should be more mindful of our daily choices that could improve the overall well-being of our planet, but not at the cost of human well-being. Anyone who has an opposing view, is still loved and should freely voice their opinion with a kind perspective to those who also oppose them.

2

3.58

FOX FACT

I believe climate change is one of the most pressing **existential threats** humanity is facing. I don't hold out hope for a concerted effort to halt or reverse the effects of climate change, but I do think that humans will find new ways to adapt their lifestyles to the changing planet.

I believe climate change is a **very real issue**, however not many people take it seriously or are serious about taking the drastic measures necessary to actually make a change, to be honest myself included. I believe the solutions that have been proposed probably are backed by facts and will make a difference if carried out on a large enough scale, but like mentioned before I do not believe there are enough people throughout the world that will follow all climate recovery guidelines to actually change things. It seems to me that the rate of realistic damage is exponential compared to the rate at which each person in the world could achieve by doing everything climate scientists tell us to; in other words it is a fight already lost.

I think is **very important** because it can get in the way with how we live. I think **fox** is the media outlets we consume

I am passionate about this subject. To me, it is undeniable that there is a **massive problem** we need to deal with. I think it's a severe issue. I would like to believe that the world will find a timely solution but everyone needs to be on board and do what they can to make it happen. I am very frustrated and saddened by the people who do not believe climate change is real. I don't even know where they get the information that they do, but there is so much false information online these days that they are probably reading from somewhere that they understand to be a **trusted source**. I also think that many people who don't believe in climate change may be looking up to **powerful officials** or **government personnel** who they support and siding with the things they say whether it really makes sense or not.

I think that climate change is a **huge issue** and will continue to be huge issue that won't be solved because we live in a society that cares more about money than people. I think the people that hold a different opinion to mine are just those who have **not been properly informed**. They most likely get there news from **social media** which makes anyone an expert if you have enough followers.

114

climate change is a **very important topic**, but that ship has sailed, now we need to mitigate the damages for the unforeseeable future. I have a very poor opinion of people that deny science in general, climate change is just one topic on that ever growing list. I believe **fox news** to be one of the prominent leaders of **misinformation** as far as media outlets go. I feel that the misinformation that people receive on a Sunday from their church is vastly underrated as far as science denial and misinformation goes.

4

392

MASHOC fact

I think that at this point, even though there may be no way we can fully replenish or recover from the effects of climate change, its **so incredibly important** to the future of all life on the planet. There is a dire need for more people in power to promote carbon-neutral or more eco-friendly, biodegradable brands, and also to have those options serve as the primary option, and less plastic manufactured. People who oppose the reality of climate change are simply put, **ignorant** to the necessity of fixing it and are **lazy** to not make change if they are able.

I believe that climate change is a growing issue and needs to be more prominently addressed. There's qualities of climate change I can obviously get behind, particularly ones related to the progression of our world and sciences. However, all of this will be permanently halted if climate change grows to the extreme and it becomes impossible for our lives to be lived out casually. What I think the solution should be is have more groups focused towards finding solutions to climate change, while spreading this knowledge as much as possible as every little bit of influence, if done by every individual, could potentially lead to a huge change. When it comes to those who deny climate change I personally will

allow them to explain their argument, but the odds of me actually agreeing with what they say are at such a low level that it'd almost seem redundant. I enjoy debates like this though as it allows me to respond with a proper counterargument as well as relay the information I've learned regarding this matter, potentially spreading this influence even farther.

The issue of climate change is crucial to sustaining life on our Earth. I believe that unless something drastic happens in the mentality of the masses, that we are already too far gone for us to reverse the negative effects we've caused. I think that people who oppose the idea of climate change are ignorant and lack self awareness or the ability to realize how their actions directly affect others, and the environment, around them. Unfortunately a lot of conservative major media sources like to pander to these types of individuals so they are most likely absorbing echo chamber information from those sources.

I believe climate change is a very serious topic that needs to be taught to everyone. Unfortunately, I don't think our world will find a timely solution. Those who hold on to the opposite opinion of mine are still valid, however it's affecting the whole world, not just them, it's a bit difficult for me to understand why they think that way. I don't think they consume any media outlets if they don't believe climate change is real. Every news source I have seen has given me some type of evidence that the world is warming up.

I believe that climate change is a real thing and I don't think we will have a solid handle on a solution in a timely manner.

people don't care, they think oh well I won't be here let the youth deal with it

let

Scary stuff, hoping that it isn't too late to implement change. I wish people understood that their taxes go to things anyway, might as well have clean air.. Fox Fact

7
5.17

I think the issue of climate change is very important. I worry a lot about our planet becoming uninhabitable in my lifetime. I hope that we will find a timely solution but I think it is going to take some very drastic consequence for corporations who do most of the damage to take things seriously. I think that people who don't believe in climate change are living in delusion and they probably watch a lot of fox news.

Climate change is very important to deal with. I don't know if our world will find a solution in time. People who hold opposite opinions are caring more about social problems than environment problems. They probably watch all their local news stations.

The climate change issue is one of, if not the biggest problem in the world right now. It is hard to say if we will find a solution in a timely manner, but as long as everyone works together to try and stop climate change, it could work. I would describe someone who feels the opposite as a person who is inconsiderate. They probably consume media outlets such as Fox News.

I think the issue of climate change is very important and I think it is necessary to find a solution. I would like to believe our world will find a timely solution, but this means it would have to be slated as a priority over other matters in our society. I describe people who have an opposite opinion simply misinformed because they most likely have not received enough factual information over this issue. I believe the opposition consumes news outlets, but I also believe that the opposition does a very good job of not speaking on the issue of climate change at all to hope it does not stay relevant.

I think the issue of climate change is extremely important and needs to be addressed and worked on. I don't believe that our world will find a timely solution because too much profit is being made by the over consumption of resources leading to climate change. The people with the opposite opinion are either uneducated about the issue or don't care because they are profiting with the current situation. The news, social media, or word of mouth.

It is very important and I try to reflect my beliefs on others when it comes to saving the world

My opinion on climate change is that it's a topic that should be heavily covered by the mass media, and that should be brought to as many people's attention due to the severity of the issue. Sadly though, most people who have the power to make a significant change—whether that be scientists who have the technology and/or knowledge to stop what causes climate change in the first place, or just media outlets in general who can spread the message—don't support the stopping of climate change, or just don't believe in it. I personally believe those types of people, while wrong and the reason why climate change isn't stopping anytime soon, can't be convinced and hold such a strong opposition that it'll be next to impossible to change their mind. This is usually in part to them consuming media that spreads misinformation or just outright calls it a "conspiracy," which downplays the severity of the issue and most likely makes them turn away from the issue due to them not understanding that it's a real problem. If there was a way to make it political, most likely the people against climate change or those who don't care about it are consuming Republican media, however recently it seems as though both Democrats and Republicans alike are starting to care about the climate, with Democrats putting it as more of a priority, so it's mainly just certain people who decide to go against it.

Very important. I hope so. They lack awareness. They don't, or choose to ignore facts/ do not believe in science..

Climate change is a big thing that we need to help with. People who have different opinions than me when it comes to climate change are usually Fox new watchers.

It's a serious issue.

33

Climate change is important, but because I'm not directly affected by climate change, I don't think about it.

MSNBC fact apathy

7
5-33

Climate change is very serious issue because it isn't just affecting the U.S. but countries all over the world. Climate change is a global crisis that needs immediate fixing but I do not think that the world will try to resolve it because because of the powerful and money hungry companies around the world that profit from climate change. I believe that there are already many solutions to climate change but the greed of humanity isn't willing to make the improvements for the sake of profitability. I hold people who oppose my opinion on climate change to a low standard because they fail to recognize a serious issue that is affecting our current world and will destroy the world in the future. I believe people like that consume a lot of Alt. Right and super conservative media that is solely focused on controlling people's beliefs and views of the world.

Its a big problem, one that people are overlooking way big. At this point in time I don't think we are doing enough to find a timely solution, and despite it being possible not enough people are committed. I don't know how to describe someone with an opposite opinion to mine since my personal opinion changes alot. Media outlets Fox news mabey or straight from facebook type stuff.

I think climate change is a very importantly issue that should be dealt with with urgency.

I believe that climate change is a **serious problem**. But I also believe that I, myself, don't have enough power or influence to make that much of a difference or just have my voice heard.

138

Personally, I'm interested in a career in environmental science to help lessen the effects of climate change on our environment. While climate change is an **urgent issue**, fear mongering, even if it's only facts, wouldn't be helpful to the effort. I believe that the people who can do something about it will do all they can and eventually things will get bad enough to where the general public cannot ignore it any more and then major changes will be made. I'd imagine climate change deniers can't cope with the reality of the situation, and people who passionately deny climate change are probably going through something on a personal level. There's a moderate amount of **narcissism** and **delusion** embedded in **right wing media**, **Fox News** notably. What it comes down to, ultimately, is that many people are running from the real world, whether that's their own lives or everything else going on. **Fox Fact**

4

5.83

Personally, I'm interested in a career in environmental science to help lessen the effects of climate change on our environment. While climate change is an **urgent issue**, fear mongering, even if it's only facts, wouldn't be helpful to the effort. I believe that the people who can do something about it will do all they can and eventually things will get bad enough to where the general public cannot ignore it any more and then major changes will be made. I'd imagine climate change deniers can't cope with the reality of the situation, and people who passionately deny climate change are probably going through something on a personal level. There's a moderate amount of narcissism and delusion embedded in right wing media, Fox News notably. What it comes down to, ultimately, is that many people are running from the real world, whether that's their own lives or everything else going on.

I think climate change is a **real and important issue** because it affects the world as a whole not only in drastic ways like the Texas freeze, but also in daily way, such as the days being hotter.

I really do think the world will the media helps us out in so many ways.

I don't think the responsibility is much on the people and more on the companies. Companies actively lobby to keep doing what they want and they don't care about the affects of it all. So yes while it's nice to contribute small things to help it **won't help** because at the end of it all it's the companies who majorly contribute to the problem.

I think Climate Change is a **big issue** that not alot of people are aware of its severity. With the proper movements from the **higher ups** a timely solution is possible. I think people denying climate change are **selfish** and only want good for themselves.

143

I personally believe that climate change is **extremely important**. I fear the validity of our climate diminishing is a major issue because the world could very easily lose its necessary ozone layer that protects our atmosphere. **just bc believe doesn't mean informed**

5 4.83
MSNBC
Mazette

I believe we will find more environmentally friendly ways of production, but we will not see its effects in our life time.

4

I'm especially saddened by the ecological effects of climate change, and the pressure it adds onto endangered species. The world will unfortunately only find a solution if the voices crying for help have profit behind them. People of an opposite opinion are of a necessary, if frustrating, balance to keep climate activists in-check. They consume media ranging from climate-skeptic to climate-denialist.

I think climate change is very important. I don't think our world will find a timely solution due to the prioritization of profit. People who hold a different opinion may be uninformed or manipulated due to misinformation.

I think climate change is an extremely important topic that needs to be addressed immediately. I hope we will find solutions to it and find more sustainable ways to live. The people that do not believe in climate change are mostly conservative men who probably consume Fox news a little too much.

I believe that climate change is very real and happening to us, if we don't change drastically we will see the end of this world and not in a pretty way. We're actively destroying our Mother Earth and are not taking care of her. People who don't believe it I think are completely just in denial and only find their news from biased outlets.

I believe climate change is a very demanding issue and more people need to become aware of the almost irreparable damage the world is doing to the atmosphere and to the arctic. I do not think the world will find any solution until it's last minute and far too late. People that hold different beliefs than me I would describe as possibly ignorant or arrogant on the subject of climate change, depending on if they have evidence themselves. I would think they don't consume any media outlets

I think climate change is important to some degree. It is something to look out for but not something that should be solely focused on. I do think the world will be able to find a timely solution in the future. I think people with opposite opinions than mine have the right to do so, not everyone is going to agree on the same thing about anything. I think they consume the same media outlets as everyone else but just see what is more catered to them.

I fear as our political world has shifted in the past couple centuries if any change at all will be done it will come from the citizens themselves who fight for a change.

Climate is very important! Our world needs to find a solution asap, people who hold an opposite opinion are mostly found on Facebook

Climate change is definitely something we should be more concerned about. I do not think the US will find a timely solution, but I don't know about other countries. Climate Change Deniers frustrate the hell out of me, and I typically think of them as being more conservative leaning. I often understand why people who acknowledge climate change may not be able to/willing to make some personal changes, and that they can be either liberal or conservative. I also believe that the biggest threat to climate change is big business and capitalist consumption.

I think climate change is a real thing that we need to spend more time addressing. I think the issue is extremely important. I hope that our world will find a timely solution, but I can't say if we will or not. I believe everyone is entitled to their own opinion, so I would describe an opposite opinion as I would if it was the same as mine. It is hard to tell what media outlet they consume, but my guess would be that they are focused more on the conservative news outlets.

That people just don't care enough about others to make a change. I hope that we find a timely solution and my hope is 50/50. People with differing opinions. Possibly right winged politics like Fox News

I do believe that we are facing a potential climate crisis, however, I don't believe that the small changes we are making as a nation will impact the eventual outcome. I am hopeful that we will find a timely solution. I don't expect everyone to agree with me about climate change and I respect each individual's

right to hold and express their opinion. Different media outlets favor different opinions, and there are so many way to consume information now that are not always major news outlets.

159

Climate change is important but if I'm being honest I tend to ignore it. I think since it's a problem we cannot see as clearly as racism and sexism it's easy to disregard. I do think we will find a timely solution because overtime scientists and those in the science field will find ways to help as well as people will be more willing to help because they see more of the consequences of their actions. I describe people who have an opposite opinion as just people who disagree with me. Maybe people who need more of in-your-face proof to believe things. Maybe Fox News or more Republican/Conservative Outlets.

4

5.42

MSNBC fact

I think that the issue of climate change is pretty important. I don't think the world will find a timely solution to it though and I feel that even if there was a solution found the majority of the world wouldn't use it, as it could effect them and the money they make. I don't judge people who hold the opposite opinion to mine, everyone is entitled to believe what they want.

I believe climate change is very important and very real. I do not think our world will find a timely solution because climate change cannot be changed by a few hundred people recycling and helping out. It is up to the major corporations and since helping climate change isn't cheap, they will never full do it.

Climate change is a huge issue that is overlooked every day. The world simply will not find a timely solution, and the people that deny climate change will be shocked when Miami is underwater. Those people definitely consume media that wants to spread false information to keep people from taking action against issues that will destroy our planet.

I think the world needs to find a solution to the problem and fast. Some of these movies about the end of the world like the day after tomorrow and stuff like that will come true if we dont.

I think the issue of climate change is very important and I wish more people would see that. I don't know if our world will find a solution in time. When people don't agree with me, I don't take it personally, everyone can have different opinions and that's okay. I think they consume different ones than I do, and that's okay.

I think that climate change is an extremely important issue, but unfortunately I have little hope in our world's likelihood of finding a timely solution. I believe that people who hold an opposite opinion to mine are ignorant, and if they are informed on the issue they are simply unintelligent. I believe that they likely have contrasting political views to mine as well, and consume media outlets that hold those views.

I THINK THAT THIS IS AN URGENT ISSUE THAT WE MAY HAVE REACHED A BIT TOO LATE.

I think climate change is a pressing issue, as well as how people do not acknowledge climate change or believe it to be a hoax. Climate change, in my opinion, is one of the most important issues occurring right now. I am not sure the world will find a solution, because of how divisive the world is and how many people it currently bears. Ultimately, it comes down to government regulation because there will always be people who do not accept it as an issue. People with a different opinion than me probably base their opinion more on media coverage than scientific research. I would assume to be on the more conservative side and probably consumer media that adheres to their political agenda.

148

I mean I understand climate change is a big thing but there are somethings we just can't help. We can't completely stop using items that help us get places. We live in communities where it makes it hard to walk places or find transport for some people.

1

MSNBC fact

Climate change is changing the Earth by different temperatures and weather patterns. It is important because if climate change gets worse it can start to affect people and the things around us. If we start recycling and reduce the amount of carbon dioxide that is released into the atmosphere, climate change can be slowed as a solution. People who have opposite opinions have their own opinions, but I feel like it is more logical to believe in climate change because there are things we can see that this is real, and I would want more people to know about it rather than ignore it. People who have different of opinions of climate change is not a real thing, look at different social platforms because things about climate change are being shown, but there are articles that are against it.

170

[It is very important.] ① fox Narrative 4.58

I think climate change is making it increasingly difficult to spend time outdoors. The extreme summer heat that is over 110 degrees is terrifying because it seems to worsen every year. People will be more at risk to skin illnesses and health concerns due to extreme weather.

I think it's an important issue that isn't really talked about in the media. I think our world honestly wouldn't find a timely solution because the world cares more about other situations that aren't as important. I listen to what they have to say and just communicate calmly and not cause an argument. I think they consume biased media outlets that just say one side of the facts.

I don't think that everyone will agree enough to make an effective and timely solution. I think that people who deny climate change consume media that isn't exactly reputable. I also believe that climate change is extremely important, but trying to solve it is way more difficult than what we as humans may be able to accomplish.

I do think climate change is important because when things like the snowstorm happened, we weren't prepared so then we didn't know what to actually do.

I feel that climate change is a very important topic that concerns the future generations and their abilities to survive and be in a livable world, and unfortunately at the current pace I do not think we will be able to find or establish a timely solution. I describe the majority as conservatives who fail to use science and technology to see what is slowly happening to our world, but I also see it as both people who do not want to realize what is happening to the Earth or people who do not care because they may be gone before any major changes impede us. I believe they either consume mostly conservative medias such as FOX or do not consume any medias.

I feel that climate change is serious and that we need to take it seriously. From the looks of thing I really don't know if we would find a timely solution.

178

I believe climate change is important and most people don't even realize what it is. There are many things we can do that can help to slow climate change. I think our world could find a timely solution but they wont get people to do it since people either don't understand or care. I describe people who hold an opposite opinion of me to be different and I don't quite understand them or their thinking. They probably consume far left news outlets such as msnbc or cnn. ~~fox~~ Fox fact

⑤

Personally I feel like this is a very important topic, but nothing will get done unless people that are in the government and or the owners of big companies do something about it. For example I myself can stop using all types of plastic but nothing will actually happen if big companies continue to make plastic.

170

It ight. I help climate.

I think it is a **very serious issue** and an important one, but i dont believe our world will find a timely solution. I think that people that dont believe in climate change are just **not okay in the head** cause its something obvious.

I hope that as climate change becomes more to the forefront that the world finds solutions that help everything and everyone.

184

I think that climate change is **somewhat over blown** and through the years, it has been manipulated for political gain. Therefore I don't believe there can be one timely solution. I don't care if someone has a different opinion than me on this topic, we all think differently. **1/0 fox fact**

④

I think climate change is a **very important issue** that needs a safe resolution. I think **some day there will be a solution to climate change**. I think everyone has their own opinion about things.

I believe that climate change is a **huge issue** and that we should figure out some sort of solution some time soon. I think **we will find solution**, just need a big enough scare to do it. I don't really care about people that have the opposite opinion. It's interesting to talk but I don't dislike them. Any media outlets

Climate is a **big and growing concern** but until recently I haven't been direly interested into it until now. With the way technonly is advancing I believe that we can find a solution if we put more time and effort into it. I don't really know how to describe it, everyone has their own option. TikTok and Instagram.

I believe the matter of climate change is **very important** to all individuals on Earth as it impacts us and the entire environment. While this is true, I do not typically seek active ways to impact climate change. I am environmentally conscious in that I recycle when I can and things like that, but I do not typically go out of my way to participate in more effort-intensive forms. I think as long as scientists continue to work on climate change issues solutions can be found, whether long or short term. People with an opposite opinion to mine (those who are super intense about their environmental beliefs) have a place in society but are not generally my cup of tea. Not that I do not respect their values, but I generally find them to be a little overbearing. I believe they consume media outlets that cater to extreme storylines regarding climate change.

I believe that climate change is a **genuine issue** that needs to be seen like a worldwide issue. I don't think our world will find a timely solution at the rate of how we're handling the issues right now. I would describe people with opposite opinions **ignorant** or just people who don't care. I don't believe they would consume **any media outlets**.

⑦

190

Climate change is **very important** to me. I think we could find a timely solution but the **capitalist elites** will do everything in their power to make sure change doesn't happen because they'll lose money. I describe people who hold the same opinion as me as sane and empathetic. I describe people who have the opposite opinion as me as **nieve**. Probably consume no media or **fox news**. **1/0 fox fact**

②

I think climate change should be the **top priority** for our government but unfortunately I do not think that will happen. I doubt that our country will do much to **find a timely solution**, but I do think other countries will pick up our slack on the subject. People who hold and opposite opinion to mine are most likely **faith-based religious** people and are science deniers. They definitely watch **Fox**.

I think social media is a one way to show up what happen in earth because no one at all understand how climate change affect each generation

The issue of climate change is really important, as we can see it is progressing faster than before. For example the heat wave that occurred during the summer was really bad and some states flooded even downtown Dallas. In my country there was heavy rain even though that never occurred in the past while I lived there. Hopefully I do think with our generation we will find a timely solution for climate change because if we look into it people who believe in climate change are Gen Z. People who hold an opposite opinion of mine I would like to say they just need to do research more about this topic because there are scientific evidence about it and it's ok everyone has their own opinions. As for media outlets normal news companies such as (CNN, BBC News, Fox, Al-Jazeera.)

Climate change is definitely a difficult challenge that we are facing on a daily basis. There are things that we can do to slower the rate of climate change such as taking public transportation, recycling and reducing the use of plastics. We just need to put those actions into practice. I do feel like most of the people that hold an opposite opinion is because they didn't realize that this is actually impacting our society right now and there are lots of people and countries suffering from the extreme weather conditions and they haven't really looked into it since they are still having enriched resources so that they won't be affected just yet. I think they would be more conservative. They will tend to watch media outlets such as Fox since it's toward the more conservative side.

I think the issue of climate change is an important pressing issue that we need to make a move on fast. I am convinced those who try to oppose the idea of climate change haven't done their research and are in denial of reality. People who disbelieve are often of the older generation who consume news from tv, radio, and articles which can be skewed either direction. They won't be around when climate change begins to affect us even more greatly and therefore they aren't concerned with the matter.

I believe climate change is a very serious issue that is getting worse and worse due to inaction. I have a hard time adjusting my daily habits, and I sometimes worry that even if I do, it won't matter unless the government passes legislation that mandates recycling, etc. Because of how divided our country is politically, I worry that we will not find a timely solution. I think people who hold an opposite opinion to me are more conservative individuals who don't think climate change is real and would prefer to stick to their habits (because they are against change in general.) I think these people also don't consume media or the news and prefer to stay in a state of ignorant bliss.

I think the issue of climate change is more important than most politicians and businesses give credit. As a person that grew up in an incredibly conservative place that did not believe in most science, I think that people who hold an opposite idea of mine think that science is less concrete than it is. That, and they often do not like to look at things that are this scary. Furthermore, it is profitable, so it isn't in their best interest.

I think it is very important, especially since I come from the coast and rising sea levels post a huge risk to my hometown. I'm not really confident that the world will find a timely solution because people are too focused on the present. I don't necessarily disagree with people who have a different opinion, why would they care about the future when there are problems going on now. I think most of them consume biased media outlets.

I believe climate change is a serve issue in today's world. It shocks me that there are people who genuinely do not believe in climate change. There are people in literally stuck frozen in the middle of a

lake, how else could someone possibly explain the causation of that? It is hard to say if the world will soon come to a solution, considering the fact that many people don't believe it's real.

I think climate change is very important. I am a very open minded person, so I am used to listening to opposing opinions. When it comes to those times, I usually hear their side and explain my viewpoint without accusing or creating an argument.

Climate change has been an ongoing issue for years. The debate against the reality of climate change is a harsh topic. I think that climate change can be slowed but will be inevitable in some cases because every person in the world is not going to change their ways immediately.

203 [I don't believe in climate change or global warming.] (2) MSNBC fact 5.08

I think it is important for everyone to start making more conscience efforts to slow down the progression of climate change. I feel that people who do not believe in climate change are part of the reason that it continues to worsen. I think opposers may consume media that fuels their opinions.

Climate change is an extremely important issue and should be viewed as fact by everyone on the planet, not a debatable political issue. I find it unlikely that we will find a timely solution because there is too much opposition from those who don't even believe this is happening. In the United States at least, climate change is typically viewed as a political issue and legislation is rarely passed because conservatives are unwilling to approve any helpful bills. I understand that people have differing opinions, but I cannot comprehend how people willingly ignore fact. I view these individuals as willfully ignorant. These individuals likely consume conservative media outlets that tend to regurgitate the same views and themes like Fox News.

204 [I think climate change, and environmental issues in general are extremely important and do my best to educate those in my life, and decrease my carbon footprint. Unfortunately, I don't think we'll find a timely solution, because there are still so many that either don't believe in it, or don't care. I'd love to describe those who deny climate change as conservatives, but I think the bigger problem is those who know it exists and just don't care (corporations) or those who know about it but don't have the tools to make a difference (the poor). I think conservatives mainly watch FOX News and scroll on Facebook.] (4) e
1/1 fox narrative

I do think it's important but I do not believe that we will find a solution in time

I think its extremely important, and I'm honestly not sure if our world will find a timely solution. I think others who hold opposite "opinions" are uninformed and ignorant, and I'm not sure what media outlets they would consume as I don't consume news from too many myself

I personally feel like climate change is a huge thing in this day and age. I think that there are a ton of people out there who don't take it seriously or who aren't informed about it at all, and it's sad because it's such a real thing and it's scary. We could be doing so much more to help the earth but people are cruel and selfish.

I feel that climate change is one of the most pressing issues in our society to date and it does not get near the amount of attention that it deserves in the media. I feel that more people need to be informed in order to gain serious ground in the prevention of this issue.

I believe climate change is an extremely important issue and the only way that there will be definite change is with government action. I don't think we will find a solution soon enough. I support everyone's

opinion but I don't understand when people disagree with clear science. People who disagree probably don't consume real media.

30
45

Before this article I never thought much about climate change. I think climate change is a really big issue that needs to be resolved quickly in order to sustain the health of the planet and its producers and consumers. I think I would describe people who hold on opposite opinion as people who think more short term than long term seeing as climate change does not have an immediate effect on the planet. So, not narrow minded but not mindful thinkers either. I think our world would probably struggle to find a timely issue but as the years go on we'll find ways to make the problem less prevalent. I think they probably consume more liberal media outlets because those are more prone to discussing environmentalist issues.

2
Fox
Fact

The issue of climate change will turn out to be a disastrous one in coming years, but I personally believe it was inevitable; there was no stopping it. If there was a possibility that it could be before, there certainly isn't any chance now. With those with differing opinions, I would wish to be as open-minded as possible with them and treating them with respect (as everyone should). If they were to act inhospitable, I wouldn't immediately associate their views with a specific media outlet, as it's what they get out of it that matters. I would feel more pity for them than anything, and would wish they grow to be happier with themselves in the future.

217

I do think climate change is good, especially to reverse humanities doing of speeding up this process. However, someone pointed out to me that the world naturally fluctuates temperatures and sometimes even into extremities like the ice age. So I think we should reverse our doings but if the Earth continues to have extreme temperatures then we will just have to wait this one out. I don't think we will find a timely solution, people are greedy, and maybe they regret it but it will already be too late then. Well I think if people have a different opinion than me I'll listen and if I think it's logical I'll think about it and if it's not logical I'll just think they're dumb. No offence but based on experience, I would think they would consume fox news.

6

Simply uninformed

Climate change is a very important issue to me personally right now. It's hard to say if we'll find a timely solution considering the way that oil/natural gas companies lobbying policymakers is still a prevalent issue, and there are people who deny the existence of climate change. I try to respect someone with a differing opinion to my own because at the end of the day they are entitled to that opinion and socialization factors have convinced them they're right the same way different factors have convinced me I'm right. Obviously if I align with more liberal beliefs, I see the opposite opinion as the conservatives who actively oppose and question climate changes validity. By doing this I can only assume they consume media that supports these beliefs such as right wing outlets like Fox News, The Federalist, or Newsmax.

very seriously, yes, people who don't think, I don't know what kinda news outlet but maybe some really biased media stations.

220

I consider climate change highly important considering it's a factor of the quality of human life. I believe researchers and scientist will find a temporary fix to slow down the process for now, but I think the solution will take time, just as other detrimental issues such as cancer or AIDS. People with the opposite opinion are ignorant and uneducated on the seriousness of the situation. If they consume any news outlet I would say they get it from social media platforms, and could be a reason they are so ignorant to this situation.

4

10 fox fact

I believe that climate change is a huge issue in our world. Climate change will not only effect us by also the many generations after us. I honestly believe that the world will never find a timely solution. I think the people that do not care about climate change are just simply uneducated and they don't know how true climate change can effect us. I believe that they do not consume any media outlets since they have no idea what is going on in our world.

I think climate change is a huge issue that goes overlooked i feel, news outlets haven't really been outreached to social media platforms witch alot of us use and i think it should. Spreading awareness will definately help get exposure to our world and trying to protect it in the best way posible

I believe climate change is a big issue, but I feel like it's being slightly over exaggerated. I still would like to see our world leaders do a better job of teaming up and fighting this.

I believe that climate change is real, I'm not sure if we will find a solution before it is too late or not. People that have an opposite opinion from me might be living in an ignorance is bliss state of mind, and for that I can't necessarily blame them but I can disagree with them. I would assume they stick to more conservative media outlets that do not discuss this topic often.

I think climate change is a very important issue. I do think our world will find a timely solution, and I describe people that hold an opposite opinion to mine as people with differing views, depending on the particular view I sometimes think of them as holding a wrong view, but I believe that all of there views have been shaped somehow, so I think it is important to see how there beliefs were formed before I judge them. the media outlets in this instance that I think they consume are social media news (on instagram, tiktok, snapchat, etc.) as well as news stations such as FOX.

030

climate change doesn't really effect me

spatny ④

031

To my understanding, human activity (particularly since the industrial revolution era) is an undeniable contributing factor to climate change— but I am also open to considering other confounding factors, such as natural cycles that contribute to global heating and cooling (e.g. ice age eras, magnetic pole shifts, stellar and geologic phenomena ... etc.). I do feel that we will find a timely solution and adapt as a species, particularly as the global human population arrives at a stasis by year 2100 (as predicted by population scientist Hans Rosling). I would describe people who hold an opinion opposite to mine as being media and information illiterate. They most likely consume disinformation from unvetted sources and facebook/social media posts.

0/1 TMSABC Narrative

032

This is a very serious issue that we are not taking serious enough. Climate change feels like that one scene in Spiderman where he's trying to hold back the train but it's just refusing to stop. Its sad but I feel like its moving to fast and were already too far gone to stop it.

033

I humans constantly and consistently throughout history create irreversible damage to the environment. I think the issue of climate change is important, and can see our world working towards a solution eventually. Larger companies such as lumber need to keep planting trees to stay in business, and water needs to be clean in order to use for paper mills. Larger companies will get "more" involved once they start seeing it effect themselves. I try to be respectful of others with different opinions, however default to respecting the person but not their opinions if they believe in outlandish ideas (such as flat earth). I think they consume one specific source with no regard to outside opinion or cross-checking multiple outlets.

1/0 fox fact

I believe that climate change could be resolved but unfortunately many people disagree with it or rather don't see it as a major issue. I do believe we've already found the solution, but if everyone is not willing to help out then, we can't save our earth. I believe everyone will believe what they want to believe no matter how hard we try. I know it is possible for people to change their minds but it's not as common an occurrence as it should be. From my own experience, I know most naysayers watch conservated leaning news stations, this of course isn't true for everyone though.

I think climate change is important. I do believe there are things we can do to help alleviate some of the effects... however, I think the climate is changing naturally as well and will always go through changes... like the ice age for example.

I wish people would take climate change more seriously and that the university adopt greener methods of producing energy and disposing of waste. Using greener plants on campus like shamrocks instead of grass would truly mean green.

Climate change is a very important issue in today's world and I fear we won't find a solution in a timely manner, but for people who oppose beliefs of mine probably consume a media that is more tailored to their views and speak into an echo chamber.

I think climate change is an important matter we need to start taking seriously.

I think the issues of climate change is very important especially for my generation. I am not sure if we will find a timely solution because there is so much that contributes to it. People who hold an opposite opinion I would say simply don't want to take the time to listen or accept responsibility. I don't know what media outlets they consume.

I think climate change is a huge companies don't care about climate change until they lose money

I feel that climate change is the kind of thing that is inevitable. The thing that we could aid, if taking large measures to change our human lifestyle globally. Yet, climate change will somehow still creep around. I have no frustration toward those who hold an opposite opinion of me because there is no problem in seeking change more than I do. Where I stand it just at the crossroads that it was a extremely unrealistic for everyone in the world to make a difference now, because human nature is hard to control. I think the media outlets that people consume where they become very outspoken on climate change is the ones that cause fear the most.

I think the issue of climate change is incredibly important. I think we will find solutions, and have already found some, but have a level of resistance due to the ideology that everything must be convenient, and we suffer at the expense of that mentality. I would describe people who hold an opinion opposing mine in regards to the uneducated, they probably haven't taken the time to sit down and learn whether by choice or lack of resources. They probably consume media outlets focusing on entertainment and pop culture rather than new stories and informational articles.

Climate change is easily one of the most important factors in the world today, and one that I think isn't covered enough. The changes to the climate have become damaging, and will soon become irreparable, yet there seems to be little being done about it. I don't know if the world will find a timely solution, and if it does then it'll already be very close to the point of no return. People that hold an opposite opinion, people that deny climate change and believe it's not real, are people I'd tend to describe as ignorant and biased. There's already plenty of evidence and signs that climate change is real, such as the article from this survey, and when people still deny it I can't help but feel a bit frustrated. I'm sure they consume the

same media outlets as I do, a mixture of the news and social media, with the big difference being the exact source as the news channel or the accounts they follow on social media that give out specific, skewed version of the news.

I really wish that more people were aware and cared about climate change. At the end of the day it is our future home, our future children and grandchildren's home and we should all want a great quality of life

I think climate change is very important. For people to deny it is ridiculous. We have seen climate change in the past couple of years. The snow storm of 2021 and the hot summer of 2022 shows us that the climate is changing and it's an issue.

I think the issue of climate change is very important because it affects all of us and our lives. I feel that those who do not agree with my opinion about this does not fully understand how climate change affects us. They might consume media through Twitter or TikTok.

248

I think it is very important the issue of the climate change because if we do not do something to fix it right now eventually might become the extinction of our habitat. I hope that companies will be involved in this situation and prevent any disaster that could happen to our home in the future. I think that people who hold an opposite opinion to mine is because they do not consume that necessary information as this survey that I just read, and really get accurate information and really worried about what is happening in the world that we've lived in.

5
MSNBC
Fact

249

I think it is incredibly serious and dare I say too late. I don't see companies turning around fast enough to stop this crisis. Average people like myself aren't going to fix climate change on our own; big corporations need to get involved, and fast. People who hold the opposite opinion are not paying attention and are simply in denial. The world is dying and since we caused this problem it's up to us to make it right.

6
FOX
Fact

Climate change is a serious issue. For one, the ice caps are melting and if we do not find a solution to this quickly enough, most of New York's Manhattan will be submerged under water in the future. If we make the right steps, I believe that we can still save our world from what's to come. People who do not believe in climate change possibly consume Republican media outlets that do not push on the topic of climate change, rather calling it a hoax then a problem.

I have a very bleak outlook: I don't think we can fix our ways in time and I entirely believe Mother Nature will take us OUT one day. I kinda hope she does, we've really messed this place up. I even have a genuine fear that we'll reach other planets wayyyy in the future... and mess them up next. I wish I weren't so cynical, but the results are there.

6
MSNBC
Fact

I feel like if we take the proper steps we can help the planet.

It's beyond time to find a solution. Sometimes I fear we are too late.

I was born in 2003 and for all my life I've lived with and I guess I've almost accepted the fact that climate change is inevitable with the way that things are going. I wish it wasn't this way but it seems that people just don't believe it's an issue for the younger generation because it won't affect them as much. I hope that some drastic change can be made soon because without it these inevitable circumstances will come to fruition.

6
FOX
Fact

I know that it is something that will be hard to stop and will more than likely progress. It makes me sad, but I often forget. There is a possibility for a solution, but I think it will be a while from now.

I think the issue of climate change is very important. I think we will eventually find a solution to climate change, and I unfortunately I believe it's going to take mishaps like the Texas freeze for opposite opinion to believe in climate change. The media outlets I think the consume is most likely social media.

Climate change is an extremely important issue, yet I don't believe that scientists have enough time to beat the climate crisis. I personally believe people who deny climate change are willfully ignorant; consuming far right propaganda and pretending that our world isn't ending.

Climate change is very important for us to understand and as a community we should be more educated on the topic.

I think climate change is a real big issue, because of the sea level rising and wild unpredictable weather. I do not think the world is going to find a solution. I think people are focused on other things going on. I would describe them as someone that just doesn't think like me. They probably consume whatever outlet makes them happy with their idea.

Climate change should be our top priority

I think that climate change is a very important issue, and it is difficult to address this when there are so many climate deniers in the world. I also think that everyday people are often guilted into feeling like they are a major part of the problem when billionaires and massive companies are the top contributors to climate change and greenhouse gas emissions. I believe that something needs to change quickly in order for us to be able to actually make a difference in the way that we are headed.

Climate change is important because it can cause harm to others. Anything can rise or fall in temperature and it can result in very bad weather. In order for us to solve this problem we have to be a part of the solution by recycling and conserving energy.

I think that the issue of climate change is extremely important because it is directly hurting people and wildlife as well. I feel like people with opinions close to mine feel a little bit helpless as the biggest contributors to climate change are big corporations that we cannot get to feel the same way as us. People who hold an opinion opposite to me probably either have no idea about the dangers of climate change or they believe that the advantages of these companies contributing to climate change is more important than stopping climate change itself.

I think climate change is an extremely important topic. I think the world will find a timely solution, but I think governments, our country's government specifically, will not implement the solution to its full extent if at all. To be clear my answers to the article in the survey about whether I would change my behavior had more to do with the fact that the article did not move me or provide me with information to make me feel like I needed to do so. In reality I already implement many of those behaviors. People who are hold an opposite opinion to my climate change view, simply do not know the science behind climate change. I've met people who've watched both FOX and CNN who disagree with my views, but the common thread was the lack of education about climate change, not who they were getting their news from.

☆

204

⑥
FOX
Nandik
4.33

I believe that climate change is important. The chemicals we use harms living creatures. I believe we should be more aware of what we release in the air. We should also be aware of littering because it could cause damage to our ecosystem.

I used to not really know what climate change was exactly until I had my friend explain it to me and I can say that the facts are literally all there. It gets hotter and colder every year. We experience insane weather worse and worse, bipolar weather and it always surprises us, but it shouldn't be a surprise and if people don't open their eyes, it'll be a real life geostorm.

269

I've heard a couple of friends express their concerns about it, but I didn't start to feel the effect until last year February when Texas underwent a freeze. I remember how uncomfortable I was and how confused I was as to why this was happening. As of right now, I still feel like I need to further educate myself on the topic, so I don't have an opinion or stance at the moment.

④
5.17

0/1 MSMBL Manifest

I believe climate change is a matter that we cannot turn away from and not face the ultimate consequences. Whether we choose to believe it's real or not it's a problem and it's starting to show with deeper and deeper affects. The freeze in Texas in 2021 was just an example. All over the US there have been frequent heat waves which is causing drought in places we never expected. The affects will only get worse as years go by and we only have a very limited amount of time until it is too late. The only way we could find a timely solution is if at least one country can collectively choose to overturn climate change. The people who hold a different opinion in mine simply do not want to believe that the world they created and have grown up in is changing for the worse. All because of their actions and the actions of the leaders they might've supported. I believe a lot of the media they may be consuming are based on news that are used more as an entertaining outlet rather than an informational one.

My opinion on Climate Change is that there something needs to happen before it is too late. I wish to still have a future to grow up in but it won't happen if something doesn't change about how our earth is being treated. I do think that there will be solutions found but at the rate that we are burning unnatural gases vs the rate that we are finding technology to combat these unnatural gases, it is unlikely that we will find the right solution in time.

272

I believe that we should put a larger effort into caring for our world and our climate. I am a Christian, and I believe that we are here to take care of the earth that God gave us. So by taking every precaution we can is not just beneficial to us, but also this beautiful planet.

③
4.5

1/0 fox fact

I'm personally split on the idea, I understand that climate change should be taken as a serious issue, however not enough people are taking action to prevent it from getting worse. I wouldn't describe people with opinions opposite of mine as anything bad, they have a different opinion and I respect it. They may consume bias news outlets that don't cover the issues of climate change.

275

I do not deny climate change, every scientist in the world will verify the validity of climate change. We live on a very unstable, rapidly changing rock that floats in a vastness cloud of emptiness, I do hope that humans are able to come up with a timely solution to slowing the warming of the planets atmosphere, and archeological records and geological studies have confirmed that our planet has experienced a rapidly changing climate since the conception of life. In the past, the planet has been much warmer, although humans are not suited to survive such a rapidly changing environment. Climate change will not effect life on the planet, it will merely effect the survivability of the human race.

③
5.33

1/0 fox fact

Climate change is very important and people need to be more aware of it. If people continue to ignore the issue or brush it off, I'm afraid no matter what people do, it will not be enough to find a timely

solution. I think people who hold the opposite opinion of me are selfish and somewhat careless. I think they might consume more present media outlets than futuristic ones.

We are already seeing early signs of climate change and are greatly facing the consequences. As climate change is at an all time incline, I believe everyone should really keep their eyes open to the ways humans harm the earth.

I think climate change is a relevant issue, but I really doubt there can be too much we can do to make everyone in the world do things to prevent it unless we brainwashed them. Eventually, we'll realize at the last second that we should have done something sooner, but it'll be too late. I don't mind different opinions, as long as they have a relevant story that supports their claim.

I think climate change is incredibly important and it is very disheartening knowing that we as a species are still falling behind on slowing it down. In an age of destructive capitalism, I feel as though our world will be long gone before we look back and actually take in that corporate profits weren't worth the destruction of the planet. Those who hold opposite opinions are entitled to their opinions, but I simply don't understand the ignorance. I'm sure they consume the media outlets that best align with their ideas, then live in an echo chamber from then on..

I think it is a problem and I think we won't find a solution just delay how bad it gets. I don't care what they think

282 I think climate change is inevitable because I personally don't see how I can make a difference. I think it's important but I can't control anything. I hope they do. Different opinions remain neutral to me. Probably more liberal outlets.

I think climate change is a great issue being that it affects life on the globe regardless of culture, race, or religion. I think science is a great study and that science if not save the world give a lot of insight as to what we can do to save our climate. I describe anyone who doesn't share the same views as a someone I could learn from or gain a different perspective from. At this point in society I believe we're all seeing much of the same national news from if not the same similar media outlets.

I think that climate change as of now is really becoming a big deal that you don't really hear much people talking about anymore. Honestly the way things are going it seems like solutions for this problem arnt really being cared about or pursued as much as they should be. The way I would describe people with opposite opinions to mine would be people, I would describe them as people because every person has their own mindset/opinion. I believe a lot of people don't really watch news anymore.

285 I believe climate change is a serious issue, though messages I hear in the media can sometimes make me doubt those beliefs because I do not know what is true. I think our world will find a solution, but I do not think major companies or politicians will allow the solution to be put into place, leading to our downfall. I think people who hold a different opinion from me have simply heard different facts from me, either from people or the media. It's impossible to know which facts about climate change are true. If I may add a comment, I think the choice of article for this survey was weak. Not only is MSNBC an extremely biased news source, causing people who know its bias to likely discredit it immediately, the article also gave only a basic explanation of the science behind climate change, and it didn't discuss anything about laws that could lessen climate change or corporations' effect on climate change, which is why I disagreed with most of the statements in the second half of the survey even though I would normally agree with those statements.

I doubt this world will ever find a timely solution there will always be the people who don't listen or care and then the people who just don't believe it. The word I would use to describe someone with the opposite opinion of me depends on what the opinion is. Biased media is probably what they consume.

287

I think climate change is inevitable. I believe we could lessen the damage by emitting less carbon emissions, but I also believe that it's a mute point. The earth naturally heats up and cools down to what we'd consider extreme temperatures over a span of a large time period. Our Ozone layer is deteriorating, which we've had a hand in, and I think that is priority one when considering what to tackle first and how to fix this climate change problem.

3

1/0 fox fact

Climate change is very important but I do not think we will find a timely solution because there aren't enough people who care enough to do something.

I believe climate change is a big issue we must try to deal with. I believe it's a very important issue. I'm not too confident we will find a timely solution due to these big companies and climate deniers in powerful positions. I feel like people with opposing views mainly consume conservative media and news.

I believe that climate change is a serious issue and if we don't do anything about it now it will continue to get worse. I think we will find a timely solution if everyone takes it more seriously. I describe people who hold an opposite opinion to mine as ignorant or closed minded. I believe that they don't consume media outlets or do their own research.

291

I do think climate change is an issue and we all need to be better, but I also do believe that this issue is not entirely our fault.

5

0/0 MSNBC fact

92

I think climate change is a really big issue because of instances like the story I just read. Not just families, but animals are being severely effected by the strong weather changes. I think eventually, with a lot of research and preparation, we will find a solution. I think people who don't believe in this are oblivious to what the world actually is and how it could effect people in a huge way. I think they consume very conservative news outlets that are mainly worried about everything else happening in the world than what is happening to earth itself.

7

MSNBC
Narrowed
4.25

I think climate change is extremely important because it affects us all. the actions of the public alone is not enough. unless these large cooperations take drastic change things will not improve.

10

I believe that climate change is important because we are killing where we live and I have always loved the environment. I have no idea if we will find a timely solution as it seems a good portion of people in power do not care about climate change. I feel people with opposite opinions are living in denial for not thinking the Earth is dying. I feel they lean towards heavily conservative media outlets.

I feel like climate change is important and that we need to be aware of the consequences if we continue to live the way we do.

294

In my opinion I don't think we can control the climate. The sun or the earth or our oceans aren't made by man so therefore man cannot affect it. it's a natural process. There's always a better way to go about things, and we can make certain changes but I don't think we can affect how our weather changes, or natural disasters. We can have safety measures or something.. People who have different opinions than me probably don't believe in a higher power. I don't think I know what kind of media outlets they consume but I do know the media can be very persuasive.

4

1/0 fox fact

I think climate change is a very serious issue, however I don't think enough people care/ will care until it's too late.

Climate change is a major issue, it is causing droughts, flooding, wildfires, freezling temperatures in places there shouldn't be. Animals of every habitat are suffering because of it. Crops, plantations, forests, jungles are suffering and that will affect not only animals but humans as well. People who are not rich can only do so much for the earth, it is big industries that have the power to make things better. People who do not believe in climate change are ignorant and should be afraid. It shouldn't be political because it is a literal problem in our earth and there is absolutely nothing political about the world slowly dying because of humans.

I believe it is an issue so important that without effective actions taken soon, it will be disastrous. I believe those who refuse to acknowledge climate change consume the same media as those who deny the COVID-19 pandemic.

I think climate change is extremely important and should be one of our top priorities to fix as a world. I hope our world finds bigger solutions to counteract our issues. I describe people who disagree as arrogant and selfish. I'm not sure what media outlets they consume but I would assume none so they can play ignorance.

Me personally I don't really care about climate change. I just don't find it that important in my life. I do recognize it as a problem, but it does not keep me up at night. If someone does take it serious, it does not bother me at all.

304

I dont care about climate change im here for a good time not a long time

The climate change issue are very important. Changes are happening at a slow rate. More must be done.

Climate change is crucial. In this case, climate deniers are incorrect and ignoring science. Mostly conservative outlets.

Climate change is a very pressing issue. It should be one of the number one priorities right now. I do not think our world will find a timely solution because I think our government is run by selfish people who are more interested in lining their coffers and protecting the profits of soulless corporations than saving the planet. I would describe the people who hold opposite opinions to me as ignorant at best, incredibly stupid and gullible at worst. Or wealthy and in denial. These people think Fox News is the Bible.

I think the issue of climate change is currently the most pressing issue facing humanity overall, even more so than other threats such as nuclear war or disease, because if climate change causes the earth to be uninhabitable, those issues won't matter at all. I don't blame people who hold a position opposite to mine, because I know they have likely been influenced by those in power who profit off of the use of fossil fuels. They likely get their news from conservative media outlets such as Fox or Newsmax.

I firmly believe that if nothing is done very soon about climate change our world may be inhabitable. It may not happen in my lifetime but it will be happening sooner than later. I have done tons of research about climate change and I even did a speech about it last semester for a class where I described the extent of the damage we have caused to the planet and what we can do to lessen our carbon footprint. I do not think that our world will find a timely solution because too many people continue to deny that this is happening and so they further participate in the decline of our planet. Drastic changes would have

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4.5

apathy 0/1

4

0/0

to happen immediately and I do not think people are willing to put it in the work. I call people that don't believe in climate change **untinged**. We can easily see the results of it and the winter storm in 2021 that the article described was pretty strong evidence. I believe that most **conservatives and Republicans** believe that climate change isn't a problem because they don't seem to care about nature or preservation whatsoever and do not think about how things impact others. I believe they most likely consume a lot of **FoxNews** and most likely things like QAnon or right leaning Reddit threads.

The issue of climate change is **very real** but it is still being ignored while it's getting worse. I do think there are people in the world helping reverse the effects from society. I don't believe I will live in a world where I have to worry about climate change. I don't have any reliable sources I've read recently but I believe it is real. People who deny climate change are **misinformed** I believe.

312

The climat echange is a **very big issue** that does not get through the way it should. I honestly find that humanity has become a parasite to the world, and I hope we find a solution in time, but understand the efforts mother nature is taking to kill the parasite, in order to survive. I think people who oppose have lack of information, and dont consume enough research based media.

6

5.5

I think that with the new generations and their concern on the issue I see more awareness and prevention efforts will be taken.

Climate change is **very important** and I learn about it through watching the news occasionally on whatever channel my parents have it left on.

While I do think Climate Change is a **serious issue**, I don't think the great personal sacrifice I would need to make to my life would be worth it. If you don't understand what I mean, this may be hard to understand but hypothetically I could never drive a car ever again and the sacrifice I would be making is far greater than the beneficial effects that would have on the environment (in an individual sense). Realistically, the only way to make a change is a drastic global effort to decrease the standard of living for most people, while also somehow forcing impoverished nations to use cleaner energy. This brings up another issue though, poorer nations don't really care about the environment. They care more about where they're going to get their next meal than what effects burning coal would have on the environment. So, in my opinion the only way to truly make a reasonable amount of change is for everybody to be on board (which is highly unlikely to begin with in nations where this could even be feasible) or some insane technological advancements arise that are very cheap and very green. I would probably describe people who disagree with this as **"misinformed"** or **"ignorant to the state of the world outside of their country"**

317

I think climate change is a **very scary thing** that people need to be more aware of. I can do my part, but the celebrities that take private jets everywhere and **big companies** will not. Why am I, as a low class consumer, expected to do my part and bagged on when I don't, when big companies and celebrities are not held to the same standard? Our world is doomed.

4

5.58

I think climate change is **incredibly important**. It's ridiculous how some people just brush it off, and because of that I don't think the world will find a timely solution. Maybe someone could, but the chances of the solution actually being carried out are unlikely because of external factors such as funding, awareness, etc. I describe people who hold an opposite opinion to mine as **ignorant**. Ignorant if they're full on climate deniers and just plain **misinformed** if they believe in climate change but not the extremities of it. Not going to lie, I myself am not the most knowledgeable when it comes to climate change. I think the media outlets they consume are one that cater to their mindset, mostly **conservative/** right-leaning media outlets are the ones calling people bringing awareness "alarmists".

I am not too knowledgeable of the current climate change situation to give an educated opinion

I think the issues that arise due to our changing climate will likely irreversibly effect our ecosystem. It is very serious and it's hard to say whether or not a complete solution is even possible. I dislike people who disagree with this, because it is rooted in scientific evidence and fact. They likely avoid media outlets that disagree with their own views, likely platforms that are not scientifically based or researched.

I feel like the world will have no choice but to find a solution because eventually the effects of climate change will become an inconvenience to society

322

I believe that a lot of change occurs only when the reality of a situation becomes relevant to them. When it comes to climate change, as with war, a lot of people don't pay attention to it until it is happening in their own back yards.

0/0

3

I do believe climate change is the most concerning universal issue at this time, mainly due to the small amount of time we have left to reverse the damage that's already been done, and or prevent it from furthering. The idea of finding a solution in time is becoming worrisome for my generation, because of how many people deny the reality of climate change. In recent years, there has been a mistrust in science. So much so that scientists are going to great lengths to warn the public how dangerous denying the science behind climate change is.

I feel that climate change is inevitable and if we do nothing about it and continue to be complacent in it the world will suffer however it's not too late but it should be one if not the most pressing issue of our time. Anyone who disagrees is actively destroying our planet and wishes harm upon the people and life in our world they tend to, in my opinion

I think that climate change is a big urgent issue that needs to be addressed. I feel like our world is pretty selfish, so yes they will find a solution but only one that will benefit them and not the situation appropriately. I feel that people have their right to their own opinion just as long as it is not harmful towards others. I feel like they use outlets that maybe support their beliefs.

I know the issue of climate change is a crucial and very huge issue that we need to fix as soon as possible. I do believe our world will find a timely solution but only when it's way too late I feel like. I describe those who hold an opposite opinion to mine, similar to how people would describe flat earthers. I don't think they even consume a media outlet at that point.

I believe Climate Change is very important, however the earth will struggle before a solution is conceived. People too stubborn to change and help will be the downfall. Mostly people stuck in the past who believe it is normal. They usually consume biased media or media entirely devoid of journalistic integrity.

400

The issue of climate change is very important! I hope that we will find a timely solution but I don't think we will find one in time. I think people who hold an opposite opinion to mine are too selfish and don't want scientists to make decisions for themselves. They probably consume the media outlets that think climate change is fake/don't cover climate change as much as others.

I think it's very important

I do think the world will find a solution. People who hold a different opinion than me are entitled to their own feelings. Media outlets I use are social media

I feel the issue of climate change is very important. I think it is very unfortunate that it has gotten to the level of severity it is at now, and needs to be addressed properly. I think there are many solutions to climate change and many have been found, but due to a lack of funding or acknowledgment some of the solutions are not as effective as they could be. I feel those who have a different opinion to me watch Fox News and might not come in contact with the obvious signs of climate change or choose to ignore it for their own peace of mind. I feel this is very selfish, as they might feel it does not matter since they do not feel they are in direct danger.

353

Sometime very soon the affects of climate change will affect first world countries as much as they do third world countries. Only then will the affects of climate change will be taken seriously, and legislative actions can be taken to subdue these problems. 1/0

7

I think the topic that is climate change is important and should not be overlooked. And for those who don't share the same care are most likely being fed by conservative media outlets.

I think climate change is a very important issue and it should be talked about way more, it makes me so sad that people just don't take care of Earth and purposely pollute it. I hope scientists can find a timely solution for climate change, or at least find a way to minimize the amount of pollution and toxins that is being put out into the world. The people who don't believe climate change is real is honestly mind-blowing to me because you have all of these facts in front of you and they're just like, "Hmm yeah no, fake news" like what?!

I think its important, I dont know if we will find a timely solution but i hope so, people who hold an opposite opinions are open deniers of a known fact and it bothers and upsets me that these people can exist in the same space at all, i would believe these types of people consume conservative and extreme right wing media.

I think it is very important because it's already a big issue at hand and will get a lot worse if not treated within the next decade or so. People that hold an opposite opinion haven't done enough research or seen the evidence of how prevalent the issue is.

In my honest opinion, I am worried that our world will not act in time to save our planet. Climate change is often overlooked by these large corporations causing heavy damage to our environment.

I can understand but I think everyone has their own opinion and you can only do so much for everyone to collaborate in helping with climate change unless the government really shoved it down our throats

No matter what your political belief is, if the corporations that are responsible for most pollution make major changes then the world itself is in trouble.

I am still learning about climate change so at this time I don't have an opinion to offer.

While I am all for changing our world for the better, I think it will unfortunately take more terrible changes in the world we love for people to finally realize what is at stake. Animals are becoming extinct more frequently, weather patterns are becoming more unpredictable, and our worlds protective layers are diminishing. As a population we need to stop being so selfish and sacrifice certain aspects of our lives our parts of our lifestyle for the greater good. Not only that, but major investments need to be made in

terms of reaching a suitable goal in preventing climate change and making our world a better place. The people who oppose me utilize conservative networks like that of Fox. I'm not a huge liberal, so I understand that the media has a strong political influence on both sides, but I do understand that Fox has been known to straight up lie and be informal.

344

i am a conservative. i agree climate change is a problem. i don't think us humans are the problem. i don't think we will find a solution. i feel like climate change is going to progressively get worse.

0/1

2

4.17

I think the issue of climate change is extremely important because it will eventually affect the daily lives of people everywhere. I can't say if the world will find a timely solution or not because it depends how long it takes to get people to unfortunately believe in climate change, and then how long to get people and companies to act and use resources. I would describe people with an opposite opinion as fearful. Media that fits their already pre conceived ideals.

Personally I do think climate change is real and is a big problem. I think the average citizen if everyone does change their ways can help out but only a little bit. To see huge change in my opinion we would need a social reform to where the average class puts pressure on big business and bad practices to stop since they are currently doing bad practices in the name of saving money and or time.

the issue of climate change is important because it invokes the world that I walk in everyday ,as my environment around me

I think that climate issue is a very serious problem that is neglected and there is isn't enough being done about it from our government to try to reverse the effects. If our world can see it as the issue that it actually is and actually works together we could find a timely solution. I describe them as ignorant because their reasoning for not caring for global warming are usually selfish and it's not like they don't know about it or see it as affecting them directly so they don't see why they should care but that's so incredibly selfish. I think they consume the mass media like Instagram, Twitter, TikTok, Facebook.

I think that climate change is a real issue and more steps should be taken to prevent it. I do not think we will find a solution because we are a selfish group of people.

I think climate change is a very big issue and should be taken more seriously by politicians and lawmakers. It's dumb to deny climate change and something needs to be done about it.

I am neutral as I don't contribute the way I should to our environmental changes/benefits

350

I think its very important to contribute what we can to slow climate change but I think humans have less power than we make it seem over climate change the earth goes through changes on its own and though pollution has an effect on that and climate change is undeniable considering the climate is changing I think we can only make small changes to the Earths natural processprocess

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3

6.47

The issue of climate change is important, however the problem seems so big! Way beyond what I can imagine and begin to fathom. I am beginning to understand more and more how it'll take each person working together to resolve some of the issues . At this point, there are so many different thoughts and views surround this subject and I don't see the world agreeing as a whole. People who have opposing views are... well... I don't know what to think about that except they probably don't consume very many media outlets.

324

i think it's very important, but I don't think that we'll be able to commit to a solution in time. the leasets will try when it is way too late and be like "oopies".

-  important / needs to be addressed / SAD / SCW / pass / pass
-  nihilistic / fatalistic / no solution in ^{time}
-  not believe / not human-caused
-  identify FOX / conservative mindset as a problem, "climate deniers", "biased media", "not as educated"
-  Any amount of hope
-  identified governments / corporations / world leaders
-  social media
-  no media

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