Public Opinion on Climate Change

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Executive Summary

Public opinion on climate change will be increasingly important as the world begins to feel the adverse impacts of a warming climate. Currently, scientists are almost certain climate change is happening and that it can be attributed mainly to human causes (IPCC, 2007; Cook et al., 2013), but there is still a gap between actual scientific consensus and perceived scientific consensus (Leiserowitz et al., 2017). A large majority of Americans believe climate change is happening, and a majority believe it is mainly caused by humans (Leiserowitz et al., 2022a). However, the United States consistently falls far behind countries with the highest amounts of concern about climate change (Leiserowitz et al., 2022b). Overall, beliefs supporting and worry about climate change in the United States have been increasing (Leiserowitz et al., 2022a). Key drivers of changes in public opinion on climate change include, but are not limited to, differences in vulnerability to negative impacts of climate change, political party affiliation, race/ethnicity, income, and antecedent variables such as trust in scientists and experience of local weather change (Hornsey et al., 2016). To increase acceptance of climate change, scientists should communicate research findings in ways that are understandable for laypeople, media outlets should present a view of climate change that is more representative of scientific consensus, and both media outlets and scientists should follow Bandura's (1977) Social Change Theory. To increase the success of climate change mitigation policies, policymakers pushing these policies should appeal to minority voters to gain their support, garner support from Democrats and moderate Republicans, and Republican constituents should demand their Congress members better represent their views.

Introduction

Public opinion is difficult to define, as many definitions have been suggested by scholars. Childs (1939) defines it as a simple aggregation of individual views. Cooley (1902) and Blumer (1948) define it differently, insisting it is "a collective-level, emergent product of debate and discussion that cannot be 'reduced' to individuals" (Price, 1992). For the purposes of this paper, the Childs definition will be followed, as most of the studies discussed determine public opinion based on statistical data from surveys of individuals. Public opinion is important in America because it is the public that decides who will lead the country and who will make laws for the country, so candidates typically base their policy agendas on topics that are important to the public at the time (Rom, Hidaka & Walker, 2022). This report will examine public opinion on climate change. Specifically, it will discuss current public opinion, trends, and key drivers of changes in public opinion relating to the topic. It will then provide implications of this information for policymakers, scientists, and the media before providing recommendations for increasing public acceptance of climate change and for promoting policies that push for climate change mitigation. More specifically, in addition to discussing these implications and recommendations, this report aims to answer the questions: What does the public think about climate change? How has public opinion on climate change evolved over time? Is the public more informed about climate change, more worried, or both? What correlations exist between a person's personal risk of climate-related harm and their level of concern for climate change? How does public understanding of climate change affect (or not affect) public interest in climate change mitigation or adaptation policies?

Current Public Opinion on Climate Change

Climate change has become one of the most pressing and talked-about issues of our time as more and more people are subjected to its negative impacts. In a 2021 article, the World Health Organization declared climate change "the biggest health threat facing humanity," (para. 1). In a 2007 report, the Intergovernmental Panel on Climate Change claimed it is "*extremely unlikely* that global climate change of the past fifty years can be explained without external forcing, and *very likely* that it is not due to known natural causes alone," (IPCC, p. 10, emphasis original). A 2013 study by Cook et al. examined 1,944 climate abstracts from 1911-2011 and found that 97.1% of the abstracts that expressed an opinion on human-caused climate change supported the idea that humans are causing global warming. This same study also found that only 0.7% of abstracts denied the idea (Cook et al., 2013). However, even though the scientific consensus is clear, there is a disparity between actual scientific consensus and the public's perception of scientific consensus. A 2017 report based on a nationwide survey found that only about 13 percent of Americans knew that over 90 percent of scientists agree on this topic (Leiserowitz et al.). This number has increased to 20 percent according to a 2022(a) version of the same survey but remains low (Leiserowitz et al.).

Even though public opinion about scientific consensus on climate change does not represent the actual scientific consensus, the number of Americans who think global warming is happening is far greater than those who do not think global warming is happening (Leiserowitz et al., 2022a). From mid-April 2022 to early May 2022, Leiserowitz and colleagues conducted a nationally representative survey on public opinion surrounding climate change issues. From this survey, the authors found that 72 percent of Americans think global warming is happening, while only 12 percent do not think it is happening (Leiserowitz et al., 2022a). This same study also

found that 54 percent of Americans are “very” or “extremely” sure global warming is happening, while only 7 percent are “very” or “extremely” sure that it is not happening. In addition, 56 percent of Americans believe that global warming is caused mainly by humans, while 33 percent believe it is mainly due to natural changes in the environment (Leiserowitz et al., 2022a). A different survey conducted by the PEW Research Center in January 2022, however, found that 46 percent of Americans say that “human activity, such as the burning of fossil fuels” contributes “a great deal” to climate change, while 29 percent say this contributes to climate change “some” (PEW Research Center, 2022).

Another 2022 study conducted by Leiserowitz and colleagues (survey dates from the end of March 2022 to mid-April 2022) examined international opinions and knowledge of climate change. This survey found those from Finland and Hungary said they knew “a lot” or “a moderate amount” most often (92 percent for Finland and 90 percent for Hungary) (Leiserowitz et al., 2022b). Those from Benin, the Democratic Republic of the Congo, Nigeria, and Haiti said they had “never heard of” climate change most often (34 percent for Benin and 32 percent for the others) (Leiserowitz et al., 2022b). For comparison, 71 percent of respondents from the United States said they knew “a lot” or “a moderate amount” about climate change, and only 2 percent said they had “never heard of” climate change (Leiserowitz et al., 2022b).

The study also found that people from Hungary, Portugal, and Costa Rica were the most likely to say they believed climate change is happening (96 percent, 94 percent, and 94 percent, respectively) (Leiserowitz et al., 2022b). Those from Laos, Haiti, and Bangladesh were the least likely to say this (67 percent, 67 percent, and 70 percent, respectively) (Leiserowitz et al., 2022b). Again, for comparison, 83 percent of respondents from the United States said that climate change is happening, which was the second lowest in the North American region. The

U.S. also had the highest percentage of respondents say that climate change is not happening out of all 110 countries, territories, and groups studied (11 percent, tied only with Norway) (Leiserowitz et al., 2022b).

Finally, this study also examined whether people think climate change is human caused. The countries with the highest percentages of people responding that they believe climate change is caused by human activities were Spain, Sweden, and Taiwan (65 percent, 61 percent, and 60 percent respectively) (Leiserowitz et al., 2022b). The countries with the lowest percentages of people saying this were Indonesia and Yemen (18 percent and 21 percent, respectively) (Leiserowitz, et al., 2022b). Of the respondents from the United States, 42 percent said they believe climate change is caused mostly by human activities (8th out of 15 countries in the North America region), 35 percent said it is caused "about equally by human activities and natural changes," 15 percent said it is caused "mostly by natural changes in the environment," and 5 percent said "none of the above because climate change isn't happening" (Leiserowitz et al., 2022b).

Trends in Public Opinion on Climate Change

Overall, most Americans have thought climate change is happening for the last 14 years, and, for the most part, this percentage has been increasing over those years (see Appendix, Figure 1), as evidenced by data from studies conducted during this time by Leiserowitz and colleagues (2022a). In 2008, 71 percent said they thought global warming was happening. This dropped to 57 percent in 2010 and has increased steadily since then (Leiserowitz et al., 2022a). This number peaked at 76 percent in the September 2021 survey before dropping back down to 72 percent in the April 2022 survey (Leiserowitz et al., 2022a). This shows that Americans have gained more knowledge about climate change over the years. The percentage of respondents

indicating they thought global warming is not happening varied more from 2008 through 2013 before becoming more stable in recent years (see Appendix, Figure 1) (Leiserowitz et al., 2022a). This number started at 10 percent in 2008, jumped to 20 percent in 2010, decreased slowly until April 2013 when it began to increase again, and peaked at 23 percent in November of 2013 (Leiserowitz et al., 2022a). After this peak, this number decreased to 11 percent in March 2016 and has stayed between 11 percent and 16 percent since then (Leiserowitz et al., 2022a).

The percentage of Americans who said they were "extremely" or "very" sure global warming was happening and the percentage of Americans who said they were "extremely" or "very" sure global warming was not happening were also examined (see Appendix, Figure 2). The percentage of Americans who were sure global warming was happening started at 51 in November 2008, decreased to 33 in January of 2010, then slowly increased until 2022, with a peak of 57 in September 2021 (Leiserowitz et al., 2022a). This shows that, overall, Americans have become more informed about climate change. The percentage of Americans who said they were sure global warming was not happening started at 5, then increased to 11 in January 2010 (Leiserowitz et al., 2022a). This number then decreased until April of 2013, then increased, peaking at 13 percent in November of 2013, before decreasing and then remaining between 6 and 9 percent since then (Leiserowitz et al., 2022a).

These studies also looked at the percentage of Americans who said they thought global warming was mostly human-caused and the percentage of those who said they thought global warming was caused mainly by human activities (see Appendix, Figure 3). Overall, the percentage of Americans who thought global warming was mainly human-caused has been on an increasing slope since 2010, starting at 46 in January 2010, peaking at 62 in December 2018, and ending at 56 in 2022 (Leiserowitz et al., 2022a). This also suggests that Americans are more

informed about climate change than they have been in previous years. On the other hand, the percentage of Americans who thought global warming was caused mostly by natural changes in the environment has stayed mostly the same over the years (Leiserowitz et al., 2022a). This number began at 32 percent and has mostly stayed between 30 percent and 36 percent with occasional spikes in either direction (37 percent in March 2012 and 23 percent in December 2018) (Leiserowitz et al., 2022a).

With the increases in knowledge about climate change over the years has come an increase in worry about global warming (see Appendix, Figure 4). Overall, worry has increased slowly over the years, starting at 62 percent of Americans saying they were "very" or "somewhat" worried about global warming, decreasing to 49 percent in early 2010 and increasing from there, peaking at 70 percent in September 2021 (Leiserowitz et al., 2022a). This increase seems to come from an increase in the percentage of people who said they were "very" worried about global warming, as this number started at 16 percent in 2008 and increased to a peak of 35 percent in September 2021, ending at 34 percent in 2022 (Leiserowitz et al., 2022a). The percentage of Americans who said they were "somewhat" worried about global climate change has stayed relatively the same over the years, starting at 46 percent in 2008 and staying between 34 percent and 45 percent after that (Leiserowitz et al., 2022a).

Key Drivers in Changes in Public Opinion on Climate Change

Differences in Vulnerability to Negative Impacts of Climate Change

One key driver in changes in public opinion on climate change is differences in vulnerability to the adverse impacts of climate change. Nonwhite populations have generally been more vulnerable to the impacts of climate change than white populations, mainly because

structural racism has decreased these populations' access to resources needed to adapt to climate change (Thomas et al., 2018; Akerlof et al., 2015). Based on the combination of data from two 2019 surveys, Ballew and colleagues (2020) found that Americans who identified as Hispanic/Latino were most likely to be "alarmed" about global warming (37 percent), those who identified as Black were the second most likely to be "alarmed" (27 percent), and those who identified as White were least likely to be "alarmed" (22 percent). Those who identified as Hispanic/Latino were also most likely to be "concerned" about global warming (33 percent), followed by those who identified as Black (30 percent) and then those who identified as white (27 percent) (Ballew et al., 2020). This data demonstrates that racial/ethnic minority groups are more likely to be concerned about climate change.

Similarly, poverty also decreases access to the resources needed to adapt to climate change, making impoverished communities more susceptible to the negative impacts of climate change (Thomas et al., 2018). A survey distributed in 2013 by Akerlof and colleagues and published in 2015 found there was a significant effect of low income on perceived risk of health issues correlated with climate change, with those with lower income having higher perceived risks. Those with chronic diseases are also seen as being more vulnerable to adverse impacts of climate change, and there was a significant effect of chronic illness presence on perceived risk of health issues correlated with climate change, with those with chronic illnesses having a higher perceived risk (Akerlof et al., 2015).

Political Ideology

Another key driver of opinion on climate change is political ideology. According to a 2016 study from Antonio and Brulle, political party affiliation has been a strong basis for division in American opinions on climate change. A 2020 survey report from MacInnis and

Krosnick found that 94 percent of Democrats and 67 percent of Republicans believed that "the world's temperature has probably been going up over the past 100 years" (p. 4). They also found that 94 percent of Democrats and 69 percent of Republicans believed that "human action has been at least partly causing global warming" (MacInnis & Krosnick, 2020, p. 4). 81 percent of Democrats and 41 percent of Republicans believed that "weather patterns have been more unstable globally in the past 3 years than before," and 82 percent of Democrats and 41 percent of Republicans believed that "temperatures have been higher globally in the past 3 years than before" (MacInnis & Krosnick, 2020, p. 5). Finally, 43 percent of Democrats said that "global warming is extremely personally important," while only 4 percent of Republicans said the same (MacInnis & Krosnick, 2020, p. 7).

The partisan gap in opinion about climate change has also increased since 1997, illustrating that increases in the extremity of each party and the politicization of this issue have driven changes in public opinion on climate change over time (see Appendix, Figure 5) (MacInnis & Krosnick, 2020). This gap (based on belief in global warming existence and the role humans have played in it) was about 8 percentage points in 1997 and has steadily increased since then, peaking at 30 percentage points in 2011 and remaining between 24 percentage points and 29 percentage points between 2012 and 2020 (MacInnis & Krosnick, 2020). This gap has been driven by increases in belief that "the world's temperature has probably been increasing over the past 100 years" in Democrats (from about 76 percent in 1997 to 94 percent in 2020) and decreases in this belief in the Republican party (from 67 percent in 1997 to about 52 percent in 2020) (see Appendix, Figure 6) (MacInnis & Krosnick, 2020, p. 18). In addition, similar trends can be seen in each party for belief that "the increase in the world's temperature over the past 100 years was caused mostly or partly by humans," with this number increasing for Democrats

from about 82 percent in 1997 to about 94 percent in 2020 and decreasing for Republicans from about 77 percent to 69 percent in 2020 (see Appendix, Figure 7) (MacInnis & Krosnick, 2020 p. 18).

The politicization of this issue, fueled by the media, might also be to blame for the discrepancy between actual scientific consensus on anthropogenic climate change and perceived scientific consensus. Feldman and colleagues (2012) studied media coverage of climate change and found that Fox News, a Republican-leaning outlet, more frequently takes a standpoint that denies and dismisses climate change than other more liberal outlets. In addition, this study also found that Fox News interviewed a ratio of climate change deniers to climate change believers that was higher than that of its liberal-leaning counterparts (Feldman et al., 2012). This presentation of debates and conversations between members of the media taking a more dismissive standpoint toward climate change and scientists taking an affirmative standpoint on the issue portrays and perpetuates the false idea that scientists are not settled on whether climate change is anthropogenically caused (Oreskes, 2018). In addition, journalism typically attempts to be unbiased and present "both sides" of an argument, which also plays into this issue. In 2004, Boykoff and Boykoff found that this good-faith attempt at being unbiased actually provides a misrepresentation of consensus since consensus is much higher than is assumed based on the presentation of both "sides" of the issue. An important implication of these findings is that accurate media representation of the scientific certainty surrounding anthropogenic climate change is crucial to shrinking the gap between actual scientific consensus and perceived scientific consensus.

Other Demographic Data (Sex, Age, Education)

A 2016 study conducted by Hornsey and colleagues examined 171 academic studies and 21 polls containing data from 56 countries found there were impacts of sex, age, and education on beliefs about climate change, but these effects were small. They note that people who are younger tend to believe more in climate change than older people, as do women as opposed to men, and those that are more educated as opposed to those who are less educated (Hornsey et al., 2016). Akerlof et al. (2015) also found that education was a significant predictor of how personally vulnerable someone thought they were to adverse health effects correlated with climate change. They also found that being female was of near significance (Akerlof et al., 2015).

Antecedent Variables

Hornsey et al. (2016) also note a number of precursor variables have significant impacts on beliefs about climate change. The variable with the highest effect size (0.5, which is considered large) was the New Ecological Paradigm, which is "a scale that is weighted heavily with items about the fragility of the environment and the importance of minimizing humanity's impact on it," with people who were more concerned about the environment more accepting of climate change (Hornsey et al., 2016, p. 623). This study also found medium effects of trust in scientists, with those who have more trust in scientists being more accepting of climate change, and perceived scientific consensus, with higher perceived scientific consensus also being associated with higher acceptance of climate change (Hornsey et al., 2016). There were also medium effects for experience of local weather changes with greater experiences of local weather changes being associated with greater acceptance of climate change, and for free-market

ideology, with those who prioritize a market free of regulation having lower concern for climate change.

A number of variables also had small effects. Those with higher individualistic and hierarchical values (valuation of elites and the status quo) were less likely to believe that there is a risk to the environment posed by industry than those with more egalitarian and communitarian values. Those with higher objective knowledge (awareness of objectively verifiable facts) were more concerned about climate change (Hornsey et al., 2016). Those with higher subjective knowledge (perception of their own knowledge) were also more concerned about climate change, but this effect size was smaller than that for objective knowledge (Hornsey et al., 2016). Those with higher activist/green identities were more likely to have more concern for climate change, as were those with higher biospheric values (values related to protecting the environment) (Hornsey et al., 2016). Higher experiences with environmental cues such as weather are also associated with stronger belief in climate change (Hornsey et al., 2016).

Implications and Recommendations

Knowledge of climate change appears to have a significant influence on public interest in and support for mitigation policies (Timmons & Lunn, 2022). A 2022 study conducted by Timmons and Lunn found that, after participants engaged with accurate scientific information about climate change, their support for a carbon tax increased. Additionally, the authors also found people were more likely to believe that businesses and individual households would shift towards energy sources that are more sustainable after receiving scientific information (Timmons & Lunn, 2022). Those who received scientific information were also more likely to believe the price of carbon per ton should be increased from its current levels after they received the information (Timmons & Lunn, 2022). This implies that if more people are educated about

climate change, support for climate change mitigation policies will increase. Therefore, it is imperative that scientists report findings and information about climate change in ways that are easy for the public to understand.

However, even though knowledge can help change opinions, knowledge alone does not cause individual behavior change, so it is dangerous to rely only on providing information when aiming to achieve behavior change. According to Albert Bandura's Social Learning Theory (1977), in order for behavior change to occur, five core determinants must be met: benefits and risks of different behaviors must be known, there must be a perception that someone can exercise control over their own behaviors and habits, there must be accurate expectations of costs and benefits of different behaviors/habits, people must set goals for themselves that include concrete plans and strategies, and perceived facilitators and barriers to changes must be identified. For behaviors to actually change, it is important for scientists, policymakers, and the media to ensure these determinants to be met. This could be done by (in addition to providing information about the benefits and risks of certain behaviors and the expectations of costs and benefits of certain behaviors) providing examples of behavior changes which have been shown to help mitigate climate change so people believe they have control over their behaviors, encourage people to set goals for themselves such as taking public transportation to work one day a week instead of driving, and identifying and demonstrating ways to combat barriers to these behavior changes (such as providing information on train and bus schedules).

As discussed previously, racial and ethnic minorities are more likely to be worried about global warming (Ballew et al., 2020). With this greater concern seems to come higher willingness to join campaigns to push elected officials to do more to mitigate climate change (Ballew et al., 2020). The 2020 article by Ballew and colleagues notes that for Hispanic/Latino

respondents, 3 percent said they were already participating in a campaign (3 percent for Black respondents and 2 percent for White respondents), 13 percent said they "definitely would" join a campaign like this (12 percent for Black respondents and 6 percent for White respondents) and 24 percent said they "probably would" do this (24 percent for Black respondents and 16 percent for white respondents). Hispanic/Latino registered voters also ranked global warming much higher in importance when deciding who they would vote for in the 2020 Presidential Election (6 out of 29 issues) than Black registered voters (16 out of 29 issues) and White registered voters (17 out of 29 issues) (Ballew et al., 2020). This has serious implications for federal, state, and local policymakers because targeting the correct racial/ethnic populations of voters when promoting (or refuting) climate change mitigation policies could make a difference in elections. Those who want to pursue more policies to mitigate climate change should target Hispanic/Latino and Black populations of their constituents with this messaging to gain more support, whereas it would be less important to target White populations with this messaging.

A 2020 survey conducted by members of the PEW Research Center found Republicans are less likely than Democrats to favor efforts to reduce the effects of global climate change (Tyson & Kennedy). The gap between the two parties was the smallest for "planting about a trillion trees to absorb carbon emissions" (88 percent of Republicans and 92 percent of Democrats in favor) (Tyson & Kennedy, 2020). The gap between the two parties was the highest for "tougher fuel efficiency standards for cars," with only 52 percent of Republicans in favor and 86 percent of Democrats in favor (Tyson & Kennedy, 2020). In between these two were "providing a tax credit to businesses for developing carbon capture/storage" (78 percent of Republicans in favor, 90 percent of Democrats), "tougher restrictions on power plant carbon emissions" (64 percent of Republicans in favor, 93 percent of Democrats), and "taxing

corporations based on their carbon emissions" (52 percent of Republicans in favor, 86 percent of Democrats) (Tyson & Kennedy, 2020). This suggests that support for policies putting more burden on consumers will be more difficult to garner overall, especially among Republican voters. Therefore, it is important for policymakers to gain as much support from Democrats and moderate Republicans as possible when promoting these policies to have the best chance of success.

It is also clear from the data above that efforts to gain support from Republicans will be crucial to passing climate change mitigation policies that may seem more extreme, such as implementing tougher fuel efficiency standards for cars. To accomplish this, all of the steps mentioned above (teaching people about climate change, following the five core determinants of behavior change from Bandura (1977), and targeting those from minority populations) can be taken. In addition, encouraging Republicans to consume media from sources other than just conservative-leaning sources would be impactful (Feldman et al. (2012) found that Republicans are more likely to have views that align with those of the media they consume regardless of political leanings of the outlet). In addition, media outlets should make more of an effort to provide a more accurate representation of scientific consensus on the issue by discontinuing the promotion of "both sides" of the argument and providing statistics on the actual amount of scientific consensus on the topic when discussing it. This would help shrink the gap between actual and perceived scientific consensus, which would then increase concern about climate change since this is positively correlated with perceived scientific consensus (Hornsey et al., 2016).

Perhaps the most important segment of the Republican population to take these steps with is that of Republican policymakers. There is a large gap between Republican legislators' views

on climate change and those of their constituents. As mentioned above, 69 percent of Republicans said in 2020 they believed "the increase in the world's temperature over the past 100 years was caused mostly or partly by humans" (MacInnis & Krosnick, p. 4). However, in March 2021, there were still 139 members of Congress (26 percent of all of Congress) who denied that climate change is occurring and that most of it has been caused by humans (Drennen & Hardlin, 2021). Contributing to this number were 52 percent of Republican members of the House and 60 percent of Republican members of the Senate (Drennen & Hardlin, 2021). Because of this, Republican constituents who do believe climate change is happening should be encouraged to raise their voices and demand their legislators take action on climate change or to vote for candidates who share their views that climate change is happening. This can be done by, again, employing Bandura's (1977) core determinants of behavior change.

Conclusion

Public opinion has the power to lead to changes in policy, and changes in policy also have the power to influence public opinion. In the case of climate change, the percentages of Americans who believe climate change is happening and that it is caused mainly by humans are high and have increased since 2008 (Leiserowitz et al., 2022a), which is good news for environmentalists and those concerned about climate change. Public opinion on this topic is influenced by demographic factors such as sex, race/ethnicity, and income, but political ideology (and the political leanings of the media consumed) and antecedent variables such as perceived scientific consensus and pro-environmental beliefs are much stronger determinants on a person's individual opinion (Hornsey et al., 2016; Thomas et al., 2018; Akerlof et al., 2015; Ballew et al., 2020; MacInnis & Krosnick, 2020; Feldman et al., 2012). It is important for scientists,

policymakers, and the media to keep these drivers in mind to further influence public opinion and to utilize public opinion to win elections and pass more climate change mitigation policies.

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Appendix

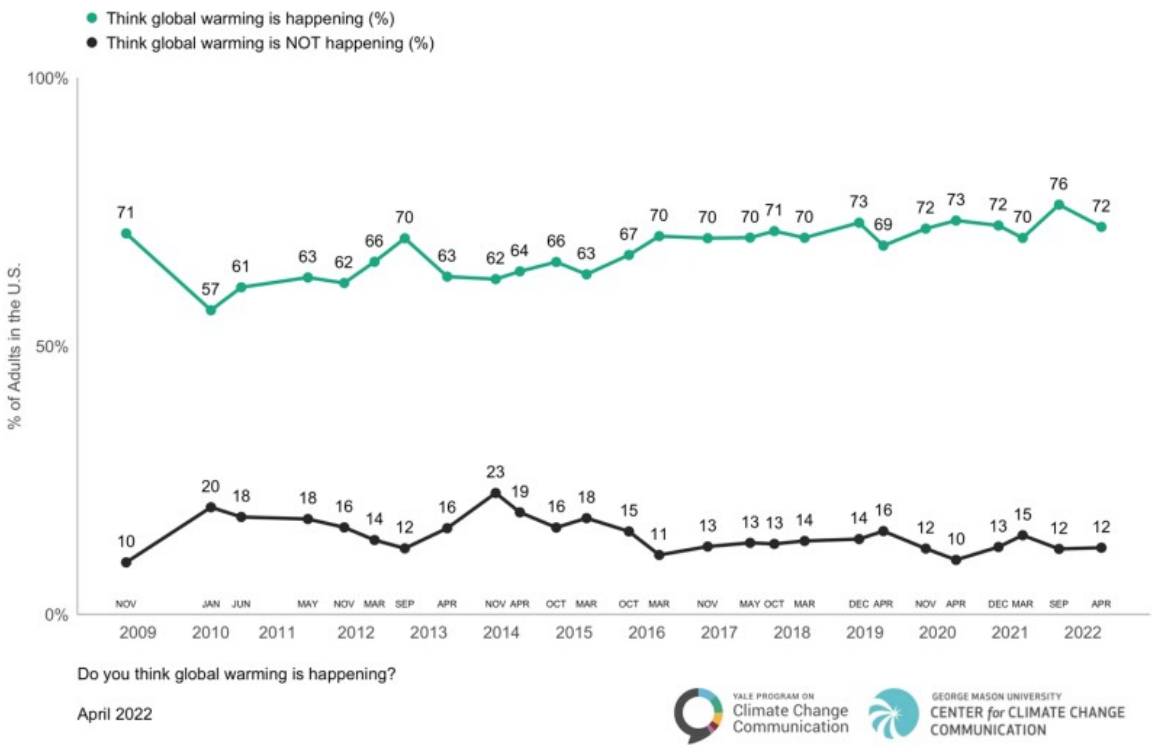

Figure 1: American Opinions on Whether Global Warming is Happening (2008-2022) (Leiserowitz et al., 2022)

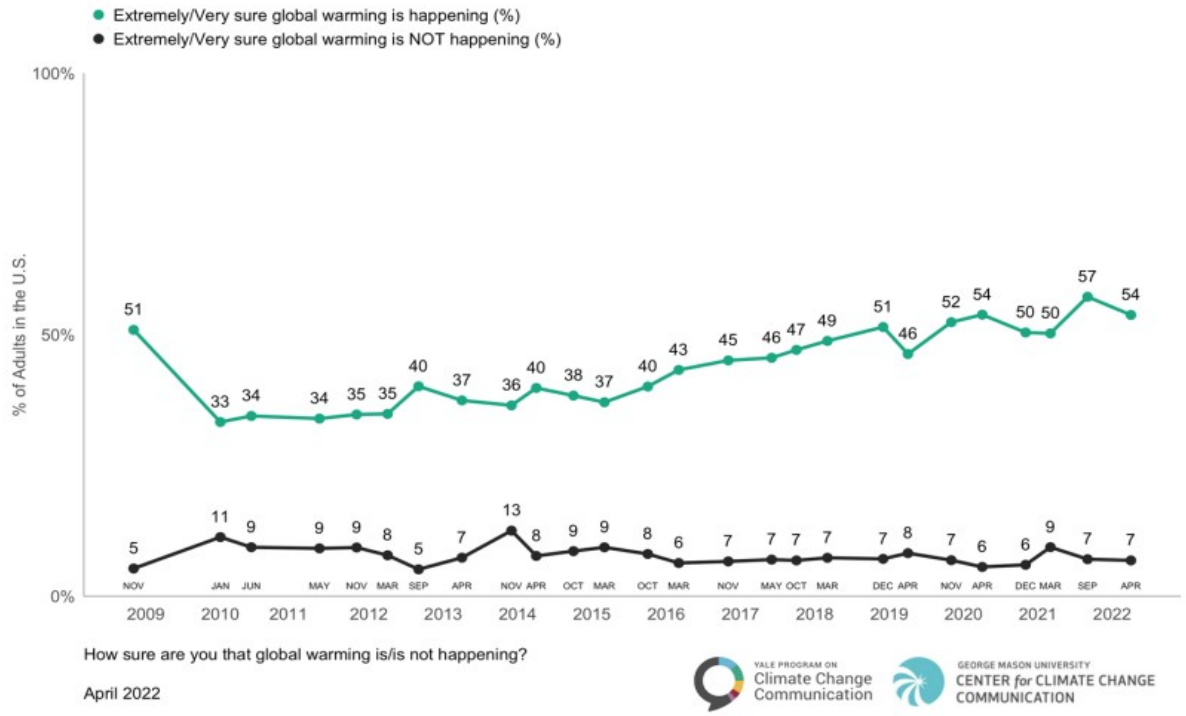

Figure 2: How Sure Americans are That Global Warming is Happening (2008-2022) (Leiserowitz et al., 2022)

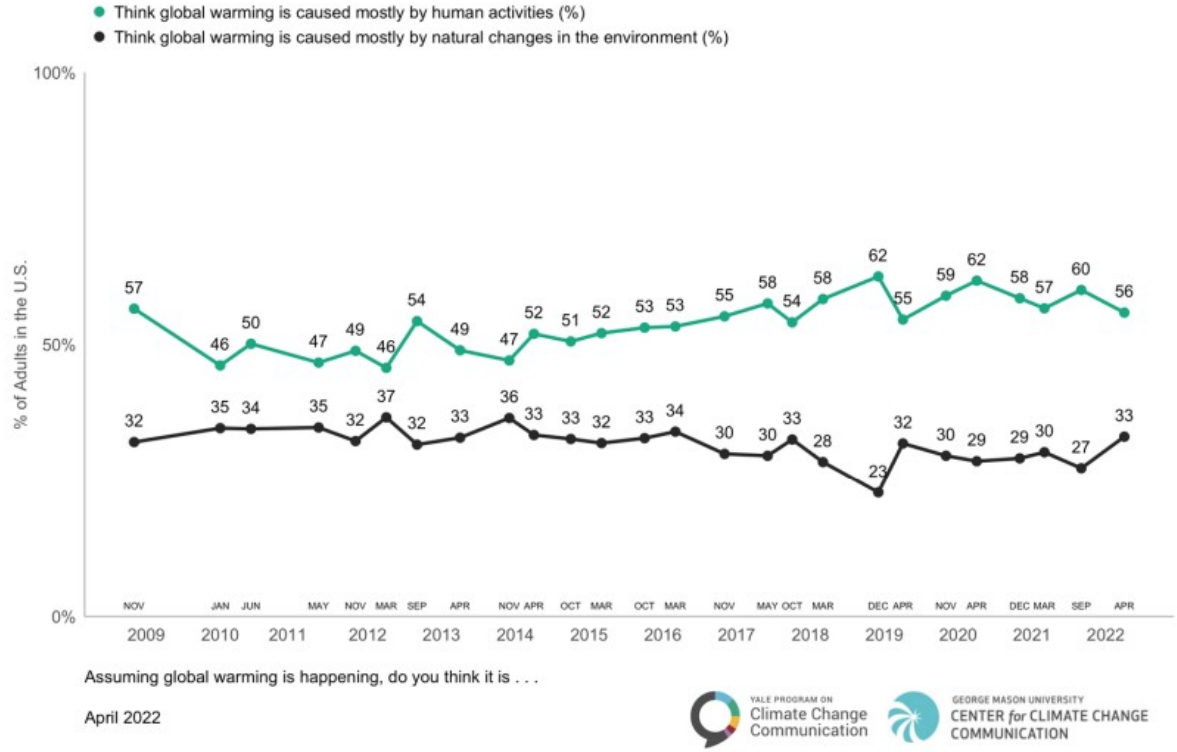

Figure 3: Percentage of Americans who Think Global Warming is Mostly Caused by Human Activities (Leiserowitz et al., 2022)

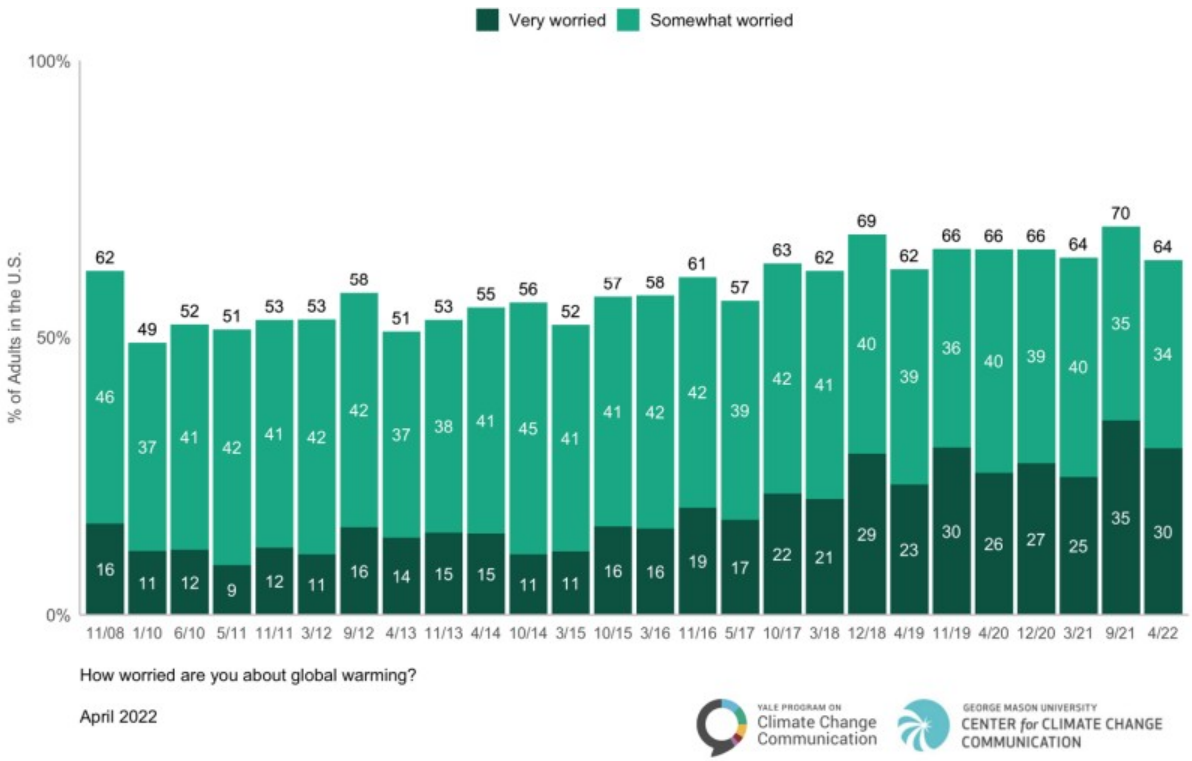

Figure 4: How worried Americans are About Global Climate Change (Leiserowitz et al., 2022)

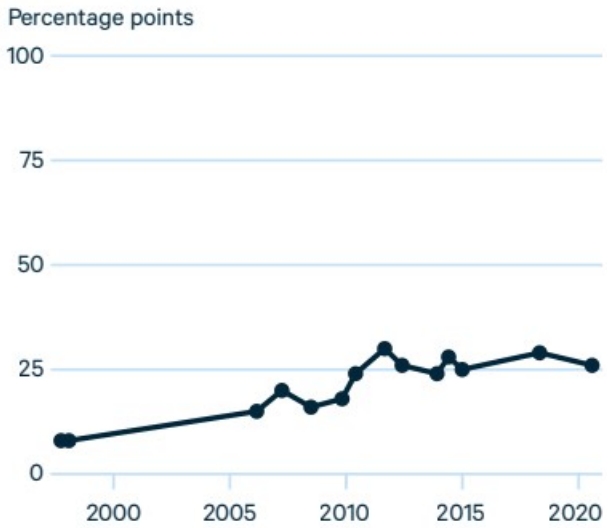

Figure 5: Trends in the Partisan Gap Using Two Measures (Global Warming Existence and Role of Humans) (MacInnis & Krosnick, 2020)

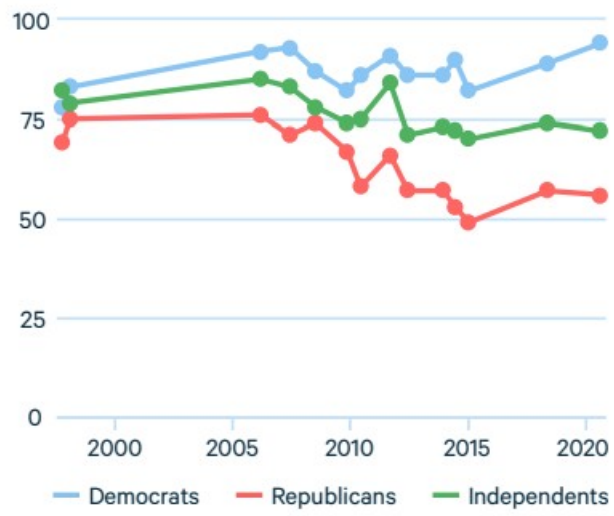

Figure 6: Proportion of Each Group who Believed the World's Temperature has Probably Been Increasing Over the Past 100 Years (MacInnins & Krosnick, 2020)

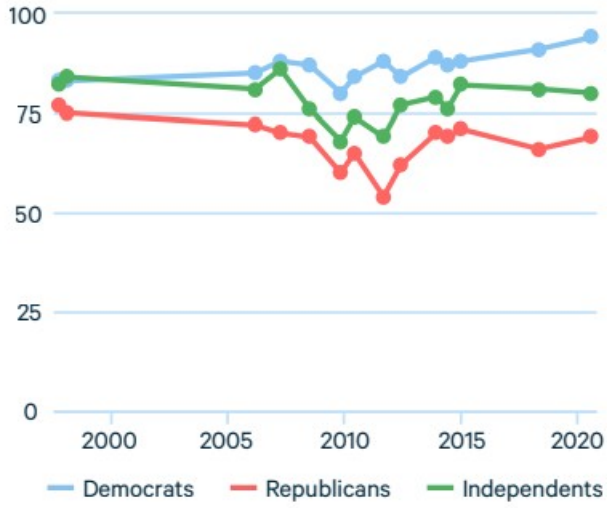

Figure 7: Proportion of Each Group who Believed the Increase in the World's Temperature Over the Past 100 Years was Caused Mostly or Partly by Humans (MacInnis & Krosnick, 2020)