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Faith in a Changing Climate: Policy Framing and Southern Evangelical Christian Views on Climate Policy

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Faith in a Changing Climate: Policy Framing and Southern Evangelical Christian Views

on Climate Policy

By

Sydne Tursky

Accepted in Partial Completion
of the Requirements for the Degree
Master of Arts

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Sydne Tursky

May 15, 2022

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A Thesis
Presented to
The Faculty of
Western Washington University

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Abstract

As the effects of climate change become more severe, many environmentalists push for federal climate policy to limit greenhouse gas emissions. However, no federal climate policy has amassed enough support to pass, largely because of America's contentious political climate. White evangelical Christians, who are often Republican, trend toward climate change skepticism and climate policy opposition. They comprise 25% of voters in the United States (National Election Pool, 2016). Therefore, climate policies must have bipartisan appeal to pass. Policy makers may generate bipartisan appeal through creative framing of climate policy that emphasizes more than just the environmental benefits of climate change mitigation. In this study, I interviewed 25 evangelical Christians in Arkansas to better understand their beliefs about climate change and policy. I tested four frames of a renewable energy policy that centered on Christian stewardship, national security, economic opportunity, and recreation. Results from the study found evangelical Christians attributed climate change to a wide number of sources: humans, natural causes, God's will, and a mix of these. Many participants had moderate to high support for renewable energy policy; for some, support did change with policy frames. Results revealed that evangelical Christians' climate policy concerns are often rational, nuanced, and reflect concerns of other groups. The study suggested that believing human activities are the overwhelming or exclusive cause of climate change may not be a necessary precondition for evangelical Christian support of climate policy. Yet political allegiances, cultural norms, and theology limit evangelicals' political support for climate policy and the politicians promoting it. These results suggest that increased evangelical support for climate policy may be possible through better policy framing and allyship between environmentalists and evangelicals.

Keywords: climate policy, evangelical Christianity, policy framing

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Chapter 1: Introduction

Climate change mitigation approaches range from small, semi-coordinated social changes to unprecedented, unified action from governments across the globe. Though experts disagree on the most feasible and effective course of action for the United States, in 2021 the Biden administration attempted the latter through the half-passed Build Back Better plan. Its tumultuous and unclear path to progress illustrates the need for new climate policy approaches.

The Build Back Better Act, part of President Biden's larger legislative framework, the Build Back Better Plan, was a social spending bill that included about $555 billion in climate change mitigation funds, alongside increased healthcare and education services and other spending priorities (The White House, n.d.; Sommer, 2021; Salam, 2021). If passed, the bill's earmarks for renewable energy and cleaner transportation would have been the "largest-ever federal investment in clean energy" (Newburger, 2022). The act was highly contentious, despite a Democratic majority in the 117th Congress. The act was passed by the House in November 2021, but never by the Senate (Cochrane & Weisman, 2021). A 50-50 partisan split in the Senate required that all Democratic caucus members support the bill in order to pass it—and even then, the deciding vote was Vice President Kamala Harris, the tiebreaker (United States Senate). Moderate Democratic Senators Joe Manchin and Kyrsten Sinema were not supportive of the bill, specifically taking issue with its cost and the included child tax credit and corporate tax increase, among other provisions (Davenport & Friedman, 2022; Zhou, 2021; Cochrane & Edmondson, 2021; Fox et al., 2020). After over a year of negotiations, the bill stalled out, with Senator Manchin announcing in February 2022 that the Build Back Better Act was dead (Kapur & Sarlin, 2022). While Manchin has indicated that he may be willing to negotiate on a new energy bill, and Democrats have proposed breaking the act into chunks that may be more easily passed, as of

April 2022 it seems clear that the Build Back Better Act is indeed unpassable, at least in its current form (Davenport & Friedman, 2022).

Ultimately, the Build Back Better Act's fate is not so different from its forebear, the Green New Deal. Proposed by Representative Alexandria Ocasio-Cortez (D-NY) and Senator Edward Markey (D-MA) in 2019, the non-binding agreement "call[ed] on the federal government to dramatically reduce greenhouse gas emissions, create high-paying jobs, ensure that clean air, clean water and healthy food are basic human rights, and end all forms of oppression" (Friedman, 2019). The Green New Deal never even passed in the House. Democrats were split on support for the bill, largely because of its cost, and it was roundly mocked by Republicans and the conservative news media (Roberts, 2019).

The problem is clear; neither the Build Back Better Act nor the Green New Deal had appeal outside of the party that proposed it. The Build Back Better Act could not pass because no Republicans liked it, and thus the bill could not survive any internal Democratic disagreement. The bills were built by and for Democrats, specifically deep-blue coastal and progressive Democrats, and little to no effort was made to draw support from conservatives. These bills' uncertain path to passage and America's historic lack of comprehensive climate policy show that achieving enough consensus to pass large-scale climate policies in the United States will require creative new approaches.

The American policy process is plagued by a perfect storm of neoliberalism and hyperpolarization. In recent years, it has become clear that passing comprehensive climate policy at the federal level is a difficult, if not impossible, prospect, as increasing political polarization leads both parties to be too entrenched in their own ideology to compromise or cooperate. Over the past three administrations, Americans have seen many bills passed through convoluted

Congressional proceedings—or even executive orders-—that were then reversed by the following Congress or president. One prime example is The Affordable Care Act (ACA), which was passed under President Obama's administration with only Democratic support; though not fully repealed, it was significantly limited and changed under Trump. In 2021, President Biden reversed many of Trump's regulatory changes to the ACA (Keith, 2021). When the nation's politics are so unstable, no legislation with single-party support can be expected to last long term. This is especially true for environmental policies, which have never been targeted to appeal to stakeholders outside the environmental movement. The Green New Deal, for instance, failed to gain majority support partly because it only appealed to people who already cared about climate change and broadly supported the principle of climate change mitigation.

Despite these obstacles, many believe climate action is needed now. Research suggests that to mitigate climate change through policy measures, lawmakers may need to creatively frame climate policies in ways that articulate how the policies can be mutually beneficial and appealing to people of varying political affiliations, even people who may not believe climate change is occurring or is anthropogenically driven. Bipartisan policies may need to appeal to each group for different reasons. Policies can achieve broad societal support by affirming, rather than disparaging, core values and avoiding contentious fact-fights (Kahan, 2006). Yet, in the United States, achieving broad societal support for climate policy is a challenge.

Achieving broad societal support for climate policy means appealing to evangelical Christians. In the United States, evangelical Christians represent a large voting bloc that resists action on climate change, with 48% agreeing that stricter environmental laws and regulations would damage the economy and are not worth the cost, compared to 38% of the general population (Pew Research Center, 2015a). A higher percentage of evangelical Christians oppose

climate policy than in any other religion except Mormonism (Pew Research Center, 2015a). *White* evangelical Christians present an even more homogenous group opposing climate action, with only 28% believing in human-caused climate change, a significantly lower proportion than in other Christian groups (Veldman, 2019b; Pew Research, 2015b). According to Veldman (2019b), "Not only is being evangelical associated with lower levels of concern, but among evangelicals concern about climate change and religious commitment are inversely related: the most religious evangelicals are the least likely to be concerned about climate change" (p. 2). Evangelical Christians are not a monolith; some are vehement believers in the need for climate policy. But en masse, evangelicals' negative response to climate change holds out, even when sociopolitical factors like political orientation and education level are controlled (Veldman, 2019b).

Evangelicals are not a small group of voters, so their opinions about climate policy matter. White evangelicals make up approximately a quarter of voting Americans (National Election Pool, 2016). There is widespread supposition that the movement is dying, but to what degree is unclear; data presents conflicting evidence, complicated by the slippery definition of "evangelical" (Burge, 2021; Wehner, 2021; Blake, 2021; Pew Research Center, 2019; Kurtzleben, 2015). Evangelicalism gained more white American adherents than it lost during Trump's presidency (Smith, 2021). Evangelical environmental opinions can present a significant barrier to climate policy enactment and implementation (Husser, 2020; Smith, 2021). Climate scientist Katherine Hayhoe, who is an evangelical Christian herself, believes that evangelical Christians may still be moved to support climate policy. In an interview, she stated that her goal is to motivate evangelical Christians toward climate action by:

showing how climate change connects to what they already care about. What they love. What matters to them. I don't want to change who people are or what they believe. It's a case of showing them that they already care about this—and already believe what they need to in order to make a difference. (Ottesen, 2021)

Perhaps the guiding light in the search to create environmental policy that can be passed *and* will last is this: There are many reasons to support climate policy outside of climate change mitigation. These reasons may include economics, security concerns, or a desire to reduce pollution. We do not have to agree on the reason why a climate policy is needed to agree on the policy itself.

This thesis examines whether and to what degree reframing environmental policy to appeal to evangelical Christians, whose views are often understudied and oversimplified in the existing literature, can increase policy support. To that end, I conducted interviews among 25 evangelical Christians in Arkansas to answer the question: What framings of a renewable energy policy from the Green New Deal have the widest appeal among white evangelical Christians in the Arkansas River Valley? While the study is highly localized, conclusions will hopefully provide context for climate policy framing among evangelicals across the American South.

Researcher Positionality

Exploring evangelical climate policy opposition seemed worthwhile because it could aid climate policy passage, but I was also drawn to it because I knew many current researchers were not members of the community in question. As someone who was raised in an evangelical home and identified as an evangelical for most of my life, I felt uniquely situated to conduct culturally sensitive research. This thesis seeks to answer questions I have been internally asking for years. *Why* don't *evangelical Christians care about the environment? Why is no one talking*

about this? Why am I the only one? And if I was going to explore the link between religion and environment, there was only one place to do it: home.

I was born and raised in the Arkansas River Valley, first in Fort Smith and then in Van Buren. My family is still there. I spent my childhood hiking in the Ozarks, suffering through sweltering summers, and fishing for catfish with my grandparents. Every Sunday morning, we worshipped at an evangelical Methodist church—and came back for Bible studies on Sunday and Wednesday evenings, too. Later, I attended the University of Arkansas in Fayetteville, calling the Hogs at every football game.

Though I spent most of my adolescence wishing I could move somewhere more "exciting," Arkansas is part of who I am, and it is still the place I think of when I think of home. It is one of the few places where I feel truly connected and loved, surrounded by a network of grade school friends, mentors, former Sunday School teachers, and neighbors who care about me from afar.

But I no longer live there, and my beliefs have shifted out of evangelical territory and into something more malleable and less institutional. I criticize the work of researchers who enter into places unknown to observe and question, but I am not sure I fully belong to the community I interviewed either: Not an outsider, but not a card-carrying member anymore, even if my driver's license would suggest otherwise. Despite this, my community in Arkansas continues to welcome me in with open arms each time I return. We may disagree on politics, and I may be constantly questioned as to why I would move to Washington State, but still I am greeted and embraced as an old friend.

I write this so readers will understand that this project is in no way meant to disparage or exploit evangelical Christians in Arkansas. I deeply respect the views of every participant, not

least because their views echo mine, in years past, and the beliefs of my dearest family and friends. I had the best time during the interviews, and my participants did, too. We all learned new things, and hearing people speak about their connection to God[1] and the environment was incredibly inspiring.

More than the actual results of this study, those conversations were my priority. We have lost the art of conversing with people who disagree with us. Common ground is a far-off land barely visible through a haze of hyperpolarization, fake news, and dirty politics. Yet my most significant finding was that we all have more in common than we think. Often, after the questions were done, participants would inquire about my views, which usually did not match their own. Inevitably, we would discuss the importance of agreeing to disagree and moving forward with kindness anyway.

That is the heart behind this project. No one interviewed said they did not care about the environment. We all care about our planet, but we embody our concern in different ways and according to various priorities. This project seeks to find ways that we can bridge our divide and create solutions that appeal to all of us, even if we voted for different candidates or go to different churches (or no church at all), have different environmental opinions, or live in different places.

I also wanted to change the narrative about Southern evangelical Christians. Here in the Pacific Northwest, and across much of coastal and/or blue America, the South, and its cultural and religious frameworks, is often spoken of with confusion, and even condescension and ire.

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[1] Some rhetorical choices may differ from the academic norm, especially regarding religious terminology. In the Bible and in the evangelical Christian cultural context, God is referenced as a father figure and thus is referred to with masculine he/him/his pronouns. Additionally, both God and His pronouns are capitalized to denote respect and authority. To respect and properly illustrate participants' Christian beliefs, the same rules for pronouns and capitalization are followed in this thesis.

This is just one example of the growing divide between coastal and middle America, urban and rural, and blue and red states. Federal climate legislation has been hindered by this polarization, to the detriment of climate change mitigation and adaptation nationwide.

Through this research, I hope to show that evangelical Christians in the South are not villains thwarting progressive climate mitigation policy with glee. They are just people—my people—with complex beliefs and convictions that may or may not coincide with environmentalists' climate policy aims. It is time for environmentalists to stop using misunderstood and under-researched cultural differences as reasons why we cannot cooperate. This attitude is both dismissive of evangelical beliefs and culture *and* self-defeating for those seeking to enact broad-based climate policy. If we are really committed to ending the climate crisis, we will need to develop creative policy to transcend that divide and find areas of common ground across a wide spectra of environmental and religious beliefs. We cannot afford to do anything else. I hope this thesis aids that endeavor.

Organization of Thesis

The following thesis will explore the results of a policy framing study conducted among evangelical Christians in the Arkansas River Valley and suggest further avenues for policy research that seeks broader climate policy appeal. Chapter 2 discusses the theological and sociopolitical factors that contribute to evangelicals' hesitance about climate policy. Chapter 3 reviews the existing literature about policy framing. Chapter 4 explains the methods chosen for this study and reviews the data gathering process. Chapter 5 is the first of two results chapters, and it presents participants' responses pertaining to beliefs about theology and the environment. Chapter 6 is the second results chapter, and it specifically reviews results from the policy framing experiment. Chapter 7 explains and contextualizes results within the broader literature,

reviewing themes and relevant nuance in participants' responses. Chapter 8 suggests future paths for research about evangelical Christians' climate policy opinions.

Chapter 2: Why Many Evangelical Christians Oppose Climate Policy

Framing climate policy so that it appeals to evangelical Christians requires an

understanding of how and why this demographic often opposes climate policy in the first place.

Researchers have identified several competing theories for evangelicals' low levels of belief in

climate change and tepid support for or outright opposition to climate change mitigation policy.

(Climate change mitigation policy, hereafter referred to as climate policy, encompasses a broad

range of proposals, including greenhouse gas reduction, energy use reduction, and renewable

energy transition, among others. In the context of this thesis, climate policy will be used to

narrowly refer to federal renewable energy policy.) In general, researchers' hypotheses about

evangelical beliefs and attitudes towards climate change and related policy fall into three main

categories: politics, theology, and culture (Veldman, 2019b). The primary theories will be

described here, with further explanation about each one's salience and shortfalls.

Politics

Political affiliation is used as one of the most straightforward explanations for evangelical

Christians' opposition to climate policy. Over 50% of evangelical Christians identify as political

conservatives, while an additional 27% consider themselves to be moderates (Pew Research

Center, 2015a). Three quarters of white evangelical Christians identify as Republicans (Pew

Research Center, 2016). Political conservatism and Republicanism have well-founded

correlations with climate change denial in the United States, due in part to neoliberal ideals,

polarization, and elite manipulation of a climate denial "machine" that works to prevent climate

policy passage, particularly by appealing to conservative Republicans. Climate change denial,

also called "climate denial," refers to the idea that climate change is not real or not serious, and

research has suggested that adoption of climate denial narratives correlates with decreased support of climate policy (McCright et al., 2016).

Conservatism correlates with climate policy opposition through its connection with neoliberalism, an ideology that took root in American politics in the mid-20th century. Neoliberalism describes the resurgence of market-oriented ideas promoting capitalism and deregulation (Shrubsole, 2015). At its core, neoliberalism advocates for a liberal government that promotes market success as its primary service. This may require active intervention, so long as it increases, and does not hinder, market growth (Sharma, n.d.). Neoliberalism influences both major political parties: Democratic Presidents Obama and Clinton exemplified these ideas through their promotion of a "privatized market society" (Wilson, 2018, p. 24). However, Democrats have not historically prioritized neoliberalism over environmental progress to the same degree as Republicans, likely because Republicans care more about market freedom and deregulation than Democrats do (Wilson, 2018). On a base level, "neoliberal governance sees the inherent politics of climate change as a challenge to economic growth," thus leading neoliberal actors to characterize action against climate change as something that is not "politically possible" (Jacques & Knox, 2016, p. 832). Neoliberal ideals incentivized corporate leaders to foment denial of anthropogenic climate change. If no one believes in it, nothing needs to be done about it, and capitalist enterprises can proceed unimpeded, regardless of their environmental impacts (Antonio & Brulle, 2011).

A climate change "denial machine," a widely used term for industry's coordinated efforts to instill public doubt about climate science (Dunlap & McCright, 2011; Dunlap & Jacques, 2013; Greenpeace, 2010; Piltz, 2008) has helped infuse Republican politics—and by association, evangelical opinion—with climate change denial and distain for climate policy. As a result of

neoliberal influence, climate change denial is an institution, largely built and continually boosted by industries whose markets may become less lucrative if policies to lower carbon emissions and reduce the effects of climate change are enacted (Dunlap, 2013; Dunlap & McCright, 2015; Dunlap & McCright, 2010; Oreskes & Conway, 2010). In the years since climate change has become widely discussed, the conventional energy (namely oil and coal) industries have worked tirelessly to foment climate change denial, with their efforts becoming especially vehement when policies for environmental regulation seemed imminent (Dunlap & McCright, 2015; Oreskes & Conway, 2010).

Think tanks also discourage climate policy support with climate denial messaging. Industries that stand to lose if climate policy is enacted fund conservative think tanks to incite climate change denial (Dunlap & McCright, 2010). The Heartland Institute is a conservative organization called "the world's most prominent think-tank supporting skepticism about man-made climate change" (Cann and Raymond, 2018, p. 446). In a qualitative analysis of hundreds of documents from the institute, Cann and Raymond (2018) isolated the top five most common climate change denial discourses, starting with the most prevalent: climate change is a hoax perpetuated by policy makers and environmentalists, climate science is "junk science," climate change evidence is uncertain, climate policy would harm citizens economically and the economy at large would be harmed by climate policy (p. 446). However, the researchers also found that anti-climate science organizations were shifting away from discourses on denial of climate science itself and moving toward attacks on climate scientists' integrity and questions of how climate policy might be paid for, and who might suffer the cost (Cann & Raymond, 2018).

Conservative politicians use climate change denial to undermine climate policy, calling upon contrarian climate scientists to oppose mainstream climate scientists in climate policy

hearings and even launching smear campaigns to declare climate change as junk science (Dunlap

& McCright, 2010). Famously, Oklahoma Senator James Inhofe—who is also an outspoken

evangelical Christian—brought a snowball to the Senate floor in February 2015 as proof that

climate change was a myth (Barrett, 2015; Veldman, 2019b). The George W. Bush

administration refused to enact climate change policy, calling for "sound science" as a clever

way of suggesting that current climate science was totally unsound (Dunlap & McCright, 2010).

Conservative media, including talk show hosts like Rush Limbaugh and Fox News figureheads,

serve as the final cogs in the denial machine and reiterate the same ideas in even more extreme

ways (Dunlap & McCright, 2010).

Additionally, social media has become a favorite vehicle for climate denial discourses.

An analysis of tweets found that organized climate change denial, stirred up by both industries

and conservative think-tanks, has led deniers to associate policies for climate action with "threats

to U.S. power and sovereignty, 'civilization as we know it,' and the current distribution of

wealth," all of which were linked with conservative ideals (Jacques & Knox, 2016, p. 846). In

virtually every instance, the rationale for climate change denial was purely political, not

scientific, and arose from the idea that climate science is a hoax designed to covertly promote

other, anti-conservative political ideologies (Jacques & Knox, 2016).

American politics have been dominated by a contentious two-party system for hundreds

of years. Furthermore, in the past few decades, competition between the two has transcended to

unprecedented levels (Antonio & Brulle, 2011; McCright & Dunlap, 2011a). Americans have a

win-at-all-costs mentality, which often means not listening to the other side or being willing to

compromise (Klein & Mason, 2021; Mason, 2015). Democrats and Republicans have become so

polarized that their desire lies more in beating or opposing the other party than it does in

advancing a specific policy goal. If Democrats support something, society expects Republicans to oppose it, and vice versa.

Hyper-polarization affects evangelicals both politically and religiously. Because Republican politicians cast themselves as standing for family values and Christianity, beating Democrats became not just a political competition, but also a moral battle for their evangelical Christian constituents (Veldman, 2019b). Losing to the Democrats means allowing liberal values, and their accompanying worldly sin, into leadership (Wilkinson, 2012; Nisbet, 2009). In this way, polarization causes people of all political leanings, but especially evangelical Christians, to further entrench themselves in a specific ideology in reaction to its opposite (Klein & Mason, 2021). Thus, evangelicals tend to align with Republicans based upon religiously grounded moral mandates. Their support for the economic interests of the broader Republican party—with its closer adherence to a neoliberal framework and denial of climate change—could be only tacit support.

There is compelling evidence that partisan politics influence evangelical Christians' stance on climate policy. However, they cannot explain the entire phenomenon. Multiple studies have demonstrated that evangelical Christianity has a unique correlation with climate change skepticism and/or climate policy support even when factors like political party affiliation, education and socioeconomic are held steady (Arbuckle, 2017; Barker & Bearce, 2013; Ecklund et al., 2017; Arbuckle & Konisky, 2015; Veldman, 2019b). In some studies, evangelicalism is the only religious affiliation found to have this effect (Ecklund et al., 2017; Arbuckle & Konisky, 2015; Veldman, 2019b). Clearly, there is something specific about the interaction between evangelical Christianity and environmental beliefs that leads to climate policy opposition. According to many scholars, that "something specific" is likely theology.

Theology

Evangelical Christian theology is broad and varies considerably across denominations, partially because the term "evangelical" is itself not well defined. Generally, "evangelical" is understood to refer to Protestant Christian denominations that adhere to similar core beliefs. Those core beliefs are: the Bible is the authoritative, unerring word of God; God sent his son, Jesus, to die on the cross for humanity's sins, after which he was resurrected; the only way to salvation is through a spiritual conversion leading to a personal relationship with Jesus Christ; and spreading the good news of Jesus' resurrection is critical to bring others to the faith (Noll et al., 2019; National Association of Evangelicals, *What Is An Evangelical?*). (A glossary of key terms, including those specific to evangelicalism, is available in Appendix A.) However, evangelical denominations are far from homogenous, and they may have many doctrinal differences and even heated theological disagreements (Veldman, 2019b; Noll et al., 2019). Given the breadth of the Bible and its accompanying traditions, denominations that identify as evangelical may have little in common with one another outside of the sect's core beliefs about salvation (Veldman, 2019b; Noll et al., 2019). As such, determining which theological ideas contribute to evangelicals' negative disposition toward climate policy has proven to be a difficult task (Veldman, 2019b). The definition of evangelicalism is further complicated by its growing correlation with a specific conservative political movement. (In my own research, some Christians who identified as evangelical did not know what the term meant outside of political and cultural connotations.) Researchers have hypothesized that evangelicals' environmental attitudes may be attributed to theological influences like anthropocentrism, the "end-time apathy hypothesis," or Robin Globus Veldman's (2019b) theory of an "embattled mentality," each discussed in turn below.

Scholars have long proposed anthropocentrism as the answer to the evangelical-environment question, beginning with historian Lynn White in 1967. White called Christianity "the most anthropocentric religion the world has seen" (p. 1205) and postulated that Christians held anti-nature views as a result of "dominion," or the power over land and animals that God bestowed to Adam in Genesis (Hulme, 2009; Veldman, 2019b).

> Man named all the animals, thus establishing his dominance over them. God planned all of this explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes. And, although man's body is made of clay, he is not simply part of nature: he is made in God's image. (White, 1967, p. 1205)

Because, according to the Bible, nature was created only to benefit mankind, and Christianity marked a rejection of animistic beliefs, there was little reason for Christians—and, by extension, the Western world, which was shaped by Christianity—to care for or respect the environment, thereby hastening environmental disaster like climate change and pollution (White, 1967).

White's ideas, commonly called the Lynn White thesis, spurred decades of debate across academic disciplines like religion and history and helped spark modern interdisciplinary environmental studies (Hulme, 2009; Taylor et al., 2016; Whitney, 2015; Nagle, 2008; Jenkins, 2009). White gave little evidence for his theory, and in the intervening years, scholars have made myriad multidisciplinary attempts to prove or disprove it (Hulme, 2009; Whitney, 2015; Eckburg & Blocker, 1989; Jenkins, 2009; Wilkinson, 2012; Djupe & Hunt, 2009; Veldman, 2019a). Consensus remains elusive, though "findings generally indicate that a link between religion and environmental concerns exists but is weak, likely but not clearly positive, and complicated by other demographic and ideological factors" like politics (Wilkinson, 2012).

But the Lynn White thesis has drawbacks outside of its more general claims about anthropocentrism and Christianity. White also wrote that taking decisive action to protect the environment was impossible unless Christianity was widely rejected (White, 1967). Given that many Christian leaders and laypeople exhibit pro-environment views and share pro-environment messages, this extreme position has been disproven (Djupe & Hunt, 2009; Wilkinson, 2012; Curry, 2008). Additionally, White wrote about religion very broadly, focusing primarily on Judeo-Christian traditions but also on all monotheistic religions (White, 1967). Subsequent examination of his ideas has largely focused on how Christianity impacts environmental attitudes. Less research has been done to determine how varying ideologies *within* Christianity lead to differences in environmental attitudes (Taylor et al., 2016). This is clearly a relevant course of study. If all of Christianity is so anthropocentric as to be environmentally devastating, as White suggests, an important question is left unanswered: why do evangelical Christians represent such a strong voting bloc against climate policy when Christians from other denominations actually tend to support climate policy (Veldman, 2019b; Wilkinson, 2012)? Anthropocentrism may tell part of the story, but it cannot account for the entirety of evangelicals' resistance to climate policy.

Many researchers have theorized that evangelicals' aversion to climate legislation stems from their belief in the "end times," as laid out in the book of Revelation, the final book in the Bible that describes how the world will end and a new epoch of heaven on earth will begin. This theory, coined the "end-time apathy hypothesis" by Robin Globus Veldman (2019b), supposes that Christians who believe the world will end and be made new have little reason to worry about climate change (Nagle, 2008; Carr et al., 2012). End-time beliefs certainly play a role in how

many Christians perceive the world around them. They may be especially salient for evangelical Christians, who adhere to a more literal reading of the Bible (Hulme, 2009; Smith et al., 2018).

According to Revelation, Jesus will return to the Earth to carry out his final judgement of humanity's sins. In this final judgement period, people who believed in Jesus and lived their lives according to His will can have eternal life with Him; those who did not will be eternally separated from God, often understood as being banished to hell. Evangelical Christians believe that only God knows when the judgement will occur. However, signs that the end is near are believed to include natural disasters, the rise of false prophets, wars and revolutions, epidemics and famines, increased sin, and rampant persecution of Christians (The Passion Translation New Testament, 2018, Matt. 24). After Judgement Day, when Jesus separates believers from non-believers, evangelical Christians believe the world will end, and a new heaven and new Earth will be created for Christians to live in forevermore (The Passion Translation New Testament, 2018, Rev. 21-22).

Revelation can be a confusing read, even for those with extensive Biblical knowledge, as a pastor who was interviewed for this study attested. It is rife with symbolism and metaphors; the exact sequence of predicted events is hard to pinpoint. Finding answers to specific questions about the end of the world can be quite challenging. As such, there are different interpretations of the book across Christianity and within evangelicalism.

Two primary eschatological, or end-time related, viewpoints prevail in evangelical Christianity. The first is premillennialism: the belief that Jesus will return to the Earth before the millennium, described in Revelation as a 1,000-year period when Jesus will overthrow Satan and establish a new kingdom on Earth where Christians will live in peace and prosperity (Blaising, 1999). After this millennium, Jesus will conduct the final judgement of all humans and totally

destroy Satan. Premillennialists also believe that Jesus' return will happen soon, though the exact

definition of "soon" is up for interpretation (Hulme, 2009). The second relevant eschatological

viewpoint is amillennialism, which holds that the millennium is not a literal 1,000-year era, but

rather a symbolic description of the current church era (Hulme, 2009; Veldman, 2019b; Strimple,

1999) during which believers in Jesus gradually establish Christianity on Earth and humanity

grows more loving and peaceful under God's heavenly reign. Jesus is understood to return after

this "millennial" period of time, which may or may not last 1,000 years (Strimple, 1999;

National Association of Evangelicals, *Premillennialism Reigns*).[2]

      Premillennialism—the belief that Jesus will return to earth and then establish a literal

1,000 year reign—is more prevalent among evangelical denominations than amillennialism,

presumably because of its more literal Biblical interpretation (Hulme, 2009; Veldman, 2019b,

National Association of Evangelicals, *Premillennialism Reigns*). Indeed, a 2010 Pew Research

Center poll found that nearly 60% of white evangelical Christians believed Jesus would return to

Earth by 2050. According to Hulme (2009),

> Those who hold pre-millennial views [are] more likely to interpret predictions of climate
>
> change—especially catastrophic climate change—as a sign that the millennium
>
> approaches. Such presaging of the era of direct divine rule is less likely to stimulate the
>
> desire and behaviour to avoid such an outcome (p.155).

The Yale Program on Climate Change Communication found that 26% of "evangelicals and

born-again Christians" think climate change is not worth worrying about because the end times

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[2] Within amillennialism, all the end-time events, from Jesus' return and final judgement to the restoration of heaven and Earth, are believed to happen concurrently, or at least in rapid succession, and not with a 1,000-year gap in between (Strimple, 1999).

are near, though the study did not record participants' specific eschatological beliefs (Roser-Renouf et al., 2016).[3]

The end-time apathy hypothesis is popular because it succinctly explains evangelical climate apathy and policy resistance, a phenomenon that has been drawing ire among environmentalists for decades. However, its popularity and seemingly obvious logic have obscured the need for in-depth investigation, and only a few studies provide evidence that confirms the theory's accuracy (Veldman, 2019b). Indeed, those studies do indicate that end-time beliefs are correlated with reduced lower levels of environmental concern (Veldman, 2019b; Guth et al., 1993; Guth et al., 1995; Barker & Bearce, 2013). However, they cannot explain why environmental apathy is so widespread across evangelicals with varying eschatologies and levels of climate skepticism. In Veldman's (2019b) study, some participants did believe that climate change was a sign of the end times, and thus cared little about its effects. But a much larger number of participants rejected the notion of anthropogenic climate change at all, declaring it a hoax created by secular people. While the end-time apathy hypothesis may explain the first group's beliefs, it can hardly explain those of the second group. Also in Veldman's (2019b) study, non-evangelical Christians with premillennial views exhibited positive views of environmentalism, which cannot be accounted for by the end-time apathy hypothesis.

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[3] More specific end-time beliefs may complicate premillennial viewpoints. Some evangelical denominations adhere to "pre-tribulation dispensational premillennialism," which includes belief in the rapture, an event wherein pious Christians will be taken to heaven before seven years of tribulation (Curry, 2008; Wise, 2010; Blaising, 1999). Some scholars suggest that belief in the rapture has obvious connections with environmental attitudes: there is no need to worry about the signs of the second coming or climate change if a dispensationalist Christian thinks they will be taken to heaven before the scary, world-ending events occur (Veldman, 2019b; Curry, 2008). Wise (2010) disputes this, suggesting that belief in a rapture does not affect environmental beliefs; even if premillennial Christians do not think they will endure the trials and tribulations described in Revelation, they do believe that they will return to Earth once Jesus returns, so preserving the Earth should still be important. There is little to no empirical research exploring the specific connection between belief in the rapture and climate change concern, so the correlation remains unclear.

Additionally, while end-time beliefs are sure to have some impact on evangelical's environmental views, it is questionable how consistent that impact may be across denominations or individuals. Though the end-time apathy hypothesis can be understood without differentiating between eschatological viewpoints, it is clearly more applicable to evangelicals with premillennial views. However, based upon my own experience attending evangelical churches, it is likely that most evangelical Christians cannot identify to which viewpoints they subscribe. If provided with definitions, they may be able to name their own position, but there is no guarantee it would line up with the eschatology of their church or denomination. In Veldman's (2019b) research, there was no distinct, measurable difference between the views of those attending churches with amillenial versus premillennial eschatology. Instead, the difference was purely individual. Whether or not a participant's beliefs about the end times influenced their environmental concern was largely connected not to their theological understanding of the end times, but to the salience of the end times for them in their day-to-day lives (Veldman, 2019b). Within my study, two of three participants who attended the same church expressed decidedly premillennialist, environmentally apathetic views, though their pastor, who was also interviewed, said that the church and its denomination adhered to amillennialism. Thus, it is unclear how broadly the end-time apathy hypothesis can be applied, understood, or used as a predictor without further research.

Robin Globus Veldman (2019b) put forth another theological explanation for evangelical Christians' reluctance to embrace climate policy in "The Gospel of Climate Skepticism." She describes evangelicals' "embattled mentality"—they feel that their beliefs and lifestyles are being threatened by encroaching secular culture. Evangelical messaging centers around this idea, with sermons emphasizing the importance of living for God, and not the "world," which is sinful

(Warren, 2002; Bonhoeffer, 1963). Additionally, the Bible frequently states that Christians can expect to be persecuted, both in the end times and before (The Passion Translation New Testament, 2018, Matt. 24; 2 Tim. 3; John 15; Mark 10; Gal. 4; Rev. 2). Religious discrimination has thus become a central theme in evangelicals' fears about an increasingly non-religious society (Veldman, 2019b). News articles about the persecution of Christians in China, Russia and the Middle East are frequent on Christian news sites, as are stories of American Christians refusing to compromise their beliefs and facing consequences after denying services for gay weddings, rejecting pro-choice healthcare or praying at their workplaces (Shellnutt & Forum 18, 2022; Fulton, 2020; Zylstra, 2017; Shellnutt, 2018; Fowler, 2019; Muncy, 2022; Lumetta, 2022; International Christian Concern, 2022). As an example of embattlement, Veldman (2019b) describes the underlying anger that her research participants often exhibited when discussing environmental issues: "For them, climate change was not only—as secular climate skeptics might say—a hoax based on weak science; it was also a tool wielded by secular elites to undermine the Christian worldview" (p. 88).

While Veldman's (2019b) theory is compelling, it is important to note that her research process was flawed. She unearthed the embattled mentality in her year of research among evangelical Christians in rural Georgia—a community that she moved to for the express purpose of conducting research, and one she had no prior connection with. She connected with a community member to help her navigate the culture, but that community member was also somewhat of an outsider, having moved to the area from the Pacific Northwest 25 years prior. Additionally, it is worth questioning if the anger Veldman encountered in her interviews with evangelicals was, as she suggests, a result of the embattled mentality, or if it may have been related to the frustration of being questioned by someone with little relation to their own culture

and worldviews. This is not to say that Veldman's work is invalid, but it does suggest that much more research will need to be done to validate her claims.

Culture

Besides politics and theology, some researchers posit that evangelicals' opposition to climate policy stems from attitudes like anti-science beliefs or a preference for individual instead of collective action, but neither theory explains the breadth of evangelical climate policy opinions. Both theories point towards a more unifying framework, cultural cognition, which may explain how the political and theological beliefs coalesce with other cultural attitudes to cement evangelical climate policy opposition.

Some scholars have linked climate policy opposition to anti-science attitudes, but others argue that anti-science attitudes have little relevance to the evangelical climate policy support question. "Anti-science attitudes" refers to the rejection of mainstream science as a way to reveal universal knowledge. To those researchers who think anti-science attitudes are the answer, evangelicals' scientific skepticism arose from the evolution-creation debate (Wilkinson, 2012; Nagle, 2008). Christians' adherence to intelligent design has frustrated many outside the faith for over 100 years (Wilkinson, 2012). Evangelicals felt they were being ridiculed for their beliefs, and even today many retain a deep distrust of modern science that carries over to climate change and is exacerbated by the climate denial machine (Wilkinson, 2012; Veldman, 2019b; McCammack, 2007; Nagle, 2008). Thus, some evangelicals question the scientific basis of climate change. For instance, over a third of white evangelical Christians do not believe there is any solid evidence that the Earth is warming (Pew Research Center, 2015a).

However, the anti-science attitudes theory suggests that evangelicals are irrational because they prioritize religion or affect over science. It also suggests that the *right* science

communication, using the most compelling or easy-to-understand or prolific studies, might be able to sway evangelicals with supposed anti-science attitudes to believe in climate change or support liberal policies aimed at addressing it. The truth is not nearly so simple, according to Dan Kahan (2012). Evangelicals who most reject climate change science are not scientifically illiterate or anti-science. In fact, people with the highest degrees of science literacy and reasoning abilities are the most culturally polarized over climate change. Some people with high science literacy believe climate change is anthropogenic and clearly evidenced, while others with high science literacy believe it is a hoax or at least scientifically uncertain (Kahan et al., 2012). Science communication has become such a polluted and contradictory environment that virtually any argument—even climate change denial—can find support from at least one or two studies, if not dozens (Kahan, 2012).

The anti-science attitudes theory is inaccurate, or at least incomplete, in many ways. Even the designation of evangelicals' views as "anti-science" is problematic because the term is used in the literature to refer to disbelief in the predominant liberal view of scientific consensus about specific issues like climate change or vaccination. Anti-science, when applied to evangelicals, does not refer to broadly held anti-science attitudes—it would likely be difficult to find an evangelical Christian who opposed all research into cancer or diabetes cures, for instance—so the anti-science label is insufficient.

Additionally, the anti-science attitudes theory wrongly casts evangelicals as irrational and uneducated. In fact, evangelicals' rejection of climate science and policy is perfectly rational when considered through the lens of their values (Kahan, 2012). Opposite views on climate change stem from and reflect existing cultural polarization and the risks associated with promoting a non-dominant view within a given culture (Kahan, 2012). It is socially risky and

thus irrational for an Evangelical Christian pastor in a small Southern town to express their belief in climate change, let alone support for climate policy, which is often dominated by progressive and liberal interests. Similarly, current climate communication "excludes people from relating to climate change in a personal or social way. It acts to exclude them from producing and sharing their own knowledge, and from participating in evaluating knowledge about climate change" (Fleming et al., 2014). In short, it is both risky and difficult for evangelicals to express belief in climate change and/or support for climate policy. Therefore, the anti-science attitudes thesis is flawed, and may only play a tiny role in evangelicals' opposition to climate policy.

Some scholars have attributed evangelicals' opposition to climate policy to a group preference for individual versus collective action (Veldman, 2019b; Curry, 2008; Nagle, 2008). The way people envision the path towards change affects the way they think about the future and climate action (Curry, 2008). Evangelical traditions are largely individualist. They emphasize the critical, salvatory importance of individual conversion to Christianity and prioritize a personal relationship with Jesus Christ over concerns like social justice, as it is premised on acknowledgement of communal harms and rights (Curry, 2008; Haluza-DeLay, 2008). Evangelicalism is a loose term, and the movement is hallmarked by the individual nature of congregations, which are somewhat doctrinally mobile (Curry, 2008). "This lack of an overarching structure, in comparison to other traditions, has meant that change within evangelical circles tends to be personality driven and shaped by Christian publishing and broadcasting" (Curry, 2008). This trend toward individualism means that addressing climate change through federal or international policy is off-putting for many evangelicals (Nagle, 2008).

Evangelicals' individualism has connotations beyond the obvious effects of individualist versus collectivist ideals. Individualism points toward cultural cognition theory, a framework

developed from Mary Douglas' cultural theory, which may link the many disparate theories discussed in this paper. Refined by Dan Kahan, cultural cognition theory attempts to explain how culture impacts individuals' worldviews and risk perception (Kahan & Braman, 2006; Kahan, 2008). Cultural cognition measures individuals' or communities' perspectives on a dual-variable spectrum: group and grid. The resulting map includes four quadrants representing cultural alignments: hierarchical individualism, hierarchical communitarianism, egalitarian individualism, or egalitarian solidarism. Each cultural alignment describes a specific worldview with its own preconceptions about how societies should be run, how change should be accomplished and, most notably, how risk is perceived (Kahan, 2008). There is not yet any definitive research placing evangelicals in either the hierarchical individualist or egalitarian individualist cognition categories, and if there were, it would be highly suspect. Even within more homogenous religious groups, individuals can be expected to disagree (Haluza-DeLay, 2008). However, given the individualist nature of many evangelical traditions, it can be presumed that most evangelicals are likely to agree with low-group ideals. (The correlation between evangelicalism and conservative political viewpoints also indicates that this is true.)

Cultural cognition theory has many implications for how evangelicals perceive climate legislation. If evangelicals primarily align with individualist cultural cognition alignments, that would influence their opinions on policy, and especially their opinions on broad federal climate policy. Smith and Leiserowitz (2013) found that individualism has a strong negative impact on evangelical support for policies created to mitigate global warming. More broadly, people with individualist worldviews often oppose environmental policies, especially those that are perceived to infringe on individual rights through increased government oversight or regulation (Kahan et al., 2011a).

The effects of individualism on evangelicals' climate policy opinions are multiplied by other mechanisms of cultural theory. Djupe and Hunt (2009) postulate that church congregations are in fact complex social networks that effectively create their own cultural sphere and accompanying worldviews. First, individuals gather information from church leaders and other congregants to form opinions. Second, "religious institutions shape opinion through normative diffusion. That is, members observe the behavioral and attitudinal cues of other members and reform their opinions to better match those of their peers" (Djupe & Hunt, 2009, p. 672). This phenomenon is what Kahan calls the identity-protective cognition, which occurs when people attune their views to fit with those of others with whom they share important connections—in this case, religious convictions (Kahan, 2008). Other psychological mechanisms enhance the effect of culture on worldviews: biased assimilation and polarization ensures that, when presented with balanced information about a given risk, people accept the information that fits with their existing worldviews. In diverse group settings, this can increase polarization (Kahan, 2008). The cultural credibility heuristic leads "individuals to impute the sorts of qualities that make an expert credible—including knowledge, honesty, and shared interest—to the people whom they perceive as sharing their values" (Kahan, 2008, p. 33-4). These and other components of cultural cognition ensure that evangelical worldviews and risk perceptions, plus their accompanying political and environmental beliefs, are self-perpetuating.

Cultural cognition theory did not create climate policy opposition, so it does not explain why some evangelical Christians began to exhibit negative perceptions of climate policy in the first place—here, politics and theology might serve as more useful explanations—but it may illustrate how the beliefs took hold to such a widespread extent in various denominations and churches across the nation. The prevailing conclusion has been that religious affiliation helps

determine individuals' politics, but Seybold (2019) hypothesized that the opposite may also be true in that political views affect a person's religious affiliation. Indeed, in line with cultural theory, it is rational to seek out communities where one's worldviews are accepted and reflected. Because evangelical Christianity has become so linked with political conservatism, it follows that evangelical Christians might join churches that align with both their theology and their political viewpoints. This theory explains both increasing polarization between evangelical Christians and broader American society *and* evangelical Christians' opposition to climate policy, which defies single-factor explanations. However, it still leaves a chicken-and-egg conundrum: are evangelical Christians conservative because they are evangelical Christians, or are they evangelical Christians because they are conservative? The answer is still unknown.

Evangelical Climate Policy Concern

As with many complex, interdisciplinary sociological questions, researchers cannot boil evangelicals' climate apathy down to one singular cause. This is to be expected, because evangelical Christians are not a monolith (Veldman, 2019b; Smith & Leiserowitz, 2013). Individuals, even those with similar religious views, are unique, and they each interpret the world around them through their own worldview (Haluza-DeLay, 2008). While worldviews are informed by surrounding culture, this does not mean that every person within a specific institution will think exactly the same way. As such, factors affecting environmental attitudes are likely to vary between and within evangelical denominations and churches. Individuals' environmental attitudes are likely influenced by differing combinations of the theories described above. Veldman (2019b) acknowledged this, stating that:

> The sense of embattlement [evangelicals felt] was powerful not only because it could
>
> neutralize concerns about climate change by explaining it in terms of something else—a

secularist plot—but because it was sustained by social dynamics. For many evangelicals, being theologically and politically conservative is a central aspect of their identity. This made embracing a politically liberal issue like climate change socially risky. If someone could embrace a politically liberal issue, did that mean he or she was also willing to embrace liberal theology? In such a polarized social context, to express concern about the environment or climate change was to put one's reputation on the line. (p. 10)

In the context of climate change, evangelicals' viewpoints are likely influenced by the politics *and* theology of the prevailing culture. The situation is further complicated by the increasing polarization of American society.

Religion, politics and culture are not the sole factors influencing evangelical climate beliefs. In many cases, these potential causes of evangelical climate apathy are compounded by gender, race, age, and geography.

Gender has a notable influence on climate change beliefs, religion notwithstanding. Women are significantly more likely than men to believe that climate change is a serious problem (Zainulbhai, 2015; McCright, 2010). They are also more worried that climate change will harm them personally and more convinced that people will have to make sacrifices to mitigate climate impacts (Zainulbhai, 2015). Women typically have greater knowledge of climate science than men but are more likely to underestimate their knowledge. It is not immediately clear if these gender differences are equally applicable among evangelical Christians; most research focuses only on gender or religion, and not both. However, the predominance of evidence suggesting that women are more climate aware and concerned than men indicates that there is almost certainly some level of gender difference within evangelicalism.

Additionally, women are more like to live environmentally friendly lifestyles than men by taking actions like reducing their trash and carbon footprint (Brough & Wilkie, 2017). Researchers have attributed this difference to women's prioritization of altruism and to men's view that environmentalism is feminine, and thus not a desirable male trait (Brough & Wilkie, 2017).

Gender differences in climate change perception may correlate with politics, at least to some degree. There is a growing gender gap in political party membership, with a higher number of men identifying as Republicans than women, who lean more toward the Democratic party (Igielnik, 2020). They are also related to race, with white men occupying a uniquely doubtful position in regards to climate change.

Race also has a documented effect on climate opinions. As previously noted, white evangelicals are much more likely to oppose climate policy and reject the idea of climate change than evangelicals as a whole (Pew Research Center, 2015a; Veldman, 2019b). This pattern holds out when religion is removed from consideration; white Americans are significantly less likely than Americans of color to believe in climate change or support climate policy (Ballew et al., 2020). Conservative white males are the most skeptical about climate science and the least likely to believe climate change will harm them personally (McCright & Dunlap, 2011; Ballew et al., 2019).

Research suggests that this divide may be attributable to differences in risk perception: African Americans and Hispanic Americans are much more likely than white Americans to be exposed to air pollution (Clark et al., 2014), among other environmental risks like toxic waste (Bullard et al., 2007; Satterfield et al., 2004). Because they are more likely to be affected by environmental ills, they may be more concerned about climate change and able to imagine direct

impacts. Social dominance orientation (SDO)—"a dispositional tendency to accept and even prefer circumstances that sustain social inequalities, combined with a general preference for hierarchical social structures" (American Psychological Association)—may also play a role, as SDO is more prevalent among political conservatives and males, especially white males (Jylhä et al., 2016).

Additionally, some, but not all, of the racial differences in climate perception might be simply correlated with political party. White people are more likely to identify as Republican or conservative than are people of color, and white people are also more likely to be politically polarized than are people of color (Ballew et al., 2020). While this theory worked to explain the differences between Hispanic Americans and white Americans, Ballew et al. (2020) found that political party affiliation did not correlate with differences in climate change and policy perceptions between white people and African Americans, so some combination of the factors described above must also be at play.

Age may also correlate with some evangelicals' climate policy opinions. Younger generations of Americans, especially millennials and Gen Z, are more likely than Gen X or Baby Boomers to support imminent climate action (Funk, 2021). They are also more likely to take personal steps towards climate mitigation, either through donating, volunteering, or speaking or posting on social media about climate change (Funk, 2021). Younger people are more likely than older generations to support shifting energy policy away from fossil fuels, and the gap is especially noticeable among Republicans. According to the Pew Research Center, "Gen Z Republicans are about three times as likely as Baby Boomer and older Republicans to favor phasing out fossil fuel use entirely" (Funk, 2021). They are also 30 percentage points

less likely to support expanded oil drilling. Young and old Democrats show far fewer differences in climate beliefs by comparison (Funk, 2021).

Geography further complicates evangelicals' perception of climate policy, largely through the mechanisms of cultural cognition. Within the United States, rates of climate change denial tend to follow a geographic pattern that looks very similar to a map of political leanings. Coastal and urban areas are much more likely to believe in anthropogenic climate change (or climate change caused by human actions) than rural states (Howe et al., 2015). The South exists as a fairly unified region where only about half of people believe in anthropogenic climate change (Howe et al., 2015). The South also has higher percentages of evangelical Protestantism than any other region (Pew Research Center, 2015a). In accordance with cultural cognition, it is socially risky to deviate from the prevailing opinion of one's community. As such, in small, relatively homogenous communities in the South, those that might be inclined to support climate policy are deterred by the inherent risks.

Chapter 2 examined the factors that contribute to evangelical Christians' hesitance toward climate policy. The next chapter explores previous framing research and considers how it might be applied to create policy with more appeal among evangelical Christians in the South.

Chapter 3: Relevant Research

Evangelicals' opposition to climate policy is driven by several competing and corresponding factors, including theology, politics, and culture. Their resistance is not well understood because of both a lack of research and the sheer number of contributing variables, and evangelicals are often presented as an immovable political blockade for climate change mitigation. However, research suggests that reframing justifications for climate policy so that they have broader appeal—to evangelicals, conservatives, Republicans, or all at once—could be the key to passing climate legislation. This chapter will examine prior framing research related to climate change and climate policy. Studies discussed in this chapter heavily shaped this thesis through ideas about methodology and possible frames.

Generally, researchers have centered studies about reframing climate policy around climate change denial. While climate change deniers are not exactly the same demographic as this study, which focuses on white evangelical Christians, the studies are still highly salient. Approximately three-quarters of white evangelical Christians do not believe in anthropogenic (human-caused) climate change (Pew Research Center, 2015b). The significant overlap between anthropogenic climate change skeptics and evangelicals suggests that studies seeking to counter or circumvent climate change denial are also relevant for this study.

Countering Climate Change Denial

Many researchers have explored how climate change denial can be countered or avoided. While it would be convenient to eradicate climate change denial altogether, it has become such a pervasive institution in American society, thanks to increasing political polarization, that uprooting it is unlikely (Hoffman, 2011; McCright & Dunlap, 2011). Hobson and Neimeyer (2013) wrote that shifting a determined individual denier's climate change perspective may be

impossible. If there is any way to do it, research suggests that overriding climate change denial may be possible by telling personal stories about individuals that have been impacted by climate change, but more research must be done to confirm this theory (Gustafson, 2020).

Previously, those seeking to promote climate policy have tried to motivate climate change deniers toward pro-environmental behavior by simply presenting more scientific facts. These approaches are ineffective for two reasons. First, climate change denial is an ideology and identity, not a simple misunderstanding of climate science (Bain, 2012; Sarewitz, 2011). Second, current scientific and academic discourses on climate change tend to stress the need for more technical data and emphasize that climate change is incredibly complex, and its causes so ingrained in the national social structure, that it may be impossible to solve (Fleming et al., 2014). These discourses are not useful in promoting effective mitigation of climate change; if they cannot even motivate action on behalf of believers in climate change, they will likely be totally useless in promoting positive environmental behavior among climate change deniers (Fleming et al., 2014).

Reframing Climate Policy

Despite widespread anthropocentric climate change skepticism in the United States, and specifically among evangelical Christians, climate change denial is not an unsurpassable barrier to climate policy. People who do not believe in climate change may still support climate policy if it has benefits outside of climate change mitigation. Instead of relying on the presentation of more scientific facts to convince deniers, a tactic which has been proven ineffective, some scholars argue that environmentalists who want to increase support for climate policy may find more success with another method: reframing (Kahan et al, 2012; Kahan & Braman, 2006; Kahan et al., 2011a; Kahan et al., 2011b).

"Reframing" may be achieved through the use of a policy frame, which is a "normative-prescriptive story that sets out a problematic policy problem and a course of action to be taken to address the problematic situation" (Rein & Laws, 1999, p. 3). Put differently, a policy frame is a narrative explaining why and how a problem should be solved (Fischer, 2003; Fletcher, 2009; Badie et al., 2011). Most attempts at climate policy use the same policy frame: that climate change should be mitigated because science says it should be, for the good of the planet and its people (Fletcher, 2009; Sarewitz, 2011). Reframing would entail changing this narrative so it focuses on other justifications for climate policy—even justifications that do not involve mitigating climate change at all, like increasing renewable energy capacity because it could lead to economic growth.

Reframing discussions of climate policy so they focus on more than just the environmental benefits of climate change mitigation could make policy mutually agreeable to people with different opinions on climate science, religion, and politics (McCright et al., 2016; Nisbet, 2009; Kahan et al., 2011a). However, reframing climate change discourses requires a reevaluation of the language used to construct them, keeping in mind that different social groups communicate in different ways and value different things (Fleming et al., 2014). The key is to shape climate policy so that it affirms, rather than threatens, individuals' worldviews and cultural cognition alignments (Kahan et al., 2011b). As Kahan et al. (2011b) wrote,

> It isn't the case, of course, that carbon emission controls are the only policy response to climate change risks; technologies that furnish a substitute for and that offset the effects of greenhouse-gas-producing energy sources can contribute, too. Many of these alternatives, such as nuclear power and geo-engineering, are likely to convey cultural resonances that affirm rather than threaten hierarchical and individualist confidence in the

power of human ingenuity to overcome environmental constraints on economic

production. There are also many hierarchical and individualistic people who believe in

the need to take action, of one form or another, to address climate change risks, and who

can be counted on to make the case for doing so in terms that appeal to rather than

alienate members of the public who share their outlooks. (p. 16)

In sum, policy makers may find that they can elicit more support for climate policy, even from

people who ostensibly do not prioritize climate action, if they get creative about reframing.

Researchers have begun testing new policy frames to determine if they are effective at

inducing climate change skeptics to engage in pro-environmental actions, like changing their

behavior to reduce their carbon footprint or voting in favor of environmental protection policies.

In one such study, researchers found that climate change deniers were more likely to act in

environmentally positive ways when the actions were framed as ways to achieve societal good

(Bain et al., 2012). For instance, "deniers intended to act more pro-environmentally where they

thought climate change action would create a society where people are more considerate and

caring, and where there is greater economic/technological development," as opposed to action

which were framed solely as climate change risk avoidance (Bain et al., 2012, p. 600).

McCright et al. (2016) also utilized the idea of counter-frames as a tactic to undermine

climate change denial. Researchers posed four sociopolitical counter-frames as rationale for

climate change action: economic opportunity, national security, Christian stewardship or public

health (McCright et al., 2016). Like Bain et al. (2012), the researchers found that climate

skeptics' views on climate policy could be shifted if climate change was viewed as a method of

increasing economic opportunity (McCright et al., 2016). Separately, Bayulgen & Benegal

(2019) also found that economic frames shifted perceptions of renewable energy policy.

Promotion of national security also worked to shift viewpoints (McCright et al., 2016). The

public health and Christian stewardship lenses were ineffectual in counteracting climate change

denial. While the Christian stewardship frame was not effective in the McCright et al. (2016)

study, other research suggests that it could still be useful (Carr et al., 2012). While McCright et

al.'s survey respondents were little influenced by a Christian stewardship frame, it may be

because they skewed less religious than the national average (McCright et al., 2016).

Encouraging climate action as a responsibility of Christian stewardship—i.e., the earth was given

to humans by God, and it is humans' responsibility to care for it—could still be proven

efficacious among evangelical Christians. Goldberg et al. (2019) used a social identity approach

to test a "Christian stewardship ethics" frame on Christians of all denominations. They found

that participants were more likely to express pro-environmental beliefs and intentions after

reading a frame that suggested environmental protection was a moral or religious issue, and that

other Christians cared about it (Goldberg et al., 2019). They also found that American

Christians' top two reasons to reduce global warming were to "provide a better life for our

children and grandchildren" and to "protect God's creation" (p. 447) and that economics had an

influence on Christians' environmental beliefs (Goldberg et al., 2019).

　　Public health should not be discounted as a potential counter-frame either. Costello et al.

(2011) states that the risks to public health presented by climate change cannot be overstated, and

that the health sector has been remiss in not communicating these risks and actively engaging in

the climate policy debate. This suggests that health professionals may provide useful tools in

how to reframe discussions of climate policy in terms of public health so that they appeal more

broadly. Additionally, the McCright et al. (2016) study was published years prior to the COVID-

19 pandemic, which brought public health concerns to the forefront of national conversation.

Climate change deniers may be more encouraged to support climate policies for public health reasons now that they have lived through a global public health crisis.

Another study provides evidence that framing environmentalism as "a way of upholding (rather than threatening) cherished societal institutions and practices" may encourage previously apathetic people to engage in pro-environmental behaviors by characterizing such behaviors as patriotic, in that they maintain the American way of life and conserve natural resources (Feygina et al., 2010). Newell et al. (2015) suggest that achieving environmental policy change will require policy makers to project a strong sense of leadership and capability to solve the issue, while also reassuring constituents that climate change risks will not unequally affect society's most vulnerable. In short, the discussion must be reframed in terms of responsibilities and rights (Newell et al., 2015). This theory presents a compelling idea for reframing discussions of climate policy to speed up climate action at the broadest levels, but it is unlikely that climate change deniers or evangelical Christians, who are often conservative Republicans, would respond positively to the federal government projecting more responsibility and power.

It is worth noting that reframing may not be the only way to encourage evangelical Christians to view climate change mitigation more positively. Hayhoe et al. (2019) found that exposure to a recorded lecture on climate change by an evangelical climate scientist led evangelical undergraduates to have significantly greater "acceptance of climate science, concern regarding its impacts, and support for action" (p. 9). This indicates that the messenger may be as important as the message, in line with Kahan et al.'s (2011a) explanation of pluralistic advocacy.

> Individuals reflexively reject information inconsistent with their predispositions when
> they perceive that it is being advocated by experts whose values they reject and opposed
> by ones whose values they share. In contrast, they attend more open-mindedly to such

information, and are much more likely to accept it, if they perceive that there are experts

of diverse values on both sides of the debate. (p. 169)

Additionally, hearing that another evangelical believes in climate change and supports mitigation

is affirming for evangelical Christians' identity and allows them to feel less nervous about the

inherent social risk in deviating from cultural norms. Some researchers have suggested that the

best way to encourage support for climate policy among evangelical Christians may be through

leaders like pastors, who could shape sermons around environmental stewardship (Carr et al.,

2012; Wilkinson, 2012).

Reframing presents a compelling solution for furthering climate policy support among

evangelical Christians, but very few studies have centered framing research on evangelicals. As

such, it needs more testing to determine which frames may be most effective. Building upon the

research conducted by McCright et al. (2016), Goldberg et al. (2019), and others, this study

examines how economic opportunity, national security, Christian stewardship, and recreation

frames affect climate policy perceptions of evangelical Christians in the Arkansas River Valley,

with the hope that results may provide more context for future research into the efficacy of

climate policy reframing.

Chapter 4: Methods

This thesis uses frame theory to examine how discussing social, economic, and political aspects of climate change and climate policy, instead of just the science, affects white evangelical Christians' support for a proposed renewable energy policy from the Green New Deal. Research was conducted via interviews; transcripts were coded according to the tenets of grounded theory.

Framing Theory

Framing theory is based upon the idea that everyone sees the world differently. Even though every human being exists in the same reality, they perceive it through the lens of their own personalities, fears, values, and experiences and construct their own picture of the world outside their head (Lippman, 1922; Guber & Bosso, 2012). Though the broad concept was first proposed by Lippman in 1922, it became the basis for Goffman's Frame Analysis in 1974, in which he introduced his seminal framing theory. According to Framing Theory, "framing involves the selection of some components of this perceived reality and communication of them in such a way that promotes a particular definition of the problem at hand, the cause and effect of it, and judgment toward a preferred solution" (Romsdahl, 2020; Entman, 1993). In the context of climate policy, framing means highlighting the benefits or consequences of the selected policy in a way that differs from the oft-repeated doomsday proclamation of environmental destruction. Climate change may or may not be central to creatively framed climate policies.

Grounded Theory

I used many tenets of grounded theory during data collection and analysis. Since its inception 50 years ago, grounded theory methods have become extremely popular across a wide variety of disciplines (Bryant & Charmaz, 2007). According to Charmaz (2014),

> Grounded theory methods consist of systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories from the data themselves... Grounded theory begins with inductive data, invokes iterative strategies of going back and forth between data and analysis, uses comparative methods, and keeps [the researcher] interacting and involved with [the] data and emerging analysis. (p.1)

In grounded theory, researchers analyze data throughout the research process, ideally without preconceived notions about what they will find (Charmaz, 2014; Lewis-Beck et al., 2004). Instead, grounded theory typically involves constructing theories based on line-by-line coding and subsequent re-evaluation of those codes (Lewis-Beck et al., 2004). Grounded theory methods are well-suited for use with interview transcripts, which were also the data gathering method for this study (Charmaz, 2014; Lewis-Beck et al., 2004).

Study Design

Before conducting any interviews, I chose a renewable energy policy from the Green New Deal to center the study and its frames. The selected policy called for a "Green New Deal mobilization" to meet "100 percent of the power demand in the United States through clean, renewable, and zero-emission energy sources, including—by dramatically expanding and upgrading renewable power sources; and by deploying new capacity" (H.R. 109, 2019, p. 6-7). The policy was selected for its widespread impacts and easy comprehension, plus its inherently broad and undefined nature. For the purposes of this study, "clean, renewable, and zero-emission energy sources" was interpreted as referring to wind, solar, and hydropower. The bill's primary sponsor, Representative Alexandria Ocasio-Cortez, stated that the definition of "clean, renewable, and zero-emission" was left intentionally open to the possibility of nuclear power (2020), but it was excluded from this study to avoid complicating interviews. While a vast

majority of Americans—regardless of political affiliation—support the use of more alternative

energy sources like wind and solar power, just over half still oppose more widespread use of

nuclear power, and support is highly correlated with conservative viewpoints (Tyson &

Kennedy, 2020). Ignoring nuclear power as a possibility within the context of the Green New

Deal limited confounding variables.

  To present the policy to participants, I wrote five short "frames," or articles, which may

be read in their entirety in Appendix B. The first frame was a short (under 100 words) news

piece providing only the most basic facts of the renewable energy policy and how it fit with

current U.S. energy policy. The other four frames were between 250-300 words each, discussing

the renewable energy policy through the lenses of economic opportunity, Christian stewardship,

national security, and recreation (hunting/fishing). The policy was described as a boon to

economic opportunity and national security, as an expression of Christian stewardship values,

and as a protector of Arkansas recreation. The first three frame topics were used by McCright et

al. in their 2016 study, and it seemed prudent to retest them on a narrower, more religious

demographic. The recreation frame was chosen because hunting and fishing hold cultural

importance, as both recreation and necessity, in Arkansas.

  The frames were carefully written to reduce confounding variables and ensure easy

comprehension. All four frames included a description of climate change as a human-caused

phenomenon and asserted that the climate policy would help mitigate climate change, on top of

the policy's other benefits. All information in the frames came from the government, academia,

or reputable news sources, but sources were not listed so that perceptions of specific

organizations did not affect participants' responses. Sources were available to participants upon

request in a separate document, but they were never requested. Each frame had a 9th grade or lower reading level.

I used semi-structured interviews to gather data. Previous studies exploring ways of reframing discussions of climate have used online surveys to collect data. While this method makes nationwide data collection convenient, it also leaves something to be desired in depth. Participants can only provide responses to questions that researchers write well in advance of the respondent's participation (Leavy, 2014). With semi-structured interviews, researchers can follow a list of questions designed to elicit the data they need, but they can also ask other questions that may arise over the course of the interview (Leavy, 2014).

Often, interviews are preferred in social science research because they can help researchers paint a broader picture of participants' spectra of beliefs and identities. Humans use conversation to understand themselves and the world around them:

> In order to understand ourselves, we must use a language that was first acquired conversationally, and we try out our interpretations in dialogue with others and the world. Unsurprisingly, conversations are therefore a rich and indispensable source of knowledge about personal and social aspects of our lives … the conversational process of knowing has been conceptualized under the name of *interviewing* (Brinkmann, 2013, p. 3)

Climate change denial is deeply rooted in a person's values and fears, as well as their cultural, political and religious alignment. As Brinkmann (2013) suggests, interviews are extremely helpful in understanding those more personal, internalized aspects of participants' beliefs. This is one reason why interviews are among the most popular methods for research in the social sciences, and why I chose interviewing as the research method for this study (Leavy, 2014; Gubrium et al., 2012; Brinkmann, 2013).

Research was conducted in the Arkansas River Valley for two reasons: first, because of my own personal connection to the region. I grew up there, and I knew that my connection to the area and its people would aid my research. I understood my participants' cultural and religious background, and I was able to empathize with them in a way that a researcher from somewhere else might find difficult. Thus, I felt uniquely positioned to do this particular research in Arkansas. Second, I chose to do research in the Arkansas River Valley because it has many of the same cultural and political dimensions as other parts of the South. In this way, I felt that it could serve as a case study to provide context for techniques that may also be applicable in other states across the region. Figure 1 is a map of the counties that make up the Arkansas River Valley.

Figure 1

Arkansas River Valley General Reference Map
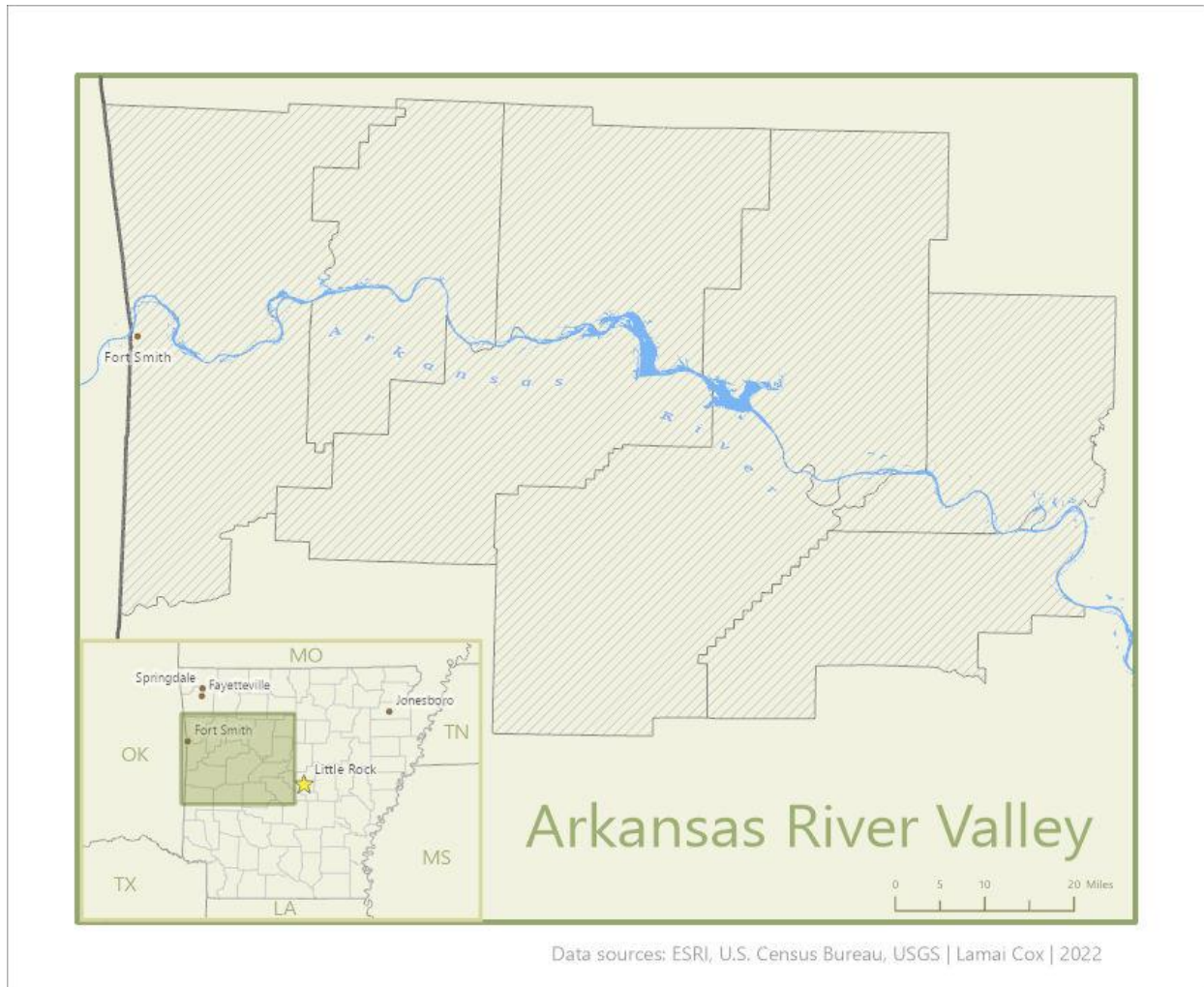
Note. (Cox, 2022)

According to the U.S. Census Bureau (2021b), Arkansas was the fifth poorest state in the U.S. in 2020. Nearly 80% of Arkansans are white (U.S. Census Bureau, 2021a). Similarly, 79% identify as Christian (Pew Research Center, 2015a). Almost half of all three million Arkansans are evangelical Christians (Pew Research Center, 2015a). Christianity comprises an indelible part of Arkansas' culture, and it underpins conversations about everything from simple small talk to politics. This is especially true in evangelical circles.

In Sebastian County and Crawford County, where this research was conducted, Donald Trump won 66% and 77% of the vote in the 2020 presidential election, respectively (Arkansas Election Results, 2020). Conservative Republicanism is the standard and expected political alignment across much of the state; where I grew up, confessing to liberal or Democratic ideals is often met with confusion and attempts at conversion to the other side.

Recreation is culturally and economically important in Arkansas. In 2011, the most recent year for which data was available, 1.5 million people over the age of 6 fished, hunted, or watched wildlife in Arkansas (U.S. Census Bureau, 2011). Hunters and anglers almost always eat what they kill or catch; many engage in hunting and fishing both because they enjoy it and because it reduces their grocery bill. It is common for Arkansans to have a stock of deer meat and/or catfish in their freezer. But recreation encompasses more than just hunting and fishing. Broadly, outdoor recreation "accounts for almost $10 billion in the Arkansas economy," supporting 96,000 jobs and contributing almost $700 million in tax revenue (Arkansas Senate, 2021). In the Arkansas River Valley, people treasure their access to nature, spending weekends hiking in the Ozark or Ouachita Mountains. Boating and related activities, like tubing and water skiing, are also commonly enjoyed on lakes across the state. Arkansas is nicknamed "The Natural State," and its residents are both thankful for and protective of that title.

Arkansas is expected to face significant climate risks, though they are presently less visible than in states facing wildfires and sea level rise. Experts predict that Arkansas will get much hotter and wetter as climate change progresses, with extreme heat and flooding posing significant risks to humans, wildlife, and the landscape (Four Twenty Seven, 2018; Thompson & Serkez, 2020; City of Fayetteville, Arkansas, n.d.; Arkansas Game & Fish Commission, 2015; Environmental Protection Agency, 2016). However, in some parts of the state, droughts may also

become more frequent (Environmental Protection Agency, 2016). Tick populations may also grow as the state warms, threatening the health of humans and wildlife (City of Fayetteville, Arkansas, n.d.). Broadly, researchers predict that warmer temperatures will harm fish and fowl populations in Arkansas, negatively impacting the recreation industry (Logan, 2009; Browne & Humburg, 2010; Middaugh & Magoulick, 2018).

To find participants, I reached out to my extensive friendly, familial, and institutional connections in the River Valley region of Western Arkansas. I utilized those links, plus social media, word of mouth, and snowball sampling, to find interview participants with whom I shared no personal relationship. From July to September 2021, I interviewed 25 people living in the Arkansas River Valley. I conducted an additional three interviews, but through the interview learned that the participants were not evangelical Christians; I excluded these three interviews from the analysis.

Participants were white evangelical Christians above age 18. I chose this demographic because they represent a large conservative voting bloc that exhibits high rates of climate skepticism, and thus often opposes the passage of climate policy in the U.S. (Jones et al., 2014; Veldman et al., 2021) Participants varied by gender; 12 identified as women while 13 identified as men. (Within the Southern evangelical Christian cultural context, gender is understood to be a binary, including only women and men.) Age varied from 19 to 78 years old. Participants had varying levels of education, from some college up to master's degrees. I did not ask participants to share their political affiliations, but the region is generally very conservative.

Interviews were conducted in Fort Smith and Van Buren, Arkansas, both in the Arkansas River Valley, at locations where the participants felt comfortable, including churches, participants' offices and homes, and libraries. All interviews were conducted in person except for

one, which occurred via Zoom. Most interviews were between 25 and 45 minutes long, though a few lasted longer than an hour. Prior to participants' arrival at each interview, I blindly selected two crayons from a jar; each crayon's color correlated with a different frame so that participants read two random frames out of the four possibilities. Every participant read the short news piece, hereon referred to as the "unframed policy."

The interviews were semi-structured, but I endeavored to make them as similar as possible, deviating from the pre-written list of questions (available in Appendix C) only when a participant's response required clarification or more depth, or if I thought a new question might encourage a particularly reticent participant to speak more freely. Each interview began with the same two questions: "What are your top three societal concerns?" and "What is your opinion on transitioning to renewable energy sources like wind, solar, and hydropower?" The first question allowed me to get a sense of each participant's priorities and their mental "baseline" going into the interview. The answers to this question often provided a glimpse into participants' political leanings as well and gave them time to get comfortable speaking with me about things that mattered to them. The second question provided broad information on how they thought about energy and the environment. After the first two questions, I read the unframed policy to each participant and asked them their opinion on the policy. I also asked them to rate their level of support on a scale from 1-10. Participants were asked the same questions after they read each of their two assigned frames; they were also asked to compare the frames to each other and determine which one contained a stronger argument.

After the frame testing portion of the interview was completed, I asked more general questions relating to participants' beliefs about energy and the environment. Specifically, I attempted to ascertain if participants believed in and/or cared about anthropogenic climate

change, what concerned and excited them about transitioning to renewable energy, and how they integrated their religious beliefs with their environmental beliefs.

I transcribed audio recordings of interviews and coded participants' responses in Nvivo using grounded theory. As I read through the interview transcripts, I looked for common themes and topics in participants' responses like "dominion," "money," and "pollution"; those themes became codes. I coded every idea or theme that occurred across two or more interviews. Over time and subsequent read-throughs, I refined the codes by making them broader or more specific depending on their relevance across all interviews. Once I had finished coding, some codes were discarded because they did not elucidate any major findings. I categorized others for better organization in this paper; for instance, "job loss," "cost," and "unforeseen consequences" became child codes under "renewable energy concerns." All codes were cross-checked against demographics to ascertain more specific information. I used an Excel spreadsheet to chart participants' policy ratings and belief in climate change; that spreadsheet later became the tables included in this document.

Chapter 5: Theology & Environment Results

This chapter documents study results pertaining to participants' broad beliefs about the environment, climate change, and God's role in both. Policy framing results are discussed in Chapter 6. As in chapters 1-3, God is capitalized and denoted with masculine He/Him/His pronouns, also capitalized, in accordance with evangelical Christian understanding of God as an authoritative father figure. I use these rhetorical conventions to accurately present the beliefs of my participants.

Summary Statistics

Between July and September 2021, I interviewed 25 participants who lived in either Fort Smith, Van Buren, or Alma, Arkansas. All three towns are in the Arkansas River Valley in western Arkansas. Participants were recruited via a Facebook post which was shared widely by my friends and family. All participants identified as evangelical Christians. Thirteen participants identified as men; twelve identified as women. The youngest participant was 19; the oldest was 78. Further gender and age data is depicted in Figure 2.

Figure 2

Participants' Age and Gender
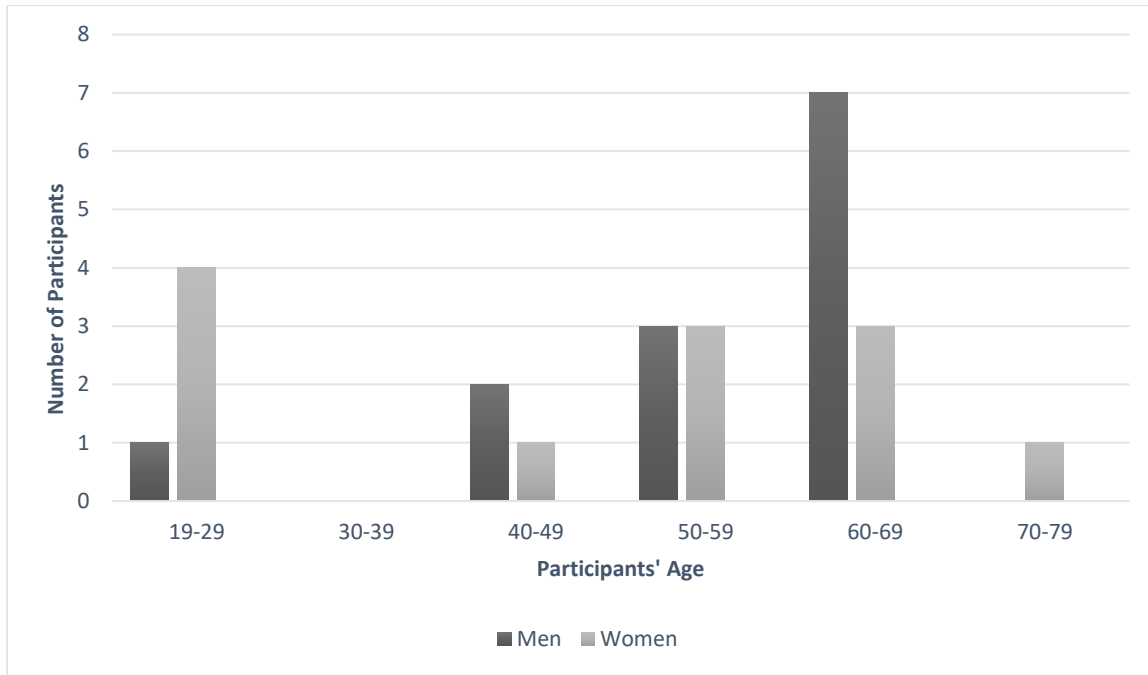
Interviews ranged from about 20 minutes to over an hour in length, though the vast majority were around 30-40 minutes long. Each participant read the unframed policy and two other randomly selected frames; Table 1 shows data on how many times each frame was read.

Table 1

Number of Times Each Frame Was Read

Frame Title	Number of Times Read
Christian Stewardship	13
Recreation	13
National Security	14
Economic Opportunity	10

Perception of Environment

Participants expressed deep care and concern for the environment, appreciating both the resources and opportunities it provided and its natural beauty. Many recalled fond memories of playing out in nature as a child, or even as an adult, during their interviews. In general, participants were grateful for their access to nature, referencing hikes and walks, fishing and hunting, camping, and other forms of recreation as important parts of their lives. Every participant directly or indirectly acknowledged an inherent value in the Earth, either because of its necessity for human survival and/or because it was a gift provided by God.

God's Role in the Environment

Participants were asked about their understanding of the link between God and environment at the end of their interviews, after the frame testing and policy questions. Three questions explored this topic. First, I asked: "What is God's role in the environment?" Second, I asked participants how they thought God wanted them to interact with the environment. Third, and as the final question in the interview, I asked if participants thought there was a Biblical mandate to protect the Earth. These questions elucidated similar but nuanced perspectives on how God and the environment intersect and how that relationship impacts human interaction with the Earth. Though these questions were asked at the end of the interview, I am beginning this section with them because they illustrate participants' core beliefs about God and the environment, and participants were clear that those beliefs served as the basis for their answers to all other questions. Understanding participants' religious frameworks makes it easier to understand their overall reasoning.

When asked about God's role in the environment, participants' responses encompassed varying theologies, but every single one was built off the premise that God is in charge. This

premise was summed up best by Participant 9: "He created it, honey. His role in it is top dollar. He's the creator of all." The understanding that God is in control of the Earth and everyone on it, and that He has a plan for humanity, understood to be His children, is a central tenet of evangelical Christianity. As such, it underpinned every interview. Participants also universally spoke of the Earth as a gift that God created for humans.

Despite widespread agreement on some levels, participants were split in their conceptions of God and His role in managing the natural environment. Some felt that God was wholly and actively in control of the Earth and everything on it, acting upon an overarching plan. For example, Participant 8 said, "What is God's role in the environment? Well, He made it. And He's never surprised."

Others felt that God does not take a hands-on role in running the Earth, instead leaving the care of the planet to humans. Participant 18 said:

God created this perfect creation. He left us in charge… He gave us the job of being stewards of this creation, and we screwed it up. We're continuing to screw it up. I think God's role in it is… I don't know how much of an active role He's going to take, because I think that He's kind of given that to us. I think that's our responsibility. (Part18)

When asked if they thought there was a Biblical mandate to care for the Earth, a vast majority of participants said they thought there was. Most did not identify a specific verse, suggesting either that it was somewhere in Genesis or Psalms or that it was implied because God made the Earth for humans and told them to rule over it. Participant 7 said:

I think that it was just kind of like, almost like there but not there. Like with Noah and the ark, He told him to save all of the animals. Well, we're damaging a lot of the animals, so we're not doing what He had told Noah to do. So, I don't know that it was necessarily

like specifically said 'you have to do this,' but I think that it was kind of implied that we were supposed to be taking care of the Earth. (Part7)

Broadly, participants interpreted the mandate to mean that they had a responsibility to respect and be good stewards of the Earth. Participant 19 said that Christians should interact with the environment:

In a respectable way, you know. I believe all things were put on here, on Earth, for a reason. I never figured out what ticks and chiggers and all that stuff has to do with good, but I believe that we should respect it and we should care for it as was intended originally before the fall of man. (Part19)

Some participants thought that part of caring for the Earth according to God's will included enjoying the environment recreationally. "We need to respect it," Participant 8 said. "And we need to treat it that way. We need to enjoy it as well—get out and go hiking, hunting, fishing, whatever."

Nine participants spoke about the concept of dominion, a concept stemming from the Genesis creation story in which God gave the Earth, plants, and animals to humans to reign over. All nine participants that mentioned dominion or its tenets cited it as a reason why humans are obligated to care for the Earth, not as license for humans to abuse the Earth's resources. For instance, Participant 15 said of the Earth, "I think we are rulers, but in that sense we are there to protect it and preserve and take care of it. But we are above everything else. I feel like He's placed us there." Participant 1 agreed, saying:

God gave us dominion over it, but you have care over something, that doesn't mean that you just bulldoze through it. That means you take care of it and protect it and it's your

job to, when you rule over something, it's not just saying "burn it to the ground," it's

saying take care of it, protect it.

Participant 14 concurred:

He gave us, as he says even, that dominion over even animals and stuff. I don't believe

that meant things like making do-dos go extinct from over-hunting and stuff. That kind of

stuff was not, I don't believe, in step with how God wants us to manage what he's given

us.

Even Participant 24, who thought temperature change was simply a natural phenomenon and

who was not supportive of the climate policy, noted that dominion was not a free pass to take

and destroy.

We are to use that which God has given us to use. According to Scripture we are to have

dominion over it. We are not to destroy anything that God has created, just to be

destroying it. We're to use it. Use it wisely. Use it efficiently. Use it as a good steward.

(Part24)

Environmental Concern

Because participants viewed the Earth as an illustration of God's love for them, and

largely believed they had a responsibility to take care of it, they were worried about

environmental issues. However, climate change was not strongly centered in participants'

perceptions of the environment and its problems—in fact, they tended to worry about other

issues more. Generally, participants worried about preservation of the Earth as a precious

physical and spiritually important resource and lamented problems like pollution, waste, and

overconsumption.

Twelve participants mentioned pollution in their interviews, and for several it seemed to be a much more top-of-mind issue than climate change. The group was quite diverse; pollution was bothersome regardless of participants' belief in climate change or perspective on its cause. Participant 13, who was unsure if humans caused climate change and gave every policy frame a zero rating, said:

Trash in itself is one thing. If it flows to seas that's a whole different problem, that's not fossil fuels, that's junk in the water and it kills the little animals and causes more fossil fuels to clean the water that was dirty because people put things in the water. You can actually cause other issues by not taking care of one issue.

Specifically, participants' conceptualizations of pollution included air pollution like smog, litter in natural areas, and ocean plastic that harms sea creatures. Participant 17 was frustrated by these problems:

You see it in these lakes, and you see it in the oceans and all this stuff, and you see the turtles with the rings, the Coke rings on them and they're stuck, or the ducks or the birds and all this stuff. That stuff kind of like, what are we doing? What are we doing to the animals? What are we doing to the world? We're polluting our waters. And we're polluting just the rest of the Earth. And it's just, it's scary. (Part17)

Nine participants lamented Americans' wastefulness, overconsumption, and desire for convenience as an environmental issue that contributed to pollution and climate change. Participant 4 found desire for convenience to be particularly frustrating:

I think we are not thinking about the impact of a lot of things because they're convenient and cheap. And I think it's making an undeniable impact…I think there's a lot of people that, not only are they not aware, but they don't care. As long as they've got water today,

gas in their car, and disposable everything, they're happy. And they don't care about

landfills or killing animals or polluting the sea. (Part4)

Specifically, participants mentioned disposable items, water overuse, rapid consumption, and

frequent building of new homes as examples of environmental abuse. Participant 22 said:

I think it's just we're in a world of consumerism and it's embarrassing to me how

disposable everything in our lives is. Furniture that doesn't last, it's expensive and you

see it out on a curb in a couple of years, it's not fixable, nobody wants it, and there it goes

off to the landfill to create more waste. (Part22)

Fourteen participants spoke about the personal actions they took to reduce their

environmental impacts, including recycling, picking up trash outside, and reducing plastic

consumption. Participant 12 said:

We do as much as we can to quote "protect the environment." We recycle and we watch

our water usage and electricity usage to be good stewards of what God has given us.

When—if—point in time when an electric vehicle becomes cost effective, because right

now they're really only for the rich, then you know, we would go to having a gas-power

car and an electric car so that for short trips and just around town, the electric car would

be fine. (Part12)

A few other participants noted that they had considered purchasing an electric car or solar panels,

bur reiterated that money and the feasibility of driving an electric car in Arkansas had so far

prevented it. Participant 4 said:

I'm not as good as I need to be by a long shot, but I do make decisions, consumer

decisions, based on what it's gonna do to the environment. Now, do I drive an electric

car? No. You know what I mean? It's just not feasible. Now, once again, you go back to,

it's not feasible. But I do little things that I guess make me feel better, that I'm trying, you know, with regard to aerosols and throwaway stuff. I'm not big on throwaway stuff, I like to reuse. (Part4)

Perception of Climate Change

Participants expressed a range of beliefs about the existence of climate change, what causes it, and how their understanding of it interacts with their religion and other sociocultural lenses. Most of the responses recorded in this section are from the second half of the interviews, when I asked participants specific questions about climate change, though a few participants expressed their feelings about climate change earlier in their interviews, like when they read the renewable energy policy. Participants were very open to discussing climate change, and in most cases expressed their thoughts without reticence. Some participants were overtly eager to talk about climate change and ask me questions about it because they said they did not usually have an opportunity to discuss it. Generally, the latter half of an interview was longer than the first half, when I tested the policy frames, because I often needed to ask clarifying and/or follow-up questions about participants' climate change perceptions. This may be because participants had not considered some of my questions before and were formulating their answers in real time, leading to sometimes unclear and changing responses.

Climate Change Belief

The first question participants were asked after the frame testing portion of the interview was: "Do you think global temperature is changing?" Out of 25 participants, all but one said they believed that global temperature was changing to some degree. Most participants responded in simple affirmatives, but others added emphasis. Participant 6, for instance, said that global temperature change was "for sure" happening. Participant 18 agreed: "Oh yeah, sure, you bet. I

think the science shows it. I think it can't be really denied." Participant 14 thought temperature change was happening but was unsure about its longevity. "I gotta say that I think it is [changing] right now. I think probably. I mean I've heard that it is. And I think it's happening, I just wonder if it's gonna happen long term. I don't know," he said.

Some participants acknowledged that temperature was changing but, foreseeing the follow-up question of "do you believe in climate change?," added caveats. Participant 13 said that yes, temperature was changing, "every day, all the time, by the hour," seemingly to undermine the idea that climate change was a sustained change instead of just a function of daily and seasonal weather shifts. Later in the interview, Participant 13 clarified that he did think climate changed in extended cycles. Participant 24 was more direct, saying that temperature changed "in cycles, yes. As a permanent rise or fall, no."

Participant 12 was the sole dissenter regarding temperature change, but even she was not positive that it was or was not happening. After some thought, she hesitantly said that temperature might be changing, but if it was, it was not necessarily changing in a different way than it always had.

> Well, it may be to some degree, if they were able to keep, you know, records of temperature and they had logged and were able to keep logs of what had happened, you know, for couple thousands of years ago. Then I think there would be a better track of being able to prove that it's changing, because we know just from records that they've been keeping within the last hundred years that there have been periods of, you know, extreme cold and extreme heat and there have been extreme weather situations. So just to say that based upon a hundred years or so of record keeping that the temperature's

changing, I guess I would say yes it is, but it also was probably changing 200, 300, four hundred, 500 years ago, not just within the last 100 years. (Part12)

After participants explained their thoughts on temperature change, I asked "Do you believe in climate change?" Twenty-three out of 25 participants said they believed in climate change. Again, a vast majority of participants responded with a brief affirmative answer, but some were more expressive. Participant 2 requested a definition of climate change before he answered the question. (I defined climate change as a phenomenon wherein climate varies over time, getting progressively hotter or colder depending on the region. I kept my definition intentionally broad and did not provide a cause so that I would not influence Participant 2's answer.) Participant 6 again said that climate change was happening "for sure." Participant 16, who said she believed in temperature and climate change, asked: "Isn't it all the same really?"

Two participants mentioned global warming in contrast to climate change. Participant 7 specified that she believed in climate change but not in global warming. She said climate change was occurring and was evidenced by sea ice melt, but she did not think it was solely caused by pollution; other factors, like the distance of the sun and the state of the ozone layer also impacted it, she said. Conversely, she exclusively associated global warming with greenhouse gases and human cause; since she attributed warming temperatures to multiple causes, global warming did not make sense to her. Participant 14 said that he believed in some aspects of climate change but was unsure about others; he specifically mentioned changing terminology.

> It depends how you define [climate change]. I notice that once upon a time it used to be global warming, now it's climate change. I very much believe in climate *change* because I think you almost can't deny it. Like I said, even if you look back in history and you do hear about things like these previous ice ages or whatever, stuff like that, at different

times in history. I think you have to agree that it happens. Climate can change, even globally, for extended periods. But is it long term? I don't know that. So, I do believe in it, I just don't know if I believe in it in the full sense that science people talk about it, like it's here to stay and it's only going to get worse kind of stuff. (Part14)

Participant 12 and Participant 24 said they did not believe in climate change. When asked, Participant 24 responded: "Not the way it's presented." He went on to explain that the climate operated in cycles and patterns; sometimes it was hotter, sometimes Arkansas would get more snow, and sometimes it would be cooler. He did not think there was any data to suggest that the planet was enduring a sustained climate shift because of fossil fuels.

First of all, there's no documentation that the temperatures are actually getting warmer. It's cyclical, as the weather and temperatures have always been. All you have to do is watch the 6-o'clock news and weather and they—well, they stopped doing it because too many people were paying attention I guess—but they used to give the record temperatures. So, it's always been a cycle, and it's always been colder or hotter, years ago, than it is now, at times. I remember in the late '80s, I want to say '88 or '89, when a person that I don't even want to mention his name began this global warming/climate change idea. The temperatures are going to steadily rise until the polar ice caps melted, New York City'd be flooded, we would progress into a desert. The summer after that prediction was the wettest July in history, while we were on our way to desert conditions. A lot of the data they were using for these predictions and so-called proofs—I don't like to be lied to, and so that bothers me, and when I know people are lying, that really bothers me. Because I try not to lie to people. I mean it's just wrong. And if I'm wrong, I'm wrong, but I don't want to tell people I'm right when I'm not. But the data they use, a

lot of it was collected over a period of time by NASA. Well, NASA comes out and says

that they manipulated it, here a couple of years ago, well they said they manipulated that

and there really was no way for global warming in their data, which I knew already. But

people are convinced. It's amazing how many people believe that the Earth's getting

hotter, and it's not. If you talk to scientists that have really done the research and have

really gone back and looked, and anybody can do it, you can Google the temperatures

from any year you want. And the most they can come up with is a half a degree in the last

hundred years. Do you know how long that would take to make any difference in our

climate? And look at all the other problems we're gonna have before then, like water. So

it's so ridiculous that people get all bent out of shape over something that's not even true.

Anyway, but it's the money. There are people making money over this climate change

propaganda, and the switching away from fossil fuels and all that… But this is not

healthy. It's not true. (Part24)

Participant 12 expressed similar, but less fervent, beliefs, saying that she did not believe in

climate change or global warming "to the extent that some people do." She cited research her

husband had done that suggested the Earth was actually due for a mini Ice Age, not a warming

event.

Most participants said they believed in climate change. However, when asked "what is

causing the temperature/climate change?," their explanations of what climate change actually is

varied widely. For instance, six male participants who said they believed in climate change

clarified that they thought the climate and the weather change day to day and year to year, but

they did not necessarily believe in climate change as a consistent, global temperature increase

due to greenhouse gas emissions (Part8, Part10, Part11, Part13, Part14, Part21). The six male

participants' viewpoints echoed those of Participant 24, yet they answered the question about belief in climate change differently. Participant 21 explained:

> Yes, I do believe that changes happen, yes, over time. If you look at history, yes. The actual science behind it I guess is the distance that the Earth is to the Sun over its orbit, there are changes, small degrees here or there. Even the sun changing has an effect. Is it because of man? Eh. I think the jury's still out on that one. (Part21)

Participant 10 also expressed doubt.

> I don't know. It could be a combination of the natural cycle of the Earth. Could be greenhouse gases, I don't … You talk to five people, you get five different answers. Although there seems to be a trend now toward – everybody thinks its man-caused, or we're doing it ourselves. But the Earth has always gone through cyclical temperature changes. (Part10)

The varying answers about what climate change is reflected different beliefs about what is causing climate change. The 23 participants who said they believed in climate change were asked a follow-up question: "What do you think is causing that change?" Their answers did not reveal a strict demarcation between participants who believed in anthropogenic climate change and those who viewed climate change as a natural phenomenon.

Four participants said they considered climate change to be simply a natural phenomenon or part of the way God made the Earth to function when He created it (Part8, Part9, Part11, Part21). Participant 8 described climate change as a function of "normal fluctuation in the Earth." Participant 11 agreed, adding that those normal fluctuations happened on "God's timetable."

Fifteen participants were certain that climate change was caused to some degree—but not necessarily entirely—by human activity (Part1, Part2, Part4, Part5, Part6, Part7, Part15, Part16, Part17, Part18, Part19, Part20, Part22, Part23, Part25). "Humans are, I think, driving the change, yes. I think the things that we are doing and using are causing great harm to our atmosphere," said Participant 4. Out of the group of 15 who believed in an anthropogenic cause, 10 mentioned fossil fuels or greenhouse gases outright (Part1, Part4, Part6, Part16, Part17, Part18, Part20, Part22, Part23, Part25). The other five participants said humans were causing climate change through less specific means, like pollution or overpopulation. Participant 5 said that climate change was caused by "the stress on our environment just from all of the pollution, and all of the deforestation, and all of those things. I think just a few degrees of temperature increase affects so many things, so I think that that is affecting our environment."

However, even among the 15 participants who believed in anthropogenic climate change, most attributed it to a combination of many factors, including the Earth's natural climate cycles, human use of fossil fuels, pollution, deforestation, and other environmental ills, like Participant 5 in the preceding paragraph. Participant 20 said climate change was caused largely by overconsumption:

> It's a collective problem that we have across the board. I think obviously our—well I've mentioned it several times—our overconsumption of everything. So yes, it's greenhouse [gases], but it's also the fact that we've clear cut forests and my current kick is that we have these perfectly manicured lawns everywhere, and I'm like, we spend all this money and use all these lawn mowers to have these perfectly cut lawns for no apparent reason. Just because, at some point in time, we decided this was a good idea. So you can't

continue to do those things at the rate that we do them and not expect to have global

warming. (Part20)

Some participants in this group even linked climate change to sin or moral decline, citing

human greed and wastefulness as potential causes. Participant 16 said:

I think it's more than just fossil fuels that are causing global warming. I think it has a lot

to do with man and what we're doing to the environment… The way we're abusing our

environment, I think with all the chemicals, and there's so many people, and we're

creating so much pollution. I just think it has a lot to do with us as well. (Part16)

Participant 4 also linked climate change to human wastefulness and lamented it as a

moral problem throughout her interview. Climate change, she said, was caused by "wasteful

overuse of inexpensive [resources and objects]… I think we are not thinking about the impact of

a lot of things because they're convenient and cheap. And I think it's making an undeniable

impact" (Part4). Participant 22 said climate change was happening because people were greedy

and thoughtless, "using things up in the environment with no regard for the long term."

Many participants who believed in human-caused climate change were quick to note that

climate was cyclic. While they did not think of climate change as a strictly natural phenomenon,

they did note that it might have both natural and anthropogenic causes. Participant 23 said:

I think that climate naturally on its own, it changes, it goes through cycles and stages. But

I think that human – I think that we as humanity have furthered that impact and made it

extreme and made the cycle like too fast… I think that that our emissions, and our

burning fossil fuels, has heated up the Earth and depleted some of the ozone layer. And I

think that it's partially just the Earth goes through cycles, and I think it's partially the

impact of industrialization. (Part23)

Participant 7 expressed similar thoughts, saying:

> [Global temperature is] definitely changing, but I don't know that we can necessarily say that it's because of like a certain thing. Because I mean the ice age happened and we didn't have factories and stuff around whenever the ice age occurred, so. It's definitely changing, but I don't know that it's necessarily related to one specific thing, I think there's a lot of factors that play a role in why it's changing… I mean, I'm sure that pollution has a big part, but I'm sure that there's other stuff, just like the way that the Earth is moving around the sun. There's other things too involved, so I don't think you could say one specific thing is causing the problem, I think that there's a lot of different things that are building up and it's just causing one major problem. (Part7)

Participant 15 agreed. She said that "I think just part of [climate change] is just how the world is and how it fluctuates, but then I do think with all of the major industries, they're polluting the air and affecting it."

Participants' beliefs about the cause of climate change were difficult to quantify. In discussing climate change, participants often contradicted themselves. It was challenging, in analysis, to parse out which participants were sure that climate change was caused by humans and which were not, because some seemed to switch positions during the interview. For instance, Participant 3 first said that climate change was caused by myriad factors, including overpopulation and the use fossil fuels. I asked a clarifying question: is climate change a natural phenomenon, or is it human-caused? Participant 3 was unsure. Her "final answer," she said, was that she did not know what caused climate change and had never really thought about it before.

Besides Participant 3, five other participants said they were unsure about the cause of climate change, vacillating between climate change as a natural phenomenon and climate change as a result of human activity (Part2, Part10, Part13, Part14, Part19). Participant 13 said:

> I don't know that the current level of fossil fuels is contributing to the levels [of temperature change] that they're saying, that are dangerous or causing all these things. Anyway, that's where I'm still kind of… the jury's out, if you will. (Part13)

God's Role in Climate Change

Near the end of the interview, after participants were asked about God's role in the environment, I asked them what God's role in climate change was. For participants who did not believe in climate change, I asked what they thought God's role in temperature change might be. Many noted that the questions about God's role were the hardest, largely because they invoked complicated theological concepts. Participant 25 said:

> Because that's kind of like, why does God allow evil to happen? That's a good question. I don't know that I know that, or even know the answer to why He's allowed some of this stuff to happen, except that I know that He gives us free will. He's not a god who expects or requires us to do certain things to be His children. We're allowed freedom of choice. He probably regrets that, giving us that. (Part25)

Evangelical Christians are widely accepting of the fact that they cannot understand everything about the nature of God—first, because it reinforces God's mystery and majesty, and second, because understanding everything about God would not create a need for faith. As such, many participants could accept the spiritual quandaries that arose from this question about God's role in climate change even as they wrestled with it. Participant 12 explained:

I think He's in control of what happens. Sometimes He sits by and He lets things happen, and sometimes He intervenes so that things don't happen. We won't really know until we go to heaven what really His whole plan was. So, it's kind of a… you have to have faith and trust that He's doing what is best for us. (Part12)

Despite unknowns, most participants were able to articulate their understanding of why climate change is happening—or, in the case of those with doubts about climate change, why God's role meant it wasn't worth worrying about. The general consensus was that climate change and other environmental issues exist because God left humans in charge of the Earth. According to Christian theology, humans are naturally sinful, and sin wreaks havoc on God's creation in myriad ways.

About half of participants thought that God was "hands off," as Participant 1 articulated. There were two perspectives on God's hands-off nature: First, that God set up the Earth to function in a specific way without need for His further involvement. Participant 11 explained the idea:

It's like when a person plumbs a house. Water flows through it and all that other stuff. The plumber doesn't have to come back and turn your water on. You turn your own water on. And that's how I look at things. When things have been put into place, that's how they operate. (Part11)

Others thought that God was hands off in that He left the maintenance of His creation in human hands. Participant 4 held this viewpoint:

Well, I don't think God has a role in climate change. I think humans have driven climate change. I believe in free will. He gave us this Earth, this perfect Earth, and He let us live here and enjoy its beauty, and humans are screwing it up. So I don't think He has a role

in that, other than letting it happen and letting us figure it out on our own or serve the consequences of our own choices. (Part4)

However, the idea that God did not create climate change set up a spiritual conundrum. A central evangelical belief—and oft-repeated phrase in interviews—is that "God is in control." Thus, many participants struggled to explain God's role in climate change, caught between their understanding of God as an omnipotent, omniscient being who could stop bad things at any time and the fact that sinful and harmful things happen every day. Participant 3 said:

I think that ultimately God knows what's gonna happen. But I think that there is sin in the world, and we all have free will, and so what are we gonna do … like the consequences of sin in the world will impact it negatively, impact us and the Earth. I don't know because He gives us free will. That's something that I've been thinking about a lot lately because it's like I know that God has a plan for my life, and I know that His hand is in everything, but also He gives us free will and choice and so ultimately like whenever he created Adam and Eve, He put humans in charge of the animals and all of the Earth and everything that's living on the Earth. So, I don't know, that's a tough question.

Generally, participants explained this phenomenon as a function of free will.

Nine participants specifically referenced free will, or the idea that humans are allowed to make choices that God does not necessarily intend or agree with. This concept stems from Genesis, when Adam and Eve chose to eat from the Tree of Knowledge of Good and Evil despite God telling them not to. In choosing rebellion against God, humans gained free will and independence but lost God's protection from the consequences of sin. Participant 5 summarized the idea:

I think He is watching. and I don't think He's allowing things to happen or anything like

that, because I think we have the free will to make the decisions that have created the problems that we have. I think we are kind of living as a result of our own decisions. (Part5)

However, even many participants who did not explicitly mention free will framed their answer around the concept. Participant 7 did so here:

I think He gave us the environment and then we kind of have taken it and made it into something He didn't really necessarily want it to be because He kind of … it was almost like the environment was sacred and all of the plants and animals and stuff were sacred, and then we've kind of gone through and destroyed a lot of that to build cities and we've destroyed a lot of the land and trees and stuff for stuff like paper. (Part7)

The implication that humans err and sin is inherent in discussions of free will. Every participant believed sin creates problems in the world, which is a central evangelical belief. Most agreed that this stretched to environmental issues as well, though there were some dissenters. The Earth is "just ours to be good stewards of, and like I said we've done an embarrassingly bad job of that. I think we need to be looking to Him more for guidance on what to do next," Participant 22 said.

Several participants noted that they thought God was disappointed in humans' behavior, specifically toward His creation. Participant 11 said God was likely "laughing at us. That's one big thing, I really think He does, He has a sense of humor. He goes 'look at those dummies, what are they doing?'" Conversely, Participant 16 said: "I don't know, I just feel like God sits back and He lets us do what we need to do, or what we *think* we need to do, and then I sometimes think He just sits and weeps."

Humans' fallibility caused some participants to doubt whether climate policy solutions could be effective, since humans would be the ones creating it. "I don't think man is the answer to anything, man is the problem on most everything," Participant 11 said.

Six participants said they thought humans did not have enough power to permanently mess up God's creation via climate change (Part3, Part8, Part12, Part15, Part21, Part24). "So man gets all huffy like he has control of this and he doesn't. He [man] can mess things up for a little bit right around him for a little time, but it's not a drop in the ocean" compared to God's control, Participant 24 said. He continued:

> The environment—created by God, sustained by God, until God's done with it, period. You could set off all the nuclear weapons, you could burn down all the trees, you could blow up all the oil wells, you can do anything you want to do, and it'll last until God says it's over. And if He wants to destroy it like that, that's the way it'll be destroyed. But it will be destroyed when He says so, not man. (Part24)

For at least three members of this group, the idea that humans don't have the ability to destroy the Earth provided hope for the future. Participant 3 was optimistic:

> I feel like humans only have, we only have so much power. God can literally end the Earth in literally the next second if He wanted to. So, I think there's a limit on the damage that we could do, which gives us hope that Christ is still, you know, has His hand in everything. Yeah, I think there's probably a limit on the damage we could do.

> Participant 21 had a different view on humans' limitations. He hypothesized that while humans had dominion over God's original creation, they no longer held that responsibility following the fall of man, when Adam and Eve first sinned. He thought that humans could not end the world via climate change because they no longer had dominion over it. He said:

Because I think, you know, we're headed to an end somewhere. As a Christian, I believe

that. Whether it's 10 days from now or 10 thousand years from now. I don't know that.

God only knows. But there are some things that I don't think we *can* do. (Part21)

Ten participants mentioned the end times, usually toward the end of the interview when

asked about God's role in the environment. Six participants hypothesized that environmental

shifts related to climate change—including increased natural disasters, specifically fire—may be

part of the end of the world as described in Revelation, though none were completely confident

(Part2, Part14, Part15, Part17, Part20, Part21). "I think that if you believe in a rapture, then

there's at least a case that could come into the idea that we're … it's (climate change) a portion

of that, maybe," Participant 2 said. In saying "rapture," Participant 2 was referring broadly to the

end times, not the specific phenomena associated with dispensational evangelicalism in which

believers will be taken to Heaven before the end of the world.

Participant 21 did not necessarily believe in anthropogenic climate change, but he did

posit that if it were truly happening, it may be part of the beginning of the end times. "Maybe

that's the way the world is supposed to end, and as a Christian I look forward to it, to tell you the

truth," he said. Many evangelical Christians—especially those who believe in a Rapture—view

the end times as good because they mark Christ's return to the Earth and, following Judgement

Day, the end of believers' sin and suffering.

Six participants made overtly hopeful statements about the environment and climate

change (Part3, Part7, Part9, Part11, Part15, Part21). "I think it'll all work out," Participant 9 said.

"I think God has a purpose for all of it and I think it'll all work out." Participant 7 was hopeful

because she thought there was still ample time to prevent climate change's effects. Two

participants cited God's promise to never again flood the Earth as reasons for hope (Part3, Part12). Participant 12 said:

> Just like when He flooded the Earth and then He said that He would never flood the Earth again, I have a hard time believing that we as humans could do something that could destroy an Earth or a universe that was so perfectly made. (Part12)

Participants' Observations of Climate Change

Participants' understanding of climate change—what combination of factors led to it, what should be done about it, what effects it might have, and what concepts were top-of-mind when thinking about it—varied widely. A few of these concepts stood out in that they were mentioned by a small group of participants, instead of just by one or two. These specific topics elucidate important aspects of some evangelicals' climate opinions, so four are addressed in the following paragraphs: intergenerational justice, natural disasters, personal effects, and environmental extremism.

While some participants worried about the link between climate change and population and its ramifications on American policy, others were thinking about their own family's relationship to climate change. Nine participants (six women and three men) said they were concerned about the effects of climate change for their children or grandchildren (Part1, Part3, Part5, Part6, Part9, Part15, Part16, Part18, Part25). "I just think, like I say, I just think about my grandchildren, and my great-grandchildren. What kind of world are they gonna live in because of choices that I was a part of making, relative to the environment?" Participant 6 said.

Natural disasters came up often in interviews, but only seven participants specifically attributed an increase in natural disasters like hurricanes, wildfires, droughts, and floods to climate change (Part1, Part14, Part16, Part17, Part20, Part22, Part23). Participant 14 said:

Things are not what they used to be. Look at California. Look at all these states that are

having so much drought or other kinds of issues. Things are definitely being affected, you

know? I think it's safe to say that it has to do with our climate changing. (Part14)

Participant 13 said more frequent hurricanes were concerning and possibly attributable to climate

change, but he thought that wildfires were mostly related to poor forest management. Participant

12 thought that natural disasters—whether they were caused by climate change or not—might be

part of God's plan for humans.

When there is a fire or a flood or a hurricane, that gives us opportunity to help other

people and show our love for them. Because if everything was peachy keen all the time,

would we really trust in Him or have faith in Him and really care about another

individual? (Part12)

Fifteen participants thought that climate change would affect them personally, either now

or later. The group posited that climate change would mostly affect agriculture and their quality

of life as the U.S. tried to adapt and limited consumer choices. "It's gonna limit just, what I want

to do and how I want to do it, and what it costs me to do it," Participant 6 said.

Some older participants said increasing temperatures are already affecting their quality of

life (Part4, Part11, Part16, Part18). "I mean, it's just hot," Participant 16 said. "I'm hot… if I do

something outside, I want to make sure it's done early in the morning or in the evening, because

it's too hot. I used to sometimes would walk a lot in the summers, but it's like nah, it's too hot

right now."

Six participants did not think climate change would affect them (Part9, Part12, Part15,

Part21, Part24, Part25). Four were unsure (Part2, Part8, Part13, Part22). Participant 9 and

Participant 25 did not think climate change would affect them because of their age; they believed

they would die before climate change began to have serious effects. Participant 15, who is 27

years old and believes in anthropogenic climate change, did not think she would be affected by

climate change because she thought it would take a long time for Arkansas to see its effects,

versus a coastal state.

Nine participants referenced what they perceived as environmental extremism (Part1,

Part2, Part6, Part11, Part13, Part16, Part17, Part21, Part24). Participant 1 said that

environmentalists sometimes took conservation too far, prioritizing it over humanity.

I think we can go a little bit too extreme in taking care of things. Like, for example, every

so often you'll hear a story about somebody who can't build something, no matter what it

is, because they found the endangered rat spider in the middle of the desert or something

like that. And I'm like okay, yes, we don't need to necessarily put humans above animals,

but I don't think we need to put animals above humans either. I think that we can coexist

peacefully and protect all of God's creations but at the same time be reasonable human

beings about it. (Part1)

Three participants said that climate scientists had predicted a global ice age in the 1970s, and

then suddenly switched tracks to global warming (Part8, Part13, Part21). The participants noted

this as evidence of environmental extremism, but it also contributed to their doubts about the

existence of climate change. Four participants cited the Keystone XL pipeline closure as

environmental extremism because they thought it was pulled for solely environmental reasons,

without consideration for the economic repercussions (Part7, Part10, Part16, Part21).

Some participants told stories of friends, family members, or acquaintances who had been

negatively affected by an environmental policy. Participant 21, for instance, said his cousin, who

was a farmer, could not afford to limit particulate matter produced by his combine; the participant found the regulation to be unreasonable.

> I don't think they totally know really how much of that was affecting the environment. I see a cloud of dust and I go 'look at that! My goodness, he's polluting.' And you go down a dirt road, you're polluting too. I grew up with a lot of dirt roads in Indiana. And I'm surprised they haven't attacked that yet. (Part21)

Participant 24 said that environmentalists do not give oil workers and lumber companies enough credit for the hard work they do to harvest resources.

> People don't—environmentalists—don't give enough credit for what has been done for the environment by just common people working for a living, and the scientists that work honestly in those fields. For example, the capacity to develop lumber, trees for lumber, is so immense now. I have heard, read, that there are more trees in America than when Columbus landed. (Part24)

Participants 8 and 13, who did not definitively believe in anthropogenic climate change, thought that data was being manipulated to push a climate change narrative. "Whether it's all getting hotter or not, I'm not sure because, in my opinion, they've cheated on the numbers too often to be believable," Participant 13 said.

Even as some participants thought environmentalism had gone too far, others mentioned personal actions that they and others should take to mitigate climate change. "And I try to live sustainably, and I recycle, things like that, which I know … I've done my research, and I know the majority of the issue is large companies, but you know, it makes me feel good to do the small things, even if it's not a big impact," Participant 23 said. Others said they would buy electric cars or solar panels if they had the money.

Participant 5 said that the first steps toward climate mitigation should be personal mindfulness about environmental impacts, including limiting wasteful use of fossil fuels.

I think if we could become more conscientious and more conservative about the emissions we put out into the air, I think that would be a good start. And I think anybody can do that. You don't have to be rich, you don't have to be anything. But do you need to go to Walmart 10 times in a week? Letting your kid ride a school bus home instead of fourteen different mommas driving down the same street. I think there's a lot of things that really would not put people out too far, that they could make little changes, that would at least start. (Part5)

Chapter 6: Policy Framing Results

In Chapter 5, I reported how participants discussed their conceptions of God, the environment, and climate change. Most of the responses recorded in that chapter came from the latter half of interviews, when I asked broader questions about participants' understanding of the natural world. (An interview schedule is available in Appendix C.) In Chapter 6, I will share the results from the policy framing experiment, which was conducted in the first half of interviews. First, I will discuss how each frame was rated in the study. Then, I will delve into participants' climate policy concerns, their theories about how climate policy may be beneficial, and their understanding of apathy and resistance as a barrier to climate policy passage.

Participants were asked to rate their support of the unframed renewable energy policy, which proposed a 100% transition to "clean" energy sources like wind, solar, and hydropower, on a 1-10 scale at multiple points during the interviews. (The unframed policy, and all the policy frames, are in Appendix B.) First, they heard a basic description of the policy and were asked to give a rating. Then, participants read two randomly selected frames. After each reading, they were again asked to rate their support of the policy on a 1-10 scale.

The policy description, also known as the "unframed policy," received an average support rating of 6.3. Seventeen participants had moderate to high support (five or higher) for the renewable energy policy before they read the frames. Eight participants had low support (less than five) before reading the frames. However, women supported the unframed policy at higher rates than men. Women gave it an average support rating of 7.3, while men gave it an average support rating of 5.35.

More specific data about how each frame tested can be viewed in Table 2 below. A full table of all participants' policy support ratings, climate change beliefs, and policy concerns is in Appendix D.

Table 2

Policy Support Ratings by Frame

	Number of Times Read	Average Support Rating	Lowest Rating	Highest Rating	Womens' Average Rating	Mens' Average Rating
Unframed Policy	25	6.3	0[a]	10	7.3	5.35
Christian Stewardship	13	6.23	0	10	7.36	3.58
Recreation	13	6.15	0	10	7.3	5.14
National Security	14	5.82	0	11[b]	9.08	3.38
Economic Opportunity	10	8.6	5	10	8.4	8.8

[a]Participants were asked to rate the renewable energy policy on a scale of 1-10. However, many participants' ratings deviated from that scale. Several participants gave a zero rating for one or multiple frames.

[b]Participant 23 rated the national security frame at 11, also deviating from the 1-10 scale. She rated the unframed policy and the Christian stewardship frame at 10. She read the national security frame last and liked it so much that she felt it deserved more than the 10 she gave to the prior frames.

Christian Stewardship

The Christian stewardship frame claimed that Christians should be supportive of climate change mitigation because the Bible requires them to care for God's creation and vulnerable populations who are threatened by climate change. The frame was read by 13 participants and had an average support rating of 6.23, slightly lower than the 6.3 average rating for the unframed

policy. Women who read the frame rated their policy support far higher than men who read it; average policy support ratings were 7.36 versus 3.58, respectively (Table 2).

In all but three cases, the Christian stewardship frame had no effect on the participants' self-rated likelihood of supporting the policy. Most stated that they had already thought of environmental issues in the context of their religion, as discussed in more detail below. Two women increased their support (from eight to nine and eight to ten) after reading the frame (Part1, Part22). One male participant decreased his support by two points (from seven to nine) because he felt that the article came "across like it would be intentionally trying to encourage me to go one way" (Part2). In other words, he was skeptical of a frame that was using his own faith to convince him to act in a certain way. Christian stewardship frame rating changes compared to unframed ratings may be viewed in Figure 3. The chart shows how much participants increased or decreased their unframed policy rating after reading the Christian stewardship frame. For instance, Participant 22 increased her rating from eight on the unframed policy to 10 after reading the Christian Stewardship frame, and thus has a +2 score in Figure 3. Though most participants' ratings did not change, those that did change their rating changed it substantially.

Figure 3

Christian Stewardship Frame Ratings, Relative Change Compared to Unframed Policy, By

Gender
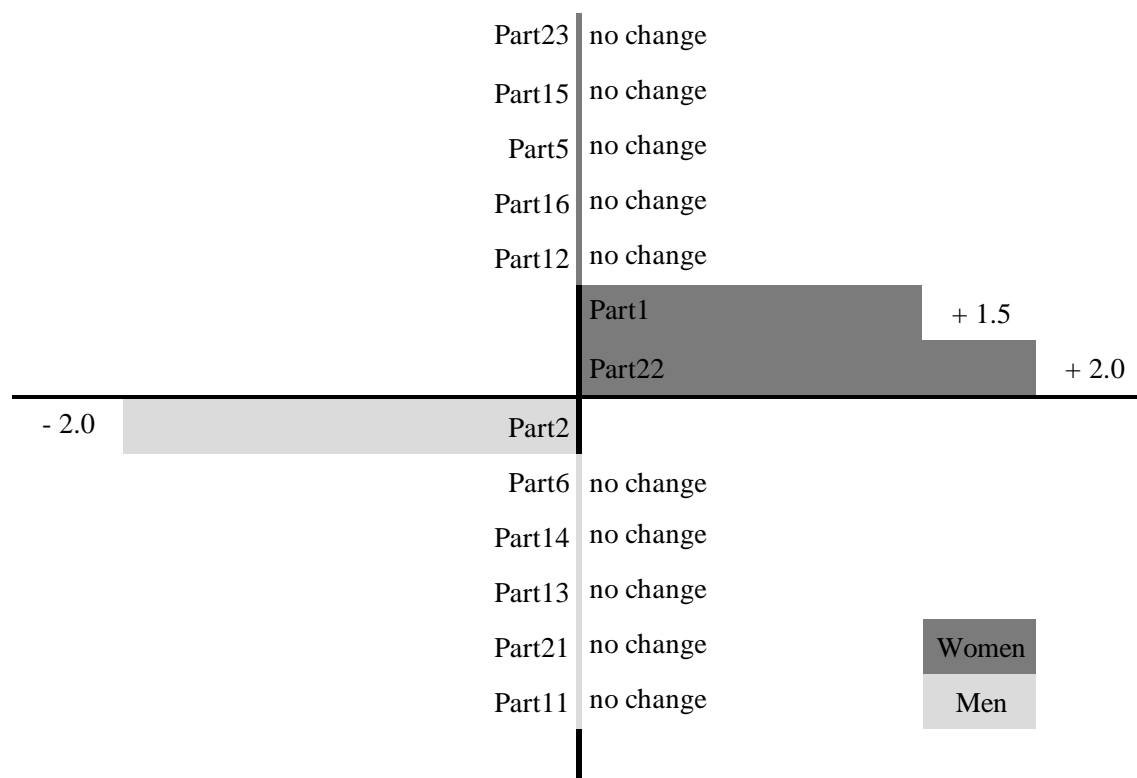
Participant 12, whose policy support rating was not affected by the frame, said: "Well,

that's one set of Christians' views related to saying that we're not taking care of God's Earth by

using the things that God gave the intellectual ability to create and formulate and use." Put

differently, she was not convinced that the article was correctly applying Biblical principles

because she noted that the Bible can be interpreted in many different ways. Just because some

Christians thought humans were not taking care of the Earth properly did not mean she had to

believe that too, she said. Participant 12 did not believe in climate change and she was not fully

convinced that temperature change was occurring at all.

Participant 21, whose support rating was also unchanged by the stewardship frame, expressed similar feelings to Participant 12. According to him, the verse from Genesis 2 that is cited in the frame may not be applicable because God commanded it before Adam and Eve first sinned. The frame quoted Genesis 2:15: "The Lord God took the man and put him in the Garden of Eden to work it and take care of it" (*New International Version Bible*). The frame also stated that "many Christians believe God gave them a duty to care for all creation in the same way, including the Earth itself, animals and other humans." Before Adam and Eve, the first humans, sinned, the world was perfect. After, it was flawed, and verses written for an ideal world may no longer apply. As such, Participant 21 thought applying Genesis 2 was tricky, and that protecting the environment is something that all people should feel obligated to do, not just Christians, as was implied in the frame (Part21).

Recreation Frame

The recreation frame explained that climate change was a threat to hunting and fishing opportunities in Arkansas because of increasing temperatures. Decreased fish and bird populations would inhibit hunters' and anglers' ability to continue their hobbies and participate in culturally important pastimes. The recreation frame was read by 13 participants and had an average support rating of 6.15, also slightly lower than the 6.3 average support rating for the unframed policy. Again, women were more likely to support it than men. Women gave it an average policy support rating of 7.3, while men gave it an average rating of 5.14 (Table 2).

The recreation frame also had little effect on participants' support of the policy. Participants' policy support rating changes can be viewed in Figure 4. Four out of 13 participants who read the frame changed their ratings: three men and one woman. One man and one woman

increased their policy rating substantially after reading the frame, but the other two men decreased their support.

Figure 4

Recreation Frame Ratings, Relative Change Compared to Unframed Policy, By Gender
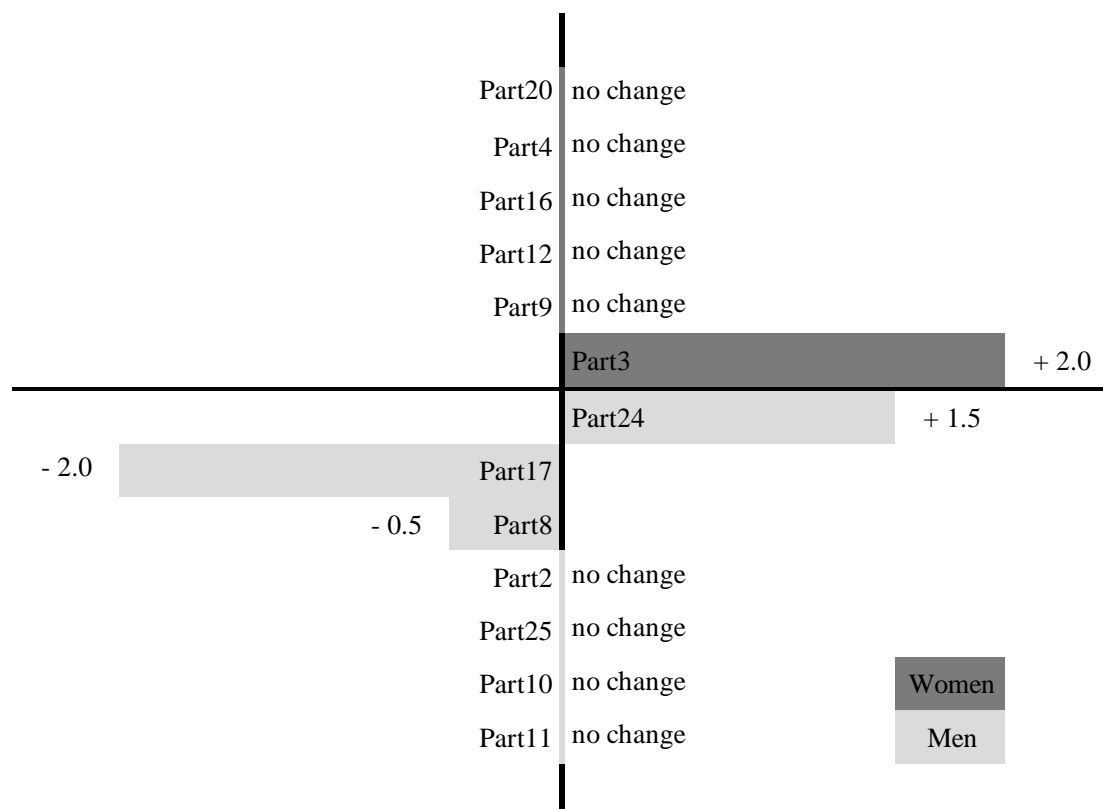
One participant—who otherwise exhibited extremely high levels of support for the energy policy—dropped his rating by two points after reading the frame because he did not think hunting for sport was morally permissible (Part17). He said:

> I'm kind of not for hunting and fishing, if you know what I mean, but I see why they do
>
> it, at least why they used to do it. Well, they had to, to have food to eat, in the early days.
>
> But now they're doing it for just sport, and just killing for no reason, and I'm not, being a

Christian, I'm not for killing animals for no reason. That's just me. If something's not

gonna attack me, I'm not gonna shoot it. That's the same with deer, and stuff like that. I

don't, no… that is not something I condone, even though my cousin's a big hunter.

(Part17)

Two female participants who rated their policy support as a 10 after reading the

recreation frame said they imagined it would be extremely effective among specific groups,

namely hunters (Part3, Part20). "Oh, you would get some country boy support with this one,"

Participant 3 said. Participant 20 said that "whoever wrote that understood what Arkansas's

about." However, of the two hunters and one fisherman who read the frame, none were

encouraged to shift their levels of policy support greatly (Part8, Part24, Part25). Participant 25,

who enjoys fishing, was already supportive of the policy and said that he had already thought

about the effect of climate change on his hobby—which was one reason why he supported the

policy to begin with. Participant 8 routinely hunts and fishes in Arkansas and surrounding states

and has also traveled to Canada for trout fishing and big game hunting. He thought that climate

change was a natural phenomenon and dropped his support for the policy by half a point after

reading the recreation frame because he did not agree that warming temperatures that harm

wildlife were human caused.

You can't blame that on fossil fuels in my opinion. There's no proof of that, at least that I

have seen. And I try to keep an open mind. But yeah, I want to hunt and fish, but there

was a time when we thought we were going to an ice age. So then we had global

warming, and now it's climate change. That's a bunch of bullshit, is what that is. It's a

narrative.

Participant 25, who used to hunt "all the time" when he was younger and who also did not

believe in anthropogenic climate change, expressed a very similar view. He felt that negative

outcomes for wildlife could not be attributed to climate or temperature change. "But it's an

example of the environment not affecting the wildlife. Name your wildlife, it doesn't matter, the

environment's not the effect," Participant 24 said. However, he did think wildlife could be

affected by overpopulation, disease, and habitat loss due to human development.

National Security Frame

The national security frame explained climate change as a threat to U.S. safety. Reliance

on oil from foreign countries allows those countries to influence America politically and

economically, sometimes to undesirable effects. The frame was read by 14 participants and had

an average support rating of 5.82. Women were vastly more likely to support it than men, giving

it an average support rating of 9.08 versus men's 3.38 (Table 2).

The national security frame was the most polarizing. The frame fared well among

participants who believed in anthropogenic climate change and exhibited moderate to high levels

of policy support after reading the unframed policy. Overall, seven participants displayed

increased levels of policy support after reading the frame, and many noted that they had never

before considered the national security impacts of energy policy. Figure 5 shows the support

rating changes after participants read the national security frame. The frame had more of an

effect on women's ratings than men's. Five out of six women who read the frame increased their

rating; none lowered their rating. Two men who read the frame increased their support ratings,

but two decreased; the other four did not change their ratings.

Figure 5

National Security Frame Ratings, Relative Change Compared to Unframed Policy, By Gender
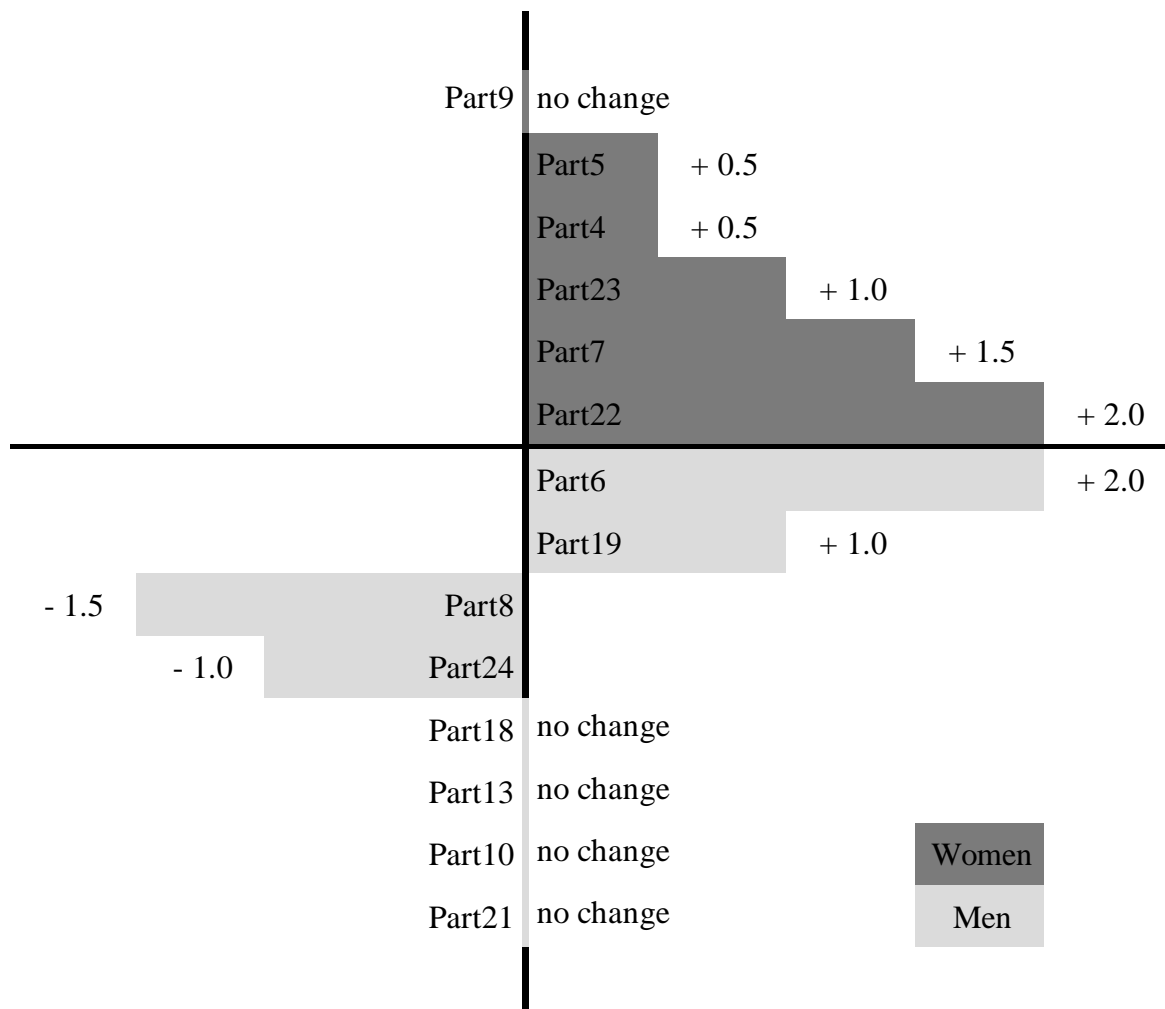
Participant 23 said of the frame:

> I had never thought about how it affects like countries politically. It brought up a great
>
> point that because we're so reliant on fossil fuels, that countries with oil reservoirs
>
> become more powerful because we're so dependent on that, and if we switched away
>
> from that it would take a lot of the power and the value that they have and they hold over
>
> other nations away and I think that that could be very beneficial as well as all the benefits

environmentally that switching to renewable energy would have. It would have a lot of

political benefits as well. (Part23)

After reading the frame, several participants also expressed concern about relying on

other countries for oil, citing recent shortages, high prices, and wars in the Middle East.

Participant 5 said:

I mean it's true. We are dependent on other countries, and we are at their mercy. I

remember gas shortages. I remember skyrocketing gas prices. So it definitely is very true

that makes us dependent on other countries because of the gasoline… Any time there's

some kind of terror attack, or I know last year with the power grid attacks and things …

you forget that two or three days without a gasoline delivery, our country shuts down. I

mean we have nothing to go on. (Part5)

However, the national security frame was extremely ineffective among five specific older

male participants who did not definitively believe in anthropogenic climate change (Part8,

Part10, Part13, Part21, Part24). Two of them decreased their support levels (from one to zero,

and two to 0.5, respectively) after reading the frame. The other three had already declared low

levels of support for the initial policy (0, 1 and 4, respectively) and their ratings did not change.

These five participants expressed hallmark conservative ideals throughout their

interviews—more so than any other participants, barring Participant 12—and voiced many

identical beliefs and concerns. (Participant 12 is a woman, and while she did express very

conservative views, she did not rely on the same talking points as the group of five conservative

men.) After reading the national security frame, they were quick to point out the logical fallacies

that they perceived in it, all noting that U.S. oil exports had exceeded imports in 2019. The frame

stated that "U.S. dependency on foreign oil poses a severe threat to national security. In 2020, the

U.S. imported 7.8 million barrels of petroleum per day. Reliance on imported oil is expected to increase through at least 2022 because of a decrease in U.S. crude oil production."

The five older male participants attributed any increased dependence on foreign oil to a "narrative" (Part8), or a machinated attempt to push a green political agenda. "We're voluntarily dependent on foreign oil, as proven by the fact that we were energy independent, we were exporting oil, a year ago. So that proves we're not dependent on foreign oil except voluntarily. So the problem is not our dependency on foreign oil, the problem is the management from the government," Participant 24 said.

Economic Opportunity Frame

The economic opportunity frame said that switching to renewable energy would strengthen the economy and create new jobs. It also noted that a switch away from coal, which is largely unprofitable, would save money. The frame was read by 10 participants and had an average support rating of 8.6, substantially higher than the 6.3 average support rating for the unframed policy. Gender had no discernable impact on support ratings for this frame, though this was the only frame where men's support exceeded that of women, at 8.8 and 8.4, respectively.

The economic opportunity frame was the most obviously successful, though it is worth noting that it was almost exclusively read by participants who expressed high levels of policy support initially. Four participants increased their support for the policy after reading the frame; no participants lowered their support rating. Three participants noted that they were not aware that switching to renewable energy could be economically beneficial until they read the frame. One participant was confused by the article, stating that, though it increased her support rating by one point, she was not entirely sure she could trust it (Part15). She thought there must be more negative effects of switching to renewable energy that the article was leaving out, "because

otherwise why wouldn't they have done it?" Figure 6 shows the policy support rating changes for the economic opportunity frame. Participants' rating changes displayed a distinct gender difference; four of five women who read the frame increased their support, but none of the five men changed theirs.

Figure 6

Economic Opportunity Frame Ratings, Relative Change Compared to Unframed Policy, By Gender

Part20 no change
Part1 + 1.0
Part15 + 1.0
Part7 + 1.5
Part3 + 2.0
Part14 no change
Part17 no change
Part18 no change
Part19 no change
Part25 no change

Women
Men
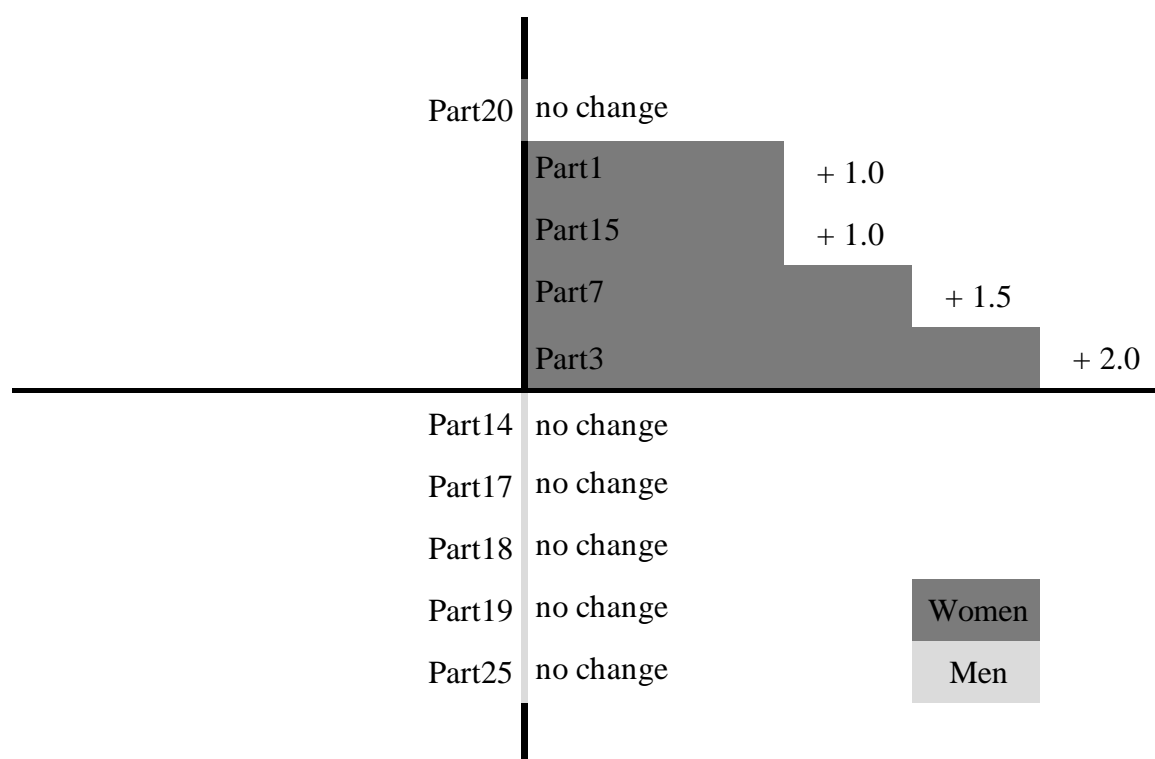
Policy Concerns

The way participants rated the renewable energy policy was affected by their concerns about fully transitioning to renewable energy. Many participants were hesitant to approve a policy that proposed a 100% transition away from fossil fuels without a well-defined timeline.

Additionally, many participants related their concerns to electric vehicles, even though

transportation was not mentioned in any of the frames. Participants' concerns about renewable

energy policy fell into two main categories: technology constraints and cost. They were also

worried about job loss, the possibility of a rushed transition, reliability, and unforeseen

consequences. Table 3 details the concerns of each participant.

Table 3

Policy Concerns

Participant	Gender	Belief in ACC	Frames Read	Costs	Technology Constraints	Unforeseen Consequences	Job Loss	Rushed Transition	Reliability
12	F	no	R, CS		x	x	x		x
3	F	unsure	EO, R	x		x	x		
9	F	God[a]	CS, R	x					
1	F	yes	CS, EO	x	x				
4	F	yes	R, NS	x	x			x	
5	F	yes	CS, NS	x		x			x
7	F	yes	NS, EO	x	x	x	x	x	
15	F	yes	CS, EO					x	
16	F	yes	CS, R	x		x	x		
20	F	yes	EO, R						
22	F	yes	NS, CS	x					
23	F	yes	NS, CS						
Percent of women concerned:				66%	33%	42%	33%	25%	17%
8	M	no	R, NS		x				x
21	M	no	CS, NS	x	x		x	x	
24	M	no	R, NS		x			x	
10	M	unsure	R, NS	x	x				
13	M	unsure	CS, NS	x	x			x	x
14	M	unsure	CS, EO						
11	M	God	R, CS			x			
2	M	yes	R, CS	x	x		x		
6	M	yes	CS, NS	x					
17	M	yes	EO, R		x				x
18	M	yes	EO, NS		x				
19	M	yes	EO, NS			x	x		
25	M	yes	R, EO			x		x	
Percent of men concerned:				38%	62%	23%	23%	31%	23%
Percent of all participants concerned:				52%	48%	32%	28%	28%	20%

[a] Denotes participants who thought climate change was caused by God, and not only humans

Technology Constraints

Twelve participants mentioned technology constraints as a policy concern. Men were more likely to mention technology constraints than women: eight of the 13 male participants and four of the 12 female participants worried about it. Nine participants said they did not think that renewable energy technologies were developed enough to facilitate a full transition away from fossil fuels (Part2, Part4, Part7, Part8, Part10, Part12, Part13, Part21, Part24). Participant 7 said:

> I think that we need to make the transition, but I also don't think that we have the technology right now to be able to make a complete transition, to be able to do all of that. There's still a lot of gaps that need to be filled in order to be able to successfully do that… Because whenever you really consider like how many solar panels it takes to power a single house, it's a lot more than a lot of people realize. (Part7)

Seven participants specifically questioned if electric cars would be feasible for use during a long road trip (Part1, Part8, Part12, Part17, Part18, Part21, Part24). They wondered if charging stations would be available on their routes and how long charging might take. Participant 1 said:

> One of my main concerns is the ability to refuel vehicles and how far they can go. For example, I drive 50 miles a day. I live in Alma, and I work in Ozark, so I drive 23 miles there and 23 miles back. So as long as you have a vehicle that can go four hundred miles, which I know most of the electric vehicles can go about that far, and that's fine because that gets me definitely through a week. But if I'm going on a trip from here to Florida, and I'm not for sure going to have a place to stop and refuel every four hundred miles, and if I plug in if it's going to take me 10 hours to refuel, then that becomes not something that's real time or cost effective to me. (Part1)

Cost

Thirteen participants said they were concerned about the cost of transitioning to renewable energy (Part1, Part2, Part3, Part4, Part5, Part6, Part7, Part9, Part10, Part13, Part16, Part21, Part22). More women worried about cost than men: eight of the 12 female participants and five of the 13 male participants mentioned it. Participant 16 worried the law would compel people to transition to renewable energy individually, and specifically questioned the affordability of electric vehicles.

> How affordable is it for most people? What does that mean? We're all going to have to
> go out and buy electric cars, or be forced to convert our cars in some way? I know a lot of
> people aren't going to be able to afford that. I'm not going to be able to afford that.
> (Part16)

Many participants said that they were pro renewable energy, but only when those energy sources made economic sense; these participants did not think that renewable energy is currently affordable or financially beneficial. "I'm all for renewables once they become feasible. And they won't become feasible until they become profitable," Participant 10 said.

Job Loss

Seven participants worried about oil and gas workers who might lose their jobs if the United States transitioned exclusively to renewable energy sources (Part2, Part3, Part7, Part12, Part16, Part19, Part21). Participant 19 was concerned about the renewable energy's ramifications on the coal industry.

> I think the one article stated that you can employ a lot more people going that route
> [renewable energy], but what about these coal mining towns? That is their livelihood.

What will be done for them if we no longer use coal? I mean you can shut down … you

can turn a mining town into a ghost town. (Part19)

Participant 7 also questioned how conventional energy workers might lose their jobs and need to

transition into new fields.

There's a lot of people that are going to lose jobs whenever we try to make that transition.

So would those people start working in wind power and that kind of a thing? I don't

know, it just kind of brings up some questions like that, just because I don't know how

many people work in the oil and gas industry but it's a lot. And if we just moved

completely over, all of those people no longer have jobs. It's kind of like the pipeline, a

lot of people lost their jobs whenever that got shut down. (Part7)

Participant 2 said that people with a renewable energy agenda did not consider all the potential

impacts of a transition to renewable energy and consequently asked people to sacrifice too much,

especially people who work in conventional energy industries and might lose their jobs if the

U.S. transitioned to renewables.

Reliability

Five participants were concerned that renewable energy sources may not be as reliable as

fossil fuels (Part5, Part8, Part12, Part13, Part17). "Would solar power, or wind power, would it

be there – because you're used to, whenever you flip the switch, your electric comes on – would

that be?" Participant 5 wondered. Participant 8 questioned how renewable energy might function

during periods of extreme weather.

When it snowed last winter, if we'd have had all solar panels, what in the world would

we have done? I had a picture on my phone, there was snow that deep on solar panels up

there by my house. There [was] no electricity being generated that day right there. If

we're that reliant on… what's gonna happen? You know and California … my concerns

are California's been trying to go this way before. They're the ones that have all the

rolling blackouts and all the crap going on. I mean, is that what we're gonna do across the

board? What's the reality, I guess is my [question], of actually having sustainable

[energy], without rolling blackouts, without all that? (Part8)

Participant 17 said he nearly installed solar panels on his home but ended up backing out because

of fears about reliability.

And I'm afraid like, you know, when it gets dark what the power's gonna be like, or if it

rains. It's kind of like having satellite, you know, you don't know how the weather is

going to affect it. And of course, you know, with us being in the South, the sun is hotter

certain months as opposed to others, so that also was my concern about how much, you

know, sun I'd actually be getting and storing. (Part17)

Rushed Transition

Seven participants feared that a transition to renewable energy would be rushed or begun

without enough preparation, such that it could fail or harm people like them (Part4, Part7, Part13,

Part15, Part21, Part24, Part25). Participant 25 was hopeful but still cautious:

I think you probably need to be careful not to just jump headfirst into it, but maybe even

get a balance of 50-50 and try it and see how it's working. I don't know why it wouldn't,

but you know, that seems to be a little safer way than just going headlong into it. That's

another thing: people just tend to go to one extreme or another. Work a little balance for a

while and see what happens, you know? (Part25)

Three participants hypothesized that people with a stake in renewable energy—whether

that stake was moral or financial—intentionally created oil shortages to hasten a transition to

renewables (Part13, Part21, Part24). Participant 13 said that progressives were pushing for renewable energy without fully considering if it would work or how its long-term effects might affect people. He also thought that environmentalists tended to have knee-jerk, panic-driven reactions to climatic events like drought, attributing it to climate change when it might not be.

Unforeseen Consequences

Some participants were concerned about how shifting away from fossil fuels—the nation's main source of energy for well over 100 years—might lead to undesirable and unpredictable consequences (Part3, Part5, Part7, Part11, Part12, Part16, Part19, Part25). Women were more worried about unforeseen consequences than men; five out of 12 women mentioned unforeseen consequences, while three out of 13 men mentioned them. "While changing to [renewable energy] may help some that are being hurt now, we don't know what the future effect of that is going to be, and that it may also hurt other people," Participant 12 said. Participant 25 agreed, positing that a full transition to renewables might require unconscionable sacrifices.

> It's a tough question, because when you start talking about scaling back on things that may be hurting the environment, then you're talking about scaling back on advances in our society in a lot of cases. So, it's really hard to balance. (Part25)

Participant 19 thought that shifting fully to renewable energy might damage conventional energy industries too severely.

> But how is it going to affect—negatively affect—our current resources, like you know coal mining and hydroelectric and stuff like that? I don't think you can go 100% renewable. And if we did, what is that going to do to those industries of the natural gas industries and the petroleum industry? (Part19)

Participant 7 questioned if increased renewable energy, and thus decreased oil trade, might have negative geopolitical effects.

Whenever you think about some of the stuff that's gone on with Iran, that's kind of where a lot of those came from too. It's definitely interesting… it may help, or it may hurt a lot of things if we moved all to electric because then all of these countries that we were paying so many millions or billions, however many dollars it is, then we're not paying them that. So then that could cause that conflict to all of a sudden, a lot of people's incomes just got taken away in their country. (Part7)

Participant 3 worried that about solar and wind energy's land requirements, and how that might affect wildlife and natural areas.

Where are we going to put all of the windmills and the solar panels, and would we have to like cut down trees and wildlife? Because if we do that then that impacts all of the wildlife in Arkansas. Where are they gonna go? Where are we gonna put those things? (Part3)

Participant 16 worried about the safety of renewable energy:

I mean I know there's solar, wind, electric and air, and I guess that would be okay, because those are natural sources that they're gonna pull from those sources, but then it makes me wonder with the electricity. You know how they talk about these big electric grids and stuff, and they put off this radiation that's harmful. (Part16)

Positive Effects

Participants mentioned many potentially positive impacts of a transition to renewable energy, including the feeling of helping the Earth recover, decreasing pollution, creating new jobs, and more. Usually, positive impacts were mentioned when I asked, "What things, if any,

excite you about a transition to renewable energy?" However, participants sometimes brought up

positive effects while discussing the frames or while responding to broader questions about how

climate change might affect people. Table 4 shows each participant's specific beliefs about

positive effects of a renewable energy transition.

Table 4

Positive Effects of Renewable Energy Policy

Part.	Gender	Belief in ACC	Frames Read	Making a Difference	Reducing Pollution	Job Creation	Inno-vation	Lower Cost	Health Benefits	Self-Sufficiency
12	F	no	R, CS			x	x			
3	F	unsure	EO, R	x		x				
9	F	God	CS, R							
1	F	yes	CS, EO	x					x	
4	F	yes	R, NS							x
5	F	yes	CS, NS	x				x		
7	F	yes	NS, EO		x				x	
15	F	yes	CS, EO	x						
16	F	yes	CS, R					x		
20	F	yes	EO, R							
22	F	yes	NS, CS				x			
23	F	yes	NS, CS	x		x				
	Percent of women who mentioned:			42%	8%	25%	17%	17%	17%	8%
8	M	no	R, NS							
21	M	no	CS, NS							
24	M	no	R, NS				x			
10	M	unsure	R, NS		x					
13	M	unsure	CS, NS							
14	M	unsure	CS, EO	x	x					
11	M	God	R, CS	x	x					
2	M	yes	R, CS	x						
6	M	yes	CS, NS	x						x
17	M	yes	EO, R	x		x				
18	M	yes	EO, NS	x					x	
19	M	yes	EO, NS		x			x		
25	M	yes	R, EO	x						
	Percent of men who mentioned:			54%	31%	8%	8%	8%	8%	8%
	Percent of all participants who mentioned:			48%	20%	16%	12%	12%	12%	8%

Note. This table charts the most common positive effects mentioned by participants. Some participants who mentioned positive effects that were not reflected in any other participants' answers will appear in the table to have mentioned no positive effects at all. In fact, only two participants said there was nothing about a transition to renewable energy that excited them (Part8, Part13). Participant 8 did, however, note that renewable energy should be developed more because the Earth would eventually run out of fossil fuels.

Making a Difference

Twelve participants were interested in transitioning to renewable energy because it might help the Earth recover from climate change's effects and/or demonstrate care for the planet, which participants thought would make them feel good about their choices (Part1, Part2, Part3, Part5, Part6, Part11, Part14, Part15, Part17, Part18, Part23, Part25). Five out of 12 women and seven out of 13 men found the idea of making a difference through renewable energy to be appealing. All but three of these participants believed in anthropogenic climate change (ACC). Participant 6, who did believe in ACC, said:

> You want to feel like you're doing the right thing. You want to feel like you're contributing to a positive. You might say gee, I don't like having an electric car, I can't drive as far, or I can't find a place to charge my car or whatever it is, but you know, maybe just knowing that you're helping, just a little bit, and maybe other people will help just a little bit too, you can actually make a difference.

Participant 2 was excited by the prospect of helping the Earth through a transition to renewable energy.

I think there's a lot of things to be excited for it, right? The idea of doing a good job and

not damaging our stuff sounds great. The idea of less species going extinct because of our

interactions with them sounds fantastic. (Part2)

Participant 11, who thought that climate change was brought about by God, liked the idea of

"saving the environment" through renewable energy.

Job Creation

Four participants—three women and one man—liked the idea of switching away from

fossil fuels because it could create jobs in the renewable energy sector (Part3, Part12, Part17,

Part23). Participant 3 and Participant 17 read the economic frame, which mentioned job creation

as a potential benefit of switching to renewable energy and brought the idea up later in their

interviews. Participant 12 and Participant 23 did not read the economic frame and brought up job

creation of their own accord. Other participants who read the economic frame seemed to like the

idea of job creation based on how they rated their support for the policy but didn't mention job

creation outright later in their interviews.

Innovation

Three participants with very different environmental beliefs—one believed in

anthropogenic climate change, one thought global temperature change was simply a natural

phenomenon, and one was not sure global temperature was changing at all—agreed that

renewable energy policy presented an exciting path toward innovation (Part22, Part24, and

Part12, respectively). Participants 12 and 22 are women, and Participant 24 is a man.

Participant 24 was interested in green energy innovation specifically because it could boost the

United States' global standing.

I think the options are great, and I think we should be on the cutting edge of that. Some

people that have risen to high positions… in our country do not have the American pride.

They don't see the necessity of America being on the cutting edge, the leading edge of

what goes on in the world… It's not in the best interest of the world for America to be

weak. We've never kept the countries that we've defeated. We've never taken anything

from them, we've rebuilt them and given them their independence and their freedom.

You know, ask Japan. Ask Germany. You know? Kuwait. Baghdad. You know? It goes

on and on. We have never taken from them. You know we have the Kuwait oil fields. We

don't need their oil, we're okay. We need them to be independent, we need them to be

strong, so we don't have to go over there and fight for them. So, I think that is what we

need to be concerned about. And for us to be on the cutting edge of energy development

is I think a primary way to do that. (Part24)

Reducing Pollution

Five participants liked the thought that renewable energy would reduce pollution as a by-product of reducing greenhouse gas emissions (Part7, Part10, Part11, Part14, Part19). Four out of 13 men mentioned reducing pollution, and only one out of 12 women mentioned it. Participant 14 said:

That's just one more way I think that we can guarantee that we're doing the best we can,

because if those kinds of gases, if we're responsible for it, then well, we're polluting the

air less *and* we're reversing that problem.

Participant 11 thought that God's timeline was causing climate change, not humans, but he was still supportive of renewable energy because it would reduce pollution. "It couldn't hurt," he said. "If you look at San Francisco and a few other places that are heavily industrialized, we see

all the smoke and all the contamination and stuff, the smog, all of that, it'll affect those bigger

cities."

Lower Cost

Three participants—two women, and one man—said that renewable energy was

appealing because it might reduce the cost of their electric bills, potentially to zero (Part5,

Part16, Part19). "We considered solar panels, and we were checking into it and then again, the

cost was just too much for us, but the futuristic outcome, we wouldn't have had an electric bill

really, so that was kind of nice," Participant 16 said.

Self-Sufficiency

Two participants, a man and a woman, thought renewable energy was a good idea

because it would reduce the United States' oil dependence and allow the U.S. to be more self-

reliant (Part4, Part6). "You know, the thought of us being self-sufficient and not depending on

other countries is exciting to me," Participant 4 said.

Health Benefits

A few participants discussed the health effects of climate change or renewable energy.

Two out of 12 women and one out of 13 men brought up health benefits. Participant 1 said that

climate change's extreme temperatures caused an increase in her multiple sclerosis symptoms.

Participant 18 had a basal cell carcinoma removed from his skin and has several other

precancerous moles, which he attributed to climate change. Both of these participants said they

wanted climate change to be mitigated to hopefully lessen its public health impacts.

Participant 1 and Participant 7 hoped that climate mitigation might reduce air pollutants

that caused them to have allergies. Participant 7 said:

I mean, I don't know if you keep up with air quality index, but that is something that I

kind of look at because I have pretty bad allergies. Recently it's been a little bit worse

than what it had been in the past. I'm sure that that's probably related to pollution more

than anything, so that would definitely be a bonus of renewable energy, just not having

all of that pollution. (Part7)

Apathy & Resistance

Fourteen participants with moderate to high policy support expressed concerns about

perceived apathy regarding climate change and resistance to energy policy changes (Part1, Part2,

Part3, Part4, Part5, Part9, Part14, Part15, Part18, Part19, Part20, Part22, Part23, Part25). None of

the participants who did not believe in anthropogenic climate change mentioned this as a

concern. In the group who did mention apathy, some referenced peers who they felt would be

unwilling to understand the issue or tolerate change; others lamented corporate powers,

particularly in conventional energy, who they thought would oppose any transition to renewable

energy. Separately, some participants contextualized their apathy concerns in terms of age and

global responsibility. These responses are discussed at the end of the section. Table 5 details

participants' apathy and resistance concerns.

Table 5

Participants' Concerns About Apathy and Resistance

Participant	Gender	Belief in ACC	Climate Apathy	Peer Resistance	Elite Resistance
3	F	unsure		x	
9	F	God		x	
1	F	yes		x	
4	F	yes	x		
5	F	yes			x
15	F	yes	x		
20	F	yes	x		x
22	F	yes	x		x
23	F	yes		x	x
Percent of women concerned:			33%	33%	33%
14	M	unsure	x	x	
2	M	yes	x	x	x
18	M	yes		x	x
19	M	yes	x		
25	M	yes	x		x
Percent of men concerned:			31%	23%	23%
Percent of all participants concerned:			32%	28%	28%

Note. Participants who did not mention concerns about apathy or resistance related to climate change or climate policy are not listed in the table.

Peer Resistance

Seven participants worried that people would be resistant to renewable energy because it was different from what they were used to, and they would be unwilling to learn a new system (Part1, Part2, Part3, Part9, Part14, Part18, Part23). Participant 9 attributed this to regional difference:

My grandparents were from Alabama, and down there around the coast I'm not sure they

would be for that. We went for a visit two years ago, [my husband] and I did, and their

opinions about things are a lot different than ours is up here. Like I said, he and I, if we had a home, a house instead of a trailer, we would've went solar, but I mentioned it to them… They don't like new things, they're really set [in their ways]. (Part9)

Elite Resistance

Ten participants lamented the power that corporations and elites held in the political arena (Part2, Part5, Part8, Part11, Part18, Part20, Part22, Part23, Part24, Part25). Seven of those participants thought that oil executives and other elites would inhibit a transition to renewable energy because it went against their own interests (Part2, Part5, Part18, Part20, Part22, Part23, Part25). Out of those seven, some simply noted that a 100% transition to renewable energy, as proposed in the policy they read, was not feasible because of elite resistance. "It's a lofty goal to say 100% because there would be so much kickback from the oil industry and all of that, I think to say you're gonna have 100% is—people are going to say no," Participant 5 said. Others were distinctly concerned about elite resistance as a barrier to renewable energy. Participant 18 was especially vocal about this phenomenon:

> I have read all these things, you know, where, again, it's people who are against [renewable energy] and want to remain with fossil fuels are saying "well, you know ultimately it takes more fossil fuel energy to build and maintain an electric car than it does to run a traditional fossil fuel-run car." I don't know if that's true or not, but in my mind, my response to those things that I read is always, "and this has been brought to you by the fossil fuel industry." Again, it goes back to who's got the money and who stands to gain and who stands to lose. I just feel that the fossil fuel industry will not give up on it until the last drop of oil and gas has been sucked out of the earth and the last penny that they can make off of it is in their pocket. Now I know that's pretty snide thinking, but,

you know, follow the money. Look at who's getting rich off the fossil fuel energy

sources. And I know we can't see where all the money is that's filtering into the

politicians and the politics, but I would be surprised if a lot of it's not from the fossil fuel

industry. That's just me. (Part18)

Participant 23 expressed similar worries:

I would be concerned about the political side of it, like lobbyists or the people who are

already large and in charge wanting to keep their money in the natural gas, or in fossil

fuels, and that being an issue trying to transition. I'd be concerned about that. (Part23)

While seven participants were concerned about elites' influence on renewable energy,

three were more broadly frustrated by elite pressure (Part8, Part11, Part24). Participant 11 did

not like the idea that any industry, but specifically renewable energy, might be controlled by a

monopoly. Participant 8 and Participant 24 felt that people in power pushed for certain policies,

environmental or not, only because it benefited them. Participant 24 even cast that group as evil:

The evil forces in the world always take advantage of those times and those things to

have an excuse to pad their pockets, to raise the prices of things extravagantly and

unnecessarily, with no care for punishing the people that're struggling to get by. So

there's a lot of that going on. (Part24)

Age and Apathy

Many middle-aged and older participants worried about the toll new energy sources

might take on seniors' quality of life. Almost none worried about the way they or their older

relatives might be affected by climate change because they thought that they would die before

climate change started to have serious effects. One 25-year-old participant mentioned elder

apathy as a barrier to climate policy:

I think that's a very Baby Boomer mindset to have where I just kick the can down the

road a little longer; either it goes farther than it's my problem or we get good enough at

it, or it won't be anybody's problem anymore because we goofed up (Part2).

Participant 1, who is 51, expressed a similar sentiment:

I'm not sure that there's ever really any hope of convincing a lot of older people who

have used fossil fuels for their entire life and don't see a problem with it. To be blunt, I

think you have to wait for that generation to die off. (Part1)

Global Responsibility

Seven participants mentioned overpopulation as an environmental issue and/or a partial

cause of climate change (Part2, Part3, Part8, Part10, Part13, Part16, Part17). Five of those

participants were men. Of the two women, one said she was directly referencing her husband's

ideas about climate change (Part3). Participant 8 said:

Reality is, and it's not really in the United States, but the world … we're gonna have a

hard time feeding the world very soon. So going back to your fossil fuels: fossil fuels will

last longer than the food.

Five male participants specifically mentioned other countries' large populations and

accompanying CO2 emissions as reasons why the United States should not act hastily against

climate change. They were hesitant to fully endorse climate policies like the one presented in this

study because they were not sure that other countries would match the United States'

commitment to climate mitigation. Participant 13 had particularly strong opinions.

But you take China with a billion people, and you take India with a billion people, and

whatever we did on our own is a speck compared to them. Doesn't mean we can do

whatever we want, I'm just saying we could half or totally eliminate fossil fuel, and if

they're still increasing their usage, then it doesn't matter that we did anything. That's a

bleak outlook. That's where as a world it kind of needs to I guess come together. But we

can't do that all on our own. So I kind of hate to see us driven towards a world policy,

and pay for something that we're doing *more* fine on, I won't say fine, [than] other

countries that probably won't ever do what they need to do with their contributions.

Participant 21 expressed a similar viewpoint.

We could be destroying our economy in order to do what we feel is right while China just

keeps on rolling and doing what they want to do and becoming even more powerful from

a global standpoint, and nobody holds them responsible.

Some of these participants said that the United States had already made substantial strides toward

environmental progress, like regulating leaded fuel, carbon emissions, and fluorocarbons, while

other nations had not. "The United States is one of the few that have done that. We've reduced

our emissions just because free enterprise works," Participant 25 said.

Chapter 7: Discussion

In this chapter, I will examine to what degree participant responses to the survey questions and the policy frames align with existing literature on evangelical Christian climate change perspectives and climate policy support. Results from the study contrasted with some prevailing theories about why evangelical Christians oppose action on climate change. They also revealed that climate denial research is not particularly useful in reshaping climate policy to appeal to those who oppose it, and confirmed that age, gender, and politics have notable effects on climate policy views. Additionally, many participants revealed that they had never discussed the environment in church, elucidating important insights about the Arkansas River Valley's potential involvement in the creation care movement, in which some evangelical churches have embraced climate action as a religious obligation.

Evangelical Beliefs Are Understudied and Oversimplified

Some researchers have posited that evangelical Christians are typically resistant to climate policy because of evangelical theology. Given that the majority of participants within this study were not extremely resistant to the renewable energy policy, prevailing theories seem to tell only part of the story, illustrating a need for more nuance in studies of evangelical climate policy support.

Anthropocentrism Does Not Fully Explain Evangelicals' Climate Beliefs

In 1967, Lynn White proposed that anthropocentrism as a result of monotheistic religions was the root of environmental crises; he also said that climate change would never be mitigated until Christianity and its ideals were eradicated. He took special issue with the concept of dominion, arguing that if Christians believed God had made the Earth for them to rule, they

would have no incentive to care for it. This study, like many others over the intervening decades, contests White's thesis.

None of the nine participants who referenced the idea of dominion thought it gave humans license to abuse the Earth or mindlessly use all its resources. Instead, they cited dominion as a reason why humans needed to take care of the Earth and be good stewards. Participant 23 said: "It's our responsibility to take care of the Earth, because God gave us dominion over the Earth and the animals and said 'take care of them.'"

Additionally, almost every participant thought either that there was a Biblical mandate to protect the Earth or that, even if it was not explicitly stated in the Bible, it was expected by virtue of God gifting the Earth to humans. Participant 5 said:

> I'm not really good with Bible verses, but I do feel that we were told to take care of what is around us. Even with the Garden of Eden, and I think we were told, "you take care of the land, you reap what you sow," all of that. I think we have been told that we need to give to the Earth because the Earth gives back to us.

If more evidence were needed, the fact that participants expressed moderate renewable energy policy support on average elucidates that evangelical Christianity's anthropocentric nature, as coined by Lynn White, is not a total barrier to climate policy support.

The End-Time Apathy Hypothesis is Insufficient

The end-time apathy hypothesis postulates that evangelical Christians do not typically support action against climate change because they believe that the world will end and be remade better by God, as laid out in the book of Revelation. Therefore, there is no need to worry about climate change ending the world. In Veldman's (2019) study with evangelical Christians in

Georgia, this hypothesis only held out among participants who already thought about the end times often.

However, in this study, among the 10 participants who mentioned the end times in any capacity (Part2, Part8, Part11, Part14, Part15, Part16, Part17, Part20, Part21, Part24), there was little deviation in support for the unframed policy when compared to the whole group average. In fact, participants who mentioned the end times rated the unframed policy slightly higher. The average support rating of the 10 participants who mentioned the end times was 6.5, compared to 6.17 for those who did not. Without further research, it is impossible to know whether or not the end times are especially salient in participants' day-to-day lives based on mentioning, or not mentioning, the end times in their interview. Still, the fact that thinking about the end times within the context of the interview, and without prompting, only marginally affected how participants viewed the renewable energy policy suggests that the end-time apathy hypothesis may be insufficient for explaining the range of evangelicals' climate beliefs.

The end-time apathy hypothesis casts end-time belief and climate policy support as opposite. But there are similarities between the so-called environmentalist doomsday narrative and evangelical Christians' understanding of the end times. Both suppose that the world will end dramatically and in great environmental destruction. Both narratives assume that the end of the world points to a certain correct way of behaving in the present. Left environmentalism and evangelical Christianity both trend toward the idea that the end of the world is a symptom of, and punishment for, humanity's wrongdoing (Johnson et al., 2022).

Some participants merged the prevailing environmental and evangelical narratives, understanding climate change as one part of the Biblical end times. Six participants suspected

that climate change might be part of the end times, because Revelation mentions natural disasters, food shortages, and other seemingly environmental happenings. Participant 14 said:

> I think if you read Revelation you can't deny, with things going from bad to worse during that church age, that yes, we are already in that. I think that's the way that we're supposed to understand it… We see evidence of those kinds of things happening to us, whether it's warnings about, you know, corrupt government types, or spiritual authority types, trying to influence the world. Or, you know, the degradation of the environment.
>
> These six participants generally expressed high levels of support for climate policy.
>
> (Part14)

People with this viewpoint are not well described by the end-time apathy hypothesis, further suggesting more nuance is needed in understanding the influences of end-time belief on evangelical Christians' support for climate policy.

Some evangelical Christians who do not consider climate change to be related to the end times reject the idea of climate change altogether, as described in Veldman's (2019) study. This may be because embracing multiple apocalypse narratives is understandably uncomfortable. More research is needed on how end-time beliefs shape climate policy preferences, but it seems clear that a new climate policy communication approach may prove more effective for those opposed to the environmental climate doomsday messaging.

The Embattled Mentality is Not Universal

Veldman (2019) posited that evangelical Christians' opposition to climate policy stems from an "embattled mentality" wherein they feel attacked by encroaching secular culture and ideals, of which climate change is representative. She formulated the theory after interviewing

evangelical Christians in Georgia who were angry about climate change because it was a threat to their worldview and way of life.

The embattled mentality was not obviously present among most of this study's participants. Very few participants viewed climate change as a hoax, though some did think it was being overdramatized by the political left. Participant 13, for instance, said:

In the seventies it was global cooling, and then it was global warming, and then they were having evidence that overall the Earth, by some measurements, were actually a little lower, so that's when they came up with the word climate change because they kept getting burned. The sky is falling and it's cooling too fast and now it's going to be an ice age! And it's like oh, now it's warming up, never mind. (Part13)

Within that group that worried about environmental extremism, a few older male participants (Part8, Part13, Part21, Part24) and one female participant (Part12) expressed frustration with proposed climate mitigation plans that might be characterized as "embattlement," though I would not say that they were angry, as Veldman described her participants to be. "Passionate" may encompass their emotion more accurately. Therefore, it seems that evangelical Christians and their views about climate mitigation cannot be uniformly explained by "embattled mentality," though it certainly may apply to some participants who are especially politically conservative.

Climate Denial Research Fails to Describe Evangelicals' Nuanced Climate Beliefs

Climate denial research typically attempts to sort people according to narrowly defined categories of climate belief: denial of temperature change, denial of anthropogenic cause of temperature change, or belief in climate change. Most research finds that evangelical Christians are one of the most likely demographics to reject the idea of climate change and climate policy

(Pew Research Center, 2015a; Pew Research Center, 2015b; Veldman, 2019b). But results from this study indicated that climate denial research is not likely to be useful in attempts at creating policy with broader appeal. Participants did not fit into well-defined categories of climate change belief. In other words, it was not easy to sort participants based on a binary of whether or not they believed in anthropogenic climate change, as climate denial studies tend to do. Instead, participants who believed in anthropogenic climate change tended to attribute it to multiple causes, including fossil fuels, human greed, wastefulness or overconsumption, *and* natural climate cycles. Participant 1 listed fossil fuels and natural cycles as the causes of climate change.

> I mean, throughout human history the climate has always gone up and down. We've had ice ages and we've had warming periods. So I do believe that climate, with or without human intervention, does change and does go back and forth. But I know that our use of fossil fuels is what has really, really pushed us over the limit and made things happen so much faster. So did I believe that climate was changing before humans came along? Yes, it was already changing. But yes, the climate is changing because of humans now, yeah.
>
> (Part1)

Two participants said that God created climate change, which is uncategorizable according to strictly defined ideas of climate acceptance.

If climate denial research is to be made useful, it must include a broader understanding of evangelical Christians' perceptions of climate change. Table 6 sorts participants' policy frame ratings according to a more nuanced categorization of climate change denial/acceptance. (Appendix D sorts the same data according to gender, for comparison.) It was difficult to categorize the breadth of opinions that participants expressed, so these new categories are

imperfect, but they may elucidate more interesting insights than a typical understanding of binary denial/acceptance.

Table 6

Policy Support Ratings by Climate Change Belief

Participant	Gender	Age	Cause of CC/TC[a]	Details	Unframed	CS	Rec	NS	EO
17	M	47	GHG[b]		10		8		10
18	M	66	GHG		10			10	10
			Average for GHG Cause:		10		8[c]	10[c]	10
4	F	62	humans[d]		8		8	8.5	
5	F	50	humans		9.5	9.5		10	
16	F	63	humans		6	6	6		
20	F	46	humans		10		10		10
22	F	61	humans		8	10		10	
6	M	62	humans		2.5	2.5		4.5	
19	M	56	humans		6			7	6
25	M	66	humans		8		8		8
			Average for Human Cause:		7.25	7	8	8	8
1	F	51	mixed	GHG/natural	8	9			9
15	F	27	mixed	GHG/natural	7	7			8
23	F	21	mixed	GHG/natural	10	10		11	
7	F	19	mixed	human/natural	3.5			5	5
			Average for Mixed Cause:		7.13	8.7		8	7.3
8	M	55	natural		2		1.5	0.5	
21	M	62	natural		4	4		4	
24	M	67	natural		1		2.5	0	
			Average for Natural Cause:		2.3	4[c]	2	1.5	-
9	F	78	theology		10		10	10	
11	M	64	theology		8	8	8		
			Average for Theological Cause:		9	8[c]	9	10[c]	-
3	F	25	undecided	human/natural	8		10		10
2	M	25	undecided	human/natural/theology	7	5	7		
10	M	65	undecided	GHG/natural	1		1	1	
13	M	58	undecided	GHG/natural	0	0		0	
14	M	42	undecided	GHG/natural	10	10			10
			Average for Undecided Cause:		5.2	5	6	0.5	10

Note. The "Details" column explains to which factors participants attributed climate change if they thought it had mixed causes, or which factors they vacillated between if they were undecided. Participant 12 is omitted from this table because she was not sure climate change was happening at all.

[a]Cause of CC/TC refers to participants' understanding of what caused climate change or, if they were unsure if climate change was truly occurring, temperature change.

[b]GHG means that participants attributed climate change solely to greenhouse gas emissions.

[c]Denotes an average score that was calculated using only one participants' rating.

[d]Humans means that participants attributed climate change to a broad mixture of human causes, like general pollutants, GHGs, and/or morality, among others

Table 6 shows that participants' climate denial or acceptance did not uniformly correlate with environmental concern or policy support. Participants who thought climate change was a natural phenomenon did express very low levels of policy support, as expected. Participants who attributed climate change to human causes or greenhouse gases generally expressed high levels of support, with one exception. However, three of the five participants who were unsure about the cause of climate change supported the renewable energy at moderate to very high levels. Those who thought climate change had mixed (human and natural) causes gave the policy varying ratings. While a more nuanced understanding of evangelical Christians' climate beliefs may predict policy responses for some groups who have more solidified ideas, it does little to explain the policy preferences of people who are less sure about a singular cause of climate change.

While the new climate change belief categories explored in Table 6 do provide additional context for the views of participants who definitively attributed climate change to natural or human causes, it is unclear how they might aid policy framing for other groups of participants. The two participants who attributed climate change to God were extremely supportive of both renewable energy policies, even though they did not think humans were responsible for the changing temperatures. Believing climate change was caused by God did not preclude their support of climate policy. Their ratings, along with the ratings of those participants who were unsure about the cause of climate change or attributed it to mixed causes and still rated the policy highly, call climate denial research's usefulness into question. Though the sample size is small, these results suggest that belief in an anthropogenic cause of climate change may not be required to generate support for climate policy. Thus, climate denial research that treats belief in climate change as a binary, while useful in other contexts, could be unnecessary for policy framing. A much larger study would be needed to draw firm conclusions, but it seems that climate policy can be written to appeal to evangelical Christians even if they believe in alternative causes of climate change.

Virtually every participant, regardless of their belief in climate change or their support of the policy, expressed environmental concern on some level, whether about pollution, wasteful land use, littering, or climate change. Participant 25, for instance, rated the recreation frame higher than any other he read not because he worried about the threat climate change posed to wildlife, but because he did think research on wildlife populations should be kept "alive, because it does need to be looked at. But it really, you know, it needs to be watched, but not for the reasons they're watching it." No one was against renewable energy at large; every participant

thought renewable energy had possible benefits and could be very useful, even if they did not believe in climate change or did not like the unframed policy they read.

Again, these results suggest that attempts to quantify climate denial may be misplaced. Human understanding and acceptance of climate change is not a binary, but a multi-dimensional spectrum, and thus the average climate denial survey is not able to fully parse it. Even if climate denial could be fully understood, it has few obvious implications for climate policy making. While participants who do not believe in climate change, or who attribute it to natural causes, may not be extremely supportive of climate policy for the sake of mitigating climate change, there are other reasons to support a shift to renewable energy, as explored in this study's frames.

This study's frames had little effect on participants who did not believe in climate change. However, all four frames mentioned climate change as an anthropogenic phenomenon and as one reason for enacting the policy, among other benefits that differed from frame to frame: economic benefits, strengthening national security, etc. Because anthropogenic climate change was inherent in the arguments of the recreation and Christian stewardship frames—warming temperatures threaten wildlife which impacts recreation, and a hotter Earth negatively affects nature and humans, creating a need for Christian values—it was mentioned across all frames to reduce a potentially confounding variable. But an economic opportunity or national security framing of renewable energy policy does not necessarily have to mention climate change. Renewable energy could create jobs, save money, and reduce dependence on foreign oil, climate change notwithstanding. A frame that does not mention climate change mitigation as a reason for renewable energy policy may be more appealing to evangelical Christians, especially those who do not believe in human-caused climate change. But it is also likely to be agreeable to many people, regardless of climate or religious belief, because the economy and national security

are common concerns for Americans. In this way, climate denial research may provide greater context, but it may not be necessary to create climate policy with broad appeal.

Gender Matters

Gender had a noticeable impact on policy support and environmental concerns. Women were far more likely than men to support the renewable energy policy, both before and after reading the frames. (The economic frame was the exception; men and women rated that frame similarly.) Women were also more likely to be worried about intergenerational justice—how climate change would affect their children and grandchildren—and the costs and unforeseen consequence of renewable energy policy. Men were more likely to mention overpopulation as an environmental issue, discuss pollution reduction as a benefit of renewable energy, believe that technology constraints would restrict renewable energy policy, and bring up the end times.

These gender differences in policy support are consistent with existing research, which indicates that women litter less, recycle more, leave a smaller carbon footprint, and are more likely to know and worry about climate change than men (McCright, 2010; Hunt, 2020; Brough & Wilkie, 2017; Brough et al., 2016). Also, men in this study were marginally less likely than woman to believe that climate change would affect them personally. When asked, "Do you think changing temperature/climate change will affect you personally?," six out of 13 men and four out of 12 women said no. This accords with the literature, which suggests that white men are vastly less likely than women to believe they will be affected by climate change (Zainulbhai, 2015; Ballew et al., 2019).

Age Matters

Age also impacted policy support, though the fact that age was not controlled means impacts are not as obvious as with gender. All eight participants under the age of 50 believed in

climate change; five of them believed it was caused by human activity. The other three were

open to the idea of an anthropogenic cause but were simply unsure. In general, participants under

50 were less rigid in their beliefs, more likely to ask clarifying questions or say that they did not

know enough to have a fully formed opinion, and more likely to support the renewable energy

policy than participants over 50. Older participants had more variability in their views on climate

change and their levels of support for climate policy. Nine participants over 50 believed in

anthropogenic climate change; four did not believe climate change was human caused; two were

unsure; and two believed climate change was caused by God. The participants who expressed the

least support for the renewable energy policy were all over 50 (Part6, Part8, Part10, Part12,

Part13). These results are consistent with the literature, which demonstrates that younger people,

and especially millennials and members of Gen Z, are more likely than others to be worried

about climate change and support climate action (Funk, 2021).

The Older Male Conservative Contingent

Five older male participants expressed remarkably similar conservative viewpoints

throughout their interviews (Part8, Part10, Part13, Part21, Part24). They all read the national

security frame and opposed it for the same reasons, even providing the same talking points,

suggesting that they might have the same news sources. None of them definitively believed in

anthropogenic climate change—three attributed temperature or climate changes to natural

phenomena, and two were very unsure about if climate change existed and, if it did, what was

causing it. Only one member of this group increased a policy support level after reading a frame;

the rest either kept their ratings the same or got progressively more irritated by the frames and

decreased their support levels.

The group was very resistant to pro-environmental ideals, often positing that environmentalism or attempts at climate mitigation were more of a political or economic ploy than a legitimate cause. Participant 21 said:

> I think it's more from a political aspect than it is a need. You know, a lot of them are such hypocrites. I'll use Al Gore as an example. There's a guy about as hypocritical as could be. Claims this and this and that, and then when somebody looked at his house he was using, I don't know, energy like gazillions in his own planes and things like that. So a lot of it is so hypocritical, and I used the example of the pipeline earlier. You know, you can't have pipeline here, but it's okay to have the one from Germany to Russia. Why? If pipeline's bad, it's bad everywhere. (Part21)

One female participant notwithstanding (Part12), these viewpoints set them starkly apart from the rest of the sample. While they were all very clear that they were not opposed to renewable energy in general, they did not like the policy tested in this study, and they were not a fan of government involvement in what they felt should be a purely capitalist enterprise. As such, it is hard to determine if policy makers could ever make a renewable energy or other climate mitigation policy that appealed to environmentalists, liberals, moderates, *and* this group of very conservative older men.

Openings for Evangelical Framing of Climate Change: Personal Observations

Even as politics and religion become more and more entwined, Christianity and the environment remain largely separate. During 23 years of consistently attending evangelical churches in Arkansas, I cannot recall hearing a single sermon about the environment. My parents confirmed that they have never heard an environment-focused sermon either. Many participants

agreed that neither the environment nor climate change ever came up in church, and/or said they had never considered many of the questions I posed.

Other social issues do creep into evangelical messaging. There were frequent discussions of poverty and underserved populations, with the understanding that Christians need to serve "the least of these," as described in the book of Matthew (The Passion Translation New Testament, 2018, Matt. 25:40). In many churches, this idea stretches to include the pro-life movement and its perceived threat to unborn children. Programs to enlist families in foster care and lessen the number of children waiting for adoption, plus food pantries, prison ministries, and holiday meals for people living in poverty are staples of evangelical churches in the community I grew up in. These issues were rarely spoken of in a political sense—opinions about specific political facets of those issues, like SNAP benefits and incarceration policies, were left unstated, lest differences in opinion create strife—but they were universally understood to be problems that resulted as a function of the sinful world, and problems that Christians could and should help remedy because of their Biblical charge to love others. When asked, "What are your top three societal concerns?" at the beginning of the interview, participants in this study mentioned social issues like abortion, addiction, poverty, child abuse, healthcare, and racial division, among others, and often equated them to moral or religious issues.

While other social issues got continual airtime, the only time I remember hearing about the environment in church was during infrequent discussions of the end times, when the environment could be expected to dissolve into chaos. (At the Methodist churches I attended, from the 1990s to 2019, the end times were not a common topic, but some evangelical churches place far more emphasis on teaching Revelation.) End-time references notwithstanding, the environment was not spoken of in a political or spiritual sense.

It is unclear to what degree evangelical churches discuss the environment or in what contexts. There is no available data about how often the environment comes up in evangelical sermons or Bible studies, and it is sure to vary between denominations, congregations, and geographic regions. But in the South, it seems fairly typical for the environment, and specifically environmentalism and climate change, to be left out of evangelical conversation. Anna Jane Joyner, a climate activist and daughter of prominent evangelical leader Rick Joyner who grew up in North Carolina, said that in her father's teachings "there wasn't an emphasis on environmental protection, [but] there was an appreciation of God's creation and the natural world" (Shigeoka, 2019). Katharine Hayhoe, a climate scientist and evangelical Christian living in Texas, says that many churchgoers she speaks to are curious about climate change and appreciate learning her perspective because they either do not hear about it anywhere else, or only hear a denial narrative (Hayhoe, 2021). Participants in this study echoed Joyner and Hayhoe's sentiments, often noting before the interview even started that they never talked about the environment in relation to their faith, but that they were excited to have the opportunity with me. Like Rick Joyner, they cared about the environment deeply as a reflection of God's love for them and others, but they were not accustomed to speaking about environmental issues in the context of religion.

Whereas I and others experienced a lack of environmental conversation from the pulpit, some churches, individuals, and organizations are vocal about environmentalism, either positively or negatively. Narratives of climate change denial and skepticism are prominent among the "evangelical Right," a term that Wilkinson (2012) uses to refer to conservative evangelical leaders and organizations that use a carefully crafted alliance between evangelicalism and conservativism to promote conservative policies. Evangelical leaders like

Jerry Falwell and Pat Robertson belong to this group and frequently express skepticism or outright disdain for environmentalism (Warner, 2020).

Another member of the evangelical Right is Focus on the Family, an organization that promotes conservative social policy, produces Bible studies and other content for children and adults, and brought in $100 million in revenue in 2020 (Focus on the Family, 2021). I participated in multiple Focus on the Family Bible studies during my time in church and grew up listening to their "Adventures in Odyssey" audio series, which used creative storytelling about characters in a fictional town to teach children about Christian values. My Adventures in Odyssey cassette tapes came from Chick-fil-A, where the tapes were included in kid's meals as the counterpart to McDonald's Happy Meal toys. In Focus on the Family's (2010) "A Statement on the Environment," the organization endorses caring for the Earth and denounces the idea that dominion gives Christians leave to abuse the planet. However, it also decries environmental extremism, noting that "many environmentalists act as if concern for plant or animal trumps all others. This exclusive emphasis is likewise alien to Biblical thought, which cherishes *God* and *humans* above all else" (pp. 1-2). Focus on the Family explains that environmental issues are a function of moral failures, and perhaps not problems worth solving for their own sake. Neither climate change nor global warming is mentioned anywhere in the document (Focus on the Family, 2010).

Focus on the Family does not appear to have created any environmental content themselves, but they do endorse a DVD series produced by the Cornwall Alliance called "Resisting the Green Dragon" (Focus on the Family, 2011; Beisner et al., 2010). The Cornwall Alliance is a conservative Christian public policy group that advocates against the mainstream environmental movement and denies the existence of anthropogenic climate change. They use

the term "resisting the green dragon" to refer to widespread efforts to evade environmentalism's unbiblical tenets. The DVD series includes titles like "Rescuing People from the Cult of the Green Dragon," "From Captain Planet to Avatar: The Seduction of Our Youth," and "How 'Going Green' Impoverishes You, Your Church, and Your Society" (Beisner et al., 2010). These titles, certainly more severe than anything my participants said, do reflect some participants' concerns about environmental extremism, especially older men.

Meanwhile, the "evangelical Left" has sprung up as a bastion of environmental activism, building the "climate care" movement (Wilkinson, 2012). Climate care, sometimes called "creation care," arose out of the growing environmental awareness of the 1970s and gained ground as evangelicals developed eco-theological frameworks to address climate change as a spiritual issue (Wilkinson, 2012). In the 1990s, many organizations were created to mobilize evangelicals toward greater care for the environment, including the Evangelical Environmental Network (EEN) (Wilkinson, 2012). EEN is still active today, aiming to "educate, inspire, and mobilize Christians in their effort to care for God's creation" (Evangelical Environmental Network, 2022). They lead anti-pollution, clean energy, and public lands conservation campaigns, create Bible study content for moms seeking to protect their children from environmental issues, and enlist and equip evangelicals from across the country to serve as climate change communicators in their own communities (Evangelical Environmental Network, 2022). EEN is just one of many organizations and individuals attempting to bring environmentalism into the church. But these groups have largely remained on the side of the evangelical Left and Center, groups which are already open to the idea of climate change and environmental activism (Wilkinson, 2012). Others, like Anna Jane Joyner and Katharine Hayhoe, are attempting to bridge the growing environmental divide between evangelical Center

and Right, with the understanding that a grassroots movement will be necessary to undermine the fixed beliefs of conservative evangelical elites (Wilkinson, 2012). Joyner's and Hayhoe's work are explored in more detail in the conclusion.

I had never heard of creation care or resisting the green dragon until I began researching for this thesis. While I did not ask participants if they had heard of those specific topics, the fact that they never learned about the environment in church would suggest that they had not either. It is possible that the Arkansas River Valley, while certainly dominated by conservative Republican and evangelical Right beliefs, embodies the spirit of Wilkinson's (2012) "evangelical Center" when it comes to environmental issues. Or perhaps religious leaders are simply more comfortable avoiding a contentious topic than confronting it publicly, especially if many are undecided whether climate change is even happening. Participants in this study exhibited heterogenous views about the environment and climate change that complicate evangelical leaders' attempts to avoid upsetting anyone. Indeed, Raymond Randall, who led creation care initiatives at Northland Church in Longwood, Florida, said even he avoids the topic of climate change so he does not scare anyone away (Wilkinson, 2012).

Clearly, evangelicals approach the environment in very different ways, to some degree according to political preference. The lack of conversation surrounding the environment in the Arkansas River Valley suggests that there is an opening for greater engagement between environmentalism and evangelicalism. At least, the absence of a climate denial counter narrative in the churches I and my participants attended leaves more room for creation care initiatives than the alternative.

Chapter 8: Conclusion

In this study, I sought to answer the question: What framings of a renewable energy policy included in the Green New Deal have the widest appeal among white evangelical Christians in the Arkansas River Valley? Evangelical Christians trend toward climate change skepticism and climate policy opposition, and they comprise 25% of voters in the United States. Their opinions about climate change are influential, especially in attempts to pass comprehensive federal climate policies, and thus it is worth understanding the complex interaction of theology, politics, and culture that shape their views. Researchers have explored framing as a way to reshape policies so they appeal to people with varying worldviews, increasing the likelihood of climate policy passage to mitigate the most damaging effects of climate change. This thesis tested four specific frames: economic opportunity, national security, Christian stewardship, and recreation.

Interviews with 25 participants illustrated more nuanced perceptions of climate change than current research attempting to classify belief in climate change would suggest. Participants also expressed belief in climate change at far higher rates than statistics about evangelical climate perspectives indicate. Broadly, participants were supportive of a transition to renewable energy, but many did have reasonable concerns and complaints about the specific policy they read, including fears of technology constraints, job loss, cost, and reliability. The national security and economic opportunity frames were effective at increasing policy support. Participants' views about God's and humans' roles in the environment point toward two paths: further framing for policy researchers, and allyship with evangelical Christians for academics and environmentalists.

Study Limitations

Like all research, this study has limitations. The study sample was older and more educated than the average in the Arkansas River Valley, simply because age and education level were not controlled. Participants were more favorable to the renewable energy policy than statistical evidence of evangelical climate policy support would suggest. In this study, participants rated their support of the unframed renewable energy policy at an average of 6.3. Some frames increased this support rating, up to 8.6 in the case of the economic opportunity frame. These ratings contrast with a Pew Research Center study (2015a) that found that about half of evangelical Christians oppose stricter environmental policies. Therefore, it seems likely that this sample skewed more toward participants who were already amenable to climate policy initiatives. Presumably, this is because people who already care about environmental issues are more likely than those who do not to respond to a call for participants for an environmental study.

The study also had a relatively small sample size of 25 participants. While the small and potentially slightly skewed sample size does not invalidate the results of this study, it does mean that results cannot be extrapolated to apply to all evangelical Christians. The study only illustrates white evangelical Christian beliefs in the Arkansas River Valley. Results *can,* however, provide clues toward potentially fruitful avenues of research to be conducted among larger swathes of evangelical Christians, with the goal of more definitively identifying methods of reframing climate policy for broader appeal. While the term "climate policy" was used throughout this thesis to refer to a specific renewable energy policy from the Green New Deal, some frames may work to encourage support for broader policies surrounding climate change mitigation and adaption.

Future Research

Climate policy researchers should continue to explore creative framing as a way to encourage evangelical climate policy support. Three of the four frames tested in this study should be tested further to determine their efficacy among larger and/or more filtered groups of evangelical Christians. It could be that these frames, or versions of them that do not include mention of climate change, may work to increase the appeal of climate policy. Additionally, participants' responses suggest opportunities for new frames that are worth exploring and may be more effective among especially religious and/or conservative voters.

Further Frame Testing

The national security frame merits further research because it was so polarizing. Study results suggest it could be quite useful for increasing policy support among those who believe in anthropogenic climate change or are unsure about climate change's cause. The frame was originally tested in summer 2021, but it may be even more salient now as U.S. gas prices have soared following Russia's invasion of Ukraine.

Though the frame fared poorly with older men who do not believe in climate change or with low climate policy support, a rewrite could make it less triggering. It would be interesting to see if removing the mention of climate change had any effect. Renewable energy would affect national security by reducing dependence on foreign oil, climate mitigation notwithstanding. Leaving climate change out of the frame may make the frame more salient and supportable for evangelical Christians, whether they believe in anthropogenic climate change or are skeptical about its causes.

The recreation and economic opportunity frames should also be tested further. It may be helpful to retest the recreation frame among a larger sample of hunters and fishers. While the

frame did not influence the ratings of the three hunters and/or fishers who read it in this study, that group is simply too small to draw any solid conclusions. The economic frame should be further tested among a larger, more diverse group to determine if its efficacy at increasing renewable energy policy support is legitimate. This frame would also be worth testing without mention of climate change, for the same reasons as the national security frame.

New Frames

Throughout the interviews, participants collectively alluded to several concepts and concerns that could be extrapolated into future climate policy frames. Future research could create and test these frames to evaluate their effectiveness at increasing evangelical Christian climate support.

A frame explaining renewable energy as a route to American excellence is worth exploring. Older male conservative participants expressed very low support for the renewable energy policy, but they were clear that they did not totally dislike the idea of renewable energy. Rather, they wanted to ensure that a transition to renewables was done with plenty of preparation and for the right reasons—which, for them, did not include climate change mitigation. Participant 24 suggested that the "right reason" could be because the United States has a history of innovation, and the country should continue to be on the cutting edge of new technologies to maintain global status. Therefore, it would be interesting to test an "America first" frame casting renewable energy as a way for the United States to stay ahead of the curve technologically and economically.

Nine participants worried about the effects of climate change on their children or grandchildren. An "intergenerational justice" frame would be worth testing, wherein renewable energy could protect the Earth for future generations. Specifically, to appeal to evangelical

Christians in Arkansas, it may be best to illustrate renewable energy as a way to reduce pollution and thus protect natural beauty for future generations, instead of only as a way to remedy climate change for descendants' benefit.

Some participants' views point toward a possible "opportunity" frame that casts climate change as a chance to change society for the better, as opposed to simply an existential threat. Four participants who did not believe in anthropogenic climate change did so partially because they did not think that humans have the power to end the world. This group also tended to push back against what they perceived as environmental extremism. They felt that environmentalists were living in a fictional doomsday narrative and pushing over-dramatic policies as a result. However, they were not totally against renewable energy; they were just against it for the stated justifications.

Instead of casting climate change as the end of the world, it may be better for policy makers to craft a hopeful, less negative climate narrative to appeal to evangelical Christians who question anthropogenic climate change. If climate change is presented as an opportunity, instead of as an existential crisis, there may be less concern about environmental extremism, and thus less reaction against environmental policy. For instance, climate change might be an opportunity for innovation and economic growth, or an opportunity to rebuild energy systems in a more functional manner.

Lastly, climate policy makers may find more support among evangelical Christians if they made legitimate efforts to address their concerns. Participants' primary concerns about transitioning to renewable energy were technological feasibility, costs, the possibility of job loss, reliability, that it might happen too fast and without enough preparation, and unforeseen consequences. All these concerns are rational, and none are unique to evangelicals (Pew

Research Center, May 2021; Union of Concerned Scientists, 2017; Regen Power, 2021).

Participants just wanted to know that they would not personally suffer as a result of renewable

energy policy, and that the country would be improved, not made worse. Participants were also

very empathetic and wanted to ensure that new policy would not unfairly burden their family,

friends, neighbors, and other rural and/or conservative people like themselves. Many feared that

rural and/or conservative people like themselves might be negatively impacted.

Evangelical Christians are not the enemy, and they are not so different from anyone else,

even if they are, on average, more likely to oppose climate policy. Evangelical Christians—and

other climate policy opponents with similar questions—may be more likely to support renewable

energy policy if their concerns were more directly addressed by policy makers. A policy frame

that specifically explains how evangelical Christians can expect the policy to affect them in their

daily lives is worth testing. Broadly, it would be helpful to expand communication about climate

policy so that Americans know what a given policy might actually do, instead of having to worry

about unknown effects.

Outside of framing, researchers should reconsider the language and categories they use in

discussing climate change belief. The prevailing narrative in the literature is that evangelicals do

not believe in climate change and do not support climate policy—but almost all participants in

this study acknowledged that the climate was changing to some degree, and most were at least

somewhat supportive of a transition to renewable energy. Climate denial research typically

delineates climate change belief according to perceived cause; there are those who believe in

climate change, those who believe the climate is changing but do not believe the change is

human caused, and those who do not believe the climate is changing at all (Ballew et al., 2019;

Rahmstorf, 2004; Björnberg et al., 2017). Some researchers add "impact skepticism" as a

category of climate denial, wherein people accept anthropogenic climate change but do not believe it will have a significant impact (Rahmstorf, 2004; Björnberg et al., 2017). These are the standard categories of climate belief, even though beliefs about climate change encompass far more than just complete acceptance and a few types of skepticism. Many of the participants in this study would not fit in any of the designated categories because they attributed climate change to multiple causes, including God. At minimum, this study suggests that "denial" categories should be expanded to include "theological skepticism," referring to climate change as a function of the end-times or God.

However, researchers might produce much more useful work by acknowledging that climate change beliefs are nuanced. Instead of defining types of climate denial or skepticism, it could be more beneficial to seek a deeper understanding of climate acceptance. As evidenced by participants in this study, there are myriad ways to accept and understand climate change. For those seeking greater climate policy support, understanding evangelicals' views and creating policy frames accordingly is far more important than sorting them into a denial binary, especially when most climate denial research suggests that changing a true climate deniers' mind is impossible (Hoffman, 2011; McCright & Dunlap, 2011; Hobson & Niemeyer, 2013).

Furthermore, participants who definitively did not believe in climate change were a minority in this study, as they are in the United States at large. Instead of trying to shift the beliefs of a small minority, more focus should be placed on conversing with the majority: people who already believe in climate change or have questions about it. This group was largely open to the idea of climate policies, and they were much more apt to change their policy support ratings than climate deniers. Here, policy researchers can engage by creating mutually agreeable climate policies and initiatives using framing principles.

Implications of This Study/Recommendations

Participants were more open to the renewable energy policy than I expected based on existing research about evangelical environmental policy support. However, it is unclear to what degree an evangelical Christian's response to a climate policy might vary based on who is presenting it and in what context it is being presented. It seems that, on an individual level in which they were speaking to someone they perceived as a member of their own community, it was fairly easy for participants to express moderate or higher support for the renewable energy policy. Additionally, I told all the participants at the beginning of the interview that they could say whatever they wanted without fear of judgement, and nothing they said would offend or surprise me. There were no costs or trade-offs inherent in supporting the policy during the interview. The same cannot be said for a broader political context.

Participants who are concerned about the environment might find themselves in a bind when voting, because the two-party system forces them to choose between environmentalism on the Democrat side and other issues that Republicans prioritize, like opposing abortion. Three-quarters of white evangelical Christians say that abortions should be illegal in all or most cases. Some evangelical organizations are anti-abortion above all other values. In 2008, a group of influential Southern Baptist leaders released "A Southern Baptist Declaration on the Environment and Climate Change" (SBECI, 2008). The document called for a more aggressive environmental stance than the denomination had previously taken, advocating that churches take action against climate change (SBECI, 2008; Veldman, 2019). However, the statement also mentioned abortion three times, declaring "the sanctity of human life and biblical definitions of marriage" to be the "most pressing moral issues of our day" (SBECI, 2008; Veldman, 2019). Similarly, Focus on the Family's (2010) "A Statement on the Environment" explains that moral

issues like abortion are the root cause of environmental problems, and thus should take precedence.

> A Christian understanding realizes the Earth's ongoing history with environmental disasters—some of inconceivable magnitude—is resultant from the fact that humans have from the beginning frustrated God's best plan both for themselves and for the harmony of creation. We therefore recognize that human violence, injustice and other flagrant transgressions violate God and give rise to harm and disorder aberrant from original spiritual and physical design. Thus, as Christians who are called to love our fellow humans, we tremble to consider the consequences to a nation that spends billions for pure air and water, yet tolerates the destruction of more than 47 million innocent preborn children. (Focus on the Family, 2010)

NPR reported that in the 2020 presidential election many evangelical Christians voted for Trump not because they liked him personally, but because they liked his pro-life stance, and could not stomach voting for a pro-choice Democrat (Kurtzleben, 2020). I have frequently heard similar justifications from family, friends, and church members in Arkansas. Within evangelical communities, there is a general understanding that political differences may be acceptable, but the "right to life" is not negotiable and takes priority over other issues (SBECI, 2008). Evangelicals may disagree about healthcare or taxes, but those issues are often viewed as negligible compared to the lives of the unborn. In this way, evangelical Christians are likely to choose their pro-life values over environmental issues, for reasons spanning from religious conviction to a desire for social inclusion, as explained by cultural cognition (Pew Research Center, 2021).

Additionally, evangelical Christians who are otherwise supportive of climate policy may find that it conflicts with their political allegiances. If they knew that the renewable energy policy used in this study had been part of the Green New Deal, for instance, it is unlikely that conservative participants would have been as likely to support it because of the bill's, and Representative Alexandria Ocasio-Cortez's, poor image among Republicans. Even if a less partisan policy was proposed, would Republican participants support it if their elected representatives did not? Would it even matter, since elected representatives, not their constituents, decide what passes and what does not? These questions illustrate the central conundrum explored in the background section: what factors cause evangelical Christians to oppose climate policy? It still seems that a combination of factors, including politics and religion, contribute, but it is not clear how those factors might be overcome in the American political context. Frames may encourage support of a specific policy, as some seemed to within this study, but that does not mean they will have an effect when evangelical Christians have to choose between their most closely held values.

Therefore, the key to encouraging evangelical Christian support for climate policy may lie in recasting it as a religious issue akin to the pro-life movement. However, the message is not the only key; if it was, one could expect the Christian stewardship frame to be more successful. The messenger may be just as important.

If participants were willing to express policy support to me, their response to policy may be shaped by who presents it to them. In other words, the messenger may be just as important as the message. Pastors and other evangelical leaders could be the key to increasing evangelical Christian support of climate policy if they begin to discuss environmental issues in a theological

context. Some evangelicals are already doing this work through the creation care movement on the evangelical Left.

Others are working to engage evangelicals on the Right. Katharine Hayhoe has dedicated her career to bridging the divide between environmentalism and evangelical Christianity—a rift that impacts her deeply as an evangelical climate scientist. Hayhoe lives in Texas and frequently visits churches to explain to laypeople the facts of climate change. Her key messages are that climate change should not be political, and that Christians should care about climate change because it will negatively impact people all over the world (Hayhoe, 2021). She encourages other evangelical Christians who care about climate change to talk about it with people in their own geographic, religious, or recreational communities with empathy, and not judgement (Hayhoe, 2021). In her own words, evangelicals who care about climate change can work to engage others in their circles by:

> figuring out what you have in common and what that person cares about. Showing how climate change connects to what they already care about. What they love. What matters to them. I don't want to change who people are or what they believe. It's a case of showing them that they already care about this—and already believe what they need to in order to make a difference. (Ottesen, 2021)

Anna Jane Joyner, who was raised in an evangelical home, has spent years engaging churches across the South in environmental activism, especially related to environmental issues that affect public health and impoverished communities (Shigeoka, 2019). She and her father, megachurch pastor Rick Joyner, even participated in a TV show wherein she attempted to convince him that climate change was real. She was not successful, but his stance against environmentalism has softened, and it did not dampen her efforts to strengthen the relationship between Christianity

and environmental action, which she explores in a podcast and through her work with the Sierra Club. In her own words, "Faith communities shape the moral narrative of our lives—they have a great deal of power to influence policy. Our story demonstrates that faith can be part of the solution" (Igelman, 2014).

Evangelical Christians are already working to transform climate change into a more widely accepted religious issue. They have the cultural competency and common ground required to communicate with other evangelical Christians about climate change, something that non-religious environmentalists cannot claim. In Hayhoe's (2021) book *Saving Us,* she recalls meeting a well-intentioned scientist who was determined to get churches involved in climate action. Unfortunately, he was not making any progress. Hayhoe soon learned the reason: he was an atheist—not a member of any of the churches he was attempting to work with, and thus not trusted or understood. Hayhoe hold him to stop and instead try to reach a community he was actually a part of, one he shared values with. He enjoyed diving, and she encouraged him to engage with other divers by focusing on climate change's impacts on their shared pastime. Shared values are key, which means that non-Christian environmentalists have little place attempting to influence evangelical Christian messaging. Secular encroachment on church sermons would surely not be viewed positively by most evangelical Christians. In fact, for some participants the Christian stewardship frame was not successful at increasing policy support because they felt it was weaponizing or misapplying their faith. Participants did not know I wrote the frames, and some thought an environmentalist was simply trying to change their minds using Christian beliefs.

While policy researchers should continue to explore policy frames as a way to showcase the non-environmental benefits of climate policy, other academics and environmentalists must

embrace a less involved role in increasing policy support among evangelical Christians. In some cases, environmentalists' biggest hope for increasing evangelical Christian support for climate policy may lie in stepping back from the issue altogether. Evidence from this study and others suggests that on-the-ground environmental work within evangelical circles is best done by evangelical Christians themselves.

The role of non-Christian environmentalists, climate scientists, and other stakeholders lies in raising awareness about climate change and serving as allies to the evangelical leaders already doing environmental work. Changing the minds of people they do not understand cannot be the goal. Instead, those seeking to pass climate policy should be willing to engage with evangelical Christians with respect, even if they do not agree about climate change.

Allyship with evangelical Christians could come in many forms. For environmental scientists and academics especially, it may involve providing resources to aid creation care advocates like Hayhoe and Joyner in their work. As a climate scientist and evangelical Christian herself, Katharine Hayhoe already has the resources she needs to speak with other evangelicals about climate change and its potential solutions (Hayhoe, 2021). But most evangelical Christians do not have a background in climate science. Those who want to engage in the creation care movement and speak with their own congregations about climate change may find themselves in need of resources, like accessible data, easy-to-understand graphics, or the opportunity to speak with experts to ensure that their own understanding of the issue is sound before they try to explain it to others. In an article for the National Association of Evangelicals that explains climate change in a theological context and advocates for increased creation care, Boorse (2011) encourages readers who feel doubtful about climate change to "Get to know local scientists who are Christians. Let them help you sort through the scientific information in the media. Are there

scientists in your church? Ask for advice" (p. 25). Evangelical environmentalists could certainly fulfill this need, but scientists are markedly less religious than the general population—only 4% of scientists identify as evangelicals, while 28% of the general public does (Liu, 2009). It may not always be easy to track down an evangelical, or even Christian, scientist, especially in rural areas. Non-religious environmental scientists could serve as allies by fulfilling this need for expertise if, and only if, their help is requested.

As the creation care movement continues to grow, evangelical environmentalists may call upon environmental experts' knowledge more often. For instance, some creation care resources encourage congregations to conduct energy audits (Evangelical Environmental Network, 2022), create disaster preparedness plans (Earth Day Sunday, 2022), or plan recycling events with local governments (Nazarenes for Creation Care, 2021), all of which would likely require input from environmental experts outside the church. In these contexts, non-religious environmentalist allies may find their expertise accompanied by rationale they do not necessarily agree with. A climate scientists' presentation at a church meeting about climate change may be followed by a sermon on Christian stewardship; knowledge shared with creation care advocates may appear in a newsletter alongside a creationist narrative. Not every environmental expert will be comfortable with this, but those that are could provide great help as evangelicals work to increase their communities' climate policy support.

Being an ally will require environmentalists to accept that there are diverse ways to understand and act upon climate change, and the evangelical way, which may look very different from that of the Western scientific academy, is not unworthy of engagement. Evangelicals may attribute climate change to multiple causes, not just humans. They may support climate change mitigation for reasons of national security or intergenerational justice or any number of other

reasons outside of environmentalists' prevailing "save the Earth" mentality. These views may differ from the dominant environmental norm, but they do not have to be detrimental to climate policy passage. We can disagree about motivations and still agree that a given policy is beneficial, because good policy can have broad benefits.

Finally, a primary and less involved facet of allyship may simply be refraining from disparaging and limiting language in reference to evangelical climate policy support. I completed this thesis as a student at Western Washington University, a liberal public institution in the Pacific Northwest. Throughout the process, explanations of my research were frequently met with exclamations like: "I'm interested to learn what you find. Evangelicals/Southerners/climate deniers are a huge problem for climate policy." These declarations, while generally intended to be supportive and well-meaning, serve to illustrate the negative and even derisive attitude that many environmentalists hold toward Southern evangelical Christians. No matter how ostensibly charitable their intent, no one with these views can respectfully or successfully encourage increased climate policy support among Southern evangelical Christians. As explored in Chapter 2, evangelicals have many understandable and logical reasons for being hesitant about climate change and climate policy. When environmentalists view evangelicals as a problem, they contribute to the United States' increasing polarization, which only serves to further entrench evangelicals in their hesitance toward climate policy.

Many environmentalists speak as if "evangelical" necessarily equates to climate change denial and policy opposition. These ideas need to be unlinked and unlearned; they contribute to the false idea that evangelicals and environmentalists are opposite, binary orientations, which is disproved by participants in this study. Participant 20 feels incredibly connected to her rural property and has been working for years to re-wild the pond and other habitats on the land.

Participant 8 does not believe that climate change is human caused, but as a hunter and proponent of conservation, he considers himself to be an environmentalist. The connection between religion and environment is much more than just a dichotomy and describing it as such contributes to polarization. Binary language casts evangelicals and environmentalists as enemies, which is both untrue and deeply inimical to climate policy passage.

The work of creation care advocates on the evangelical Right, coupled with empathetic allyship and supportive language from environmentalists, could be transformative for evangelical climate policy support. If pastors, church staff, and laypeople feel included in the environmental conversation and feel comfortable discussing it in a church setting, there is a possibility that climate policy support may increase. Kahan's cultural cognition theory, and Djupe and Hunt's (2009) theory that churches function as complex social networks, support the idea that increased discussion and acceptance of environmental issues will likely spread among church congregants.

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Appendix A

Glossary of Evangelical Terms

Some terms used in this thesis may be unfamiliar to readers who do not have a background in evangelical Christianity. A glossary of key terms is included here.

*End-times***:** Refers to the evangelical Christian understanding of the end of the world. A foretelling of these events is included in Revelation, the final book of the Bible.

*Evangelical***:** A subset of Protestantism that encompasses many Christian denominations. Some denominations are split, with certain churches identifying as evangelical and others not. Evangelical beliefs vary, but evangelical Christians typically adhere to the same core beliefs. Those core beliefs are: the Bible is the authoritative, unerring word of God; God sent his son, Jesus, to die on the cross for humanity's sins, after which he was resurrected; the only way to salvation is through a spiritual conversion leading to a personal relationship with Jesus Christ; and spreading the good news of Jesus' resurrection is critical to bring others to the faith (Noll et al., 2019; National Association of Evangelicals, *What Is An Evangelical?*).

*Fall of Man***:** Refers to the event in which humans were forever separated from God. In Genesis 3, Adam and Eve disobeyed God and ate from the Tree of Knowledge of Good and Evil after they were tricked by Satan. This was the first sin, and as a result, God banished humans from the paradisical Garden of Eden to work and struggle on Earth.

*Methodist***:** In this thesis, "Methodist" is used to label churches that belong to the United Methodist Church (UMC), a Christian denomination that includes a wide range of churches. Some Methodist Churches are very theologically conservative, like the church I grew up

attending. Others, especially those in the North, are more progressive. The denomination arose out of an evangelical tradition, but whether or not all churches within the UMC identify as evangelical, or define the label in exactly the same way, is uncertain (Hahn, 2017). The UMC is currently undergoing a schism, with conservative churches pushing back against progressive churches' desire to permit LGBTQ+ marriage (Adams, 2022; Miller, 2022).

Protestant: According to Merriam-Webster (2022a), a Protestant is "a member of any of several church denominations denying the universal authority of the Pope and affirming the Reformation principles of justification by faith alone, the priesthood of all believers, and the primacy of the Bible as the only source of revealed truth." Put simply, Protestant is used to refer to a Christian church (or church member) that is not Catholic.

Revelation: The final book of the Bible, which describes how Jesus will return to Earth and the world will end. The book is full of metaphor and allegory, and Christians interpret the book in many different ways.

Sin: "an offense against religious or moral law; an action that is or is felt to be highly reprehensible; transgression of the law of God" (Merriam-Webster, 2022b). The term can be used in two ways. First, to specifically refer to a vast number of violations, including adultery, murder, lying, gossip, and otherwise disobeying God. For example, "Cain killed Abel, which was a sin." Second, to refer broadly to widespread acts of immorality committed by humans e.g., "Because we all make mistakes, the world is full of sin."

Appendix B

Frames (full text)

The full text for each frame is included here. Participants were not told the name of the frame as designated in this thesis (unframed, economic opportunity, national security, Christian stewardship, or recreation). They read the texts below exactly as written and knew them only by the titles seen here.

Unframed Policy

"Officials Propose New Energy Policy"

Lawmakers proposed a new policy to fully transition the nation's power grid from fossil fuel sources to "clean, renewable, and zero-emission energy sources."

In 2020, 79% of U.S. energy came from fossil fuels, which include petroleum, natural gas and coal. Only 12% of energy came from renewable sources like wind, hydroelectric and solar power. The proposed policy aims to meet 100% of power demand through renewable energy by expanding existing renewable power sources and creating new infrastructure.

Economic Opportunity Frame

"Officials Propose New Energy Policy to Boost Economy"

U.S. lawmakers proposed a new policy to shift the power grid from fossil fuel sources to renewable energy. The switch would lead to a stronger economy and new jobs in manufacturing, installation and other areas.

Renewable energy could boost the nation's economy. A study found that adding 500 megawatts of wind energy in 10 states would create a $24 billion boost in those states, plus a $3 billion impact nationwide.

Burning fossil fuels emits greenhouse gases into the atmosphere and warms the Earth. Higher temperatures lead to more natural disasters and heat waves, change growing seasons, decrease available water and raise the sea level. Using renewable energy would benefit the economy and lessen greenhouse gas emissions to help prevent the worst effects of rising temperature.

Many governors are betting on renewable energy investment to create jobs. Texas makes the most wind power in the country. Over 25,000 Texans work in wind power.

Wind and solar energy can be produced in every state, so people can work in renewable energy anywhere. Fossil fuel jobs only exist in places with coal and oil deposits.

In Arkansas, the Batesville School District installed nearly 1,500 solar panels and saved almost $600,000 in yearly utility costs. Additionally, the district made money by selling extra energy back to the grid, so every teacher got a raise.

Renewable energy usually costs about the same as fossil fuel energy. Solar and wind energy production costs decreased by 88% and 69% respectively from 2009 to 2018, and costs are expected to keep falling.

Over 40% of global coal mines do not make money. Ending coal power could save the U.S. $78 billion. Building new wind and solar plants is already cheaper than running existing coal plants.

National Security Frame

"Officials Propose New Energy Policy to Improve National Security"

U.S. lawmakers proposed a new policy to shift the power grid from fossil fuel sources to renewable energy. The switch would strengthen U.S. national security by reducing dependence on foreign oil, according to leading experts.

U.S. dependency on foreign oil poses a severe threat to national security. In 2020, the U.S. imported 7.8 million barrels of petroleum per day. Reliance on imported oil is expected to increase through at least 2022 because of a decrease in U.S. crude oil production.

Burning fossil fuels emits greenhouse gases into the atmosphere and warms the Earth. Higher temperatures lead to more natural disasters and heat waves, change growing seasons, decrease available water and raise the sea level. Using renewable energy would lessen U.S. dependence on oil and limit greenhouse gas emissions to help prevent the worst consequences of rising temperature.

Oil reserves not controlled by the U.S. are vulnerable to intentional disruptions. Because the U.S. military relies on oil to fuel ships, tanks, cars and planes, hostile forces could manipulate foreign oil supplies to weaken the country.

Countries that control large oil deposits, like Russia and Saudi Arabia, have the freedom to adopt policies that go against U.S. values.

Oil dependence shapes political alliances and conflicts between the U.S. and countries in the Persian Gulf, plus Russia and China. Oil limits the United States' ability to form partnerships and diminishes U.S. leverage.

Military experts and political leaders support a shift away from foreign oil by investing in renewable energy, because doing so would protect the country from oil-related threats and conflicts.

Christian Stewardship Frame

"Officials Propose New Energy Policy to Protect God's Creation"

U.S. lawmakers proposed a new policy to shift the power grid from fossil fuel sources to renewable energy. Christians said the policy is one way to be good stewards of God's creation and leave a better world for our children.

In a letter sent to Congress, over 100 evangelical Christian leaders said renewable energy was an "opportunity to partner with Jesus in his mission to bring" a good life to all. They said the new policy would protect the natural world, defend children's health and clean up pollution from fossil fuels.

Burning fossil fuels emits greenhouse gases into the atmosphere and warms the Earth. Higher temperatures lead to more natural disasters and heat waves, change growing seasons, decrease available water and raise the sea level. Using renewable energy would limit greenhouse gas emissions and help prevent temperature increases. Rising temperatures are already affecting the health of humans worldwide, especially those in poverty.

Genesis 2:15 says "The Lord God took the man and put him in the Garden of Eden to work it and take care of it." Many Christians believe God gave them a duty to care for all creation in the same way, including the Earth itself, animals and other humans.

For other Christians, using renewable energy is a chance to show God's love by protecting people from disasters and other harmful events.

"Scripture teaches us that we have the moral responsibility to care for God's world and to defend the vulnerable," said a pastor who signed the letter.

Recreation Frame

"Officials Propose New Energy Policy to Protect Arkansas Recreation"

U.S. lawmakers proposed a new policy to shift the power grid from fossil fuel sources to renewable energy. The policy could help protect ducks and fish so that Arkansas anglers and hunters can continue their hobbies in the future.

Researchers worry that there may be fewer fish, birds and other game in Arkansas if nothing is done to prevent the Earth's temperature from rising. In winter, ducks fly south to Arkansas for food and ice-free water. But as temperatures increase across the country, birds do not have to fly as far south. An Arkansas State University professor found that warmer winters lead to less ducks to hunt in Arkansas and more in midwestern states.

Burning fossil fuels emits greenhouse gases into the atmosphere and warms the Earth. Higher temperatures lead to more natural disasters and heat waves, change growing seasons, decrease available water and raise the sea level. Using renewable energy would limit greenhouse gas emissions and help prevent temperature increases, which are already impacting Arkansans' ability to hunt and fish.

Warmer stream temperature may harm fish as oxygen levels drop, causing the fish to lay eggs at different times. Hotter temperatures may also lead to floods, destroying fish habitat. Smallmouth bass in the Buffalo River are especially at risk. Less healthy fish means less opportunities for fishing.

In 2011, 1.5 million people over the age of 6 fished, hunted, or watched wildlife in Arkansas. On average, hunters and anglers spent the equivalent of one month hunting or fishing each year.

If temperatures continue to rise, "hunting in places where we've traditionally done it will seriously diminish," the ASU professor said. "I think it will be a big cost to our heritage and our wildlife."

Appendix C

Interview Schedule

The interview schedule is included here. Interviews were semi-structured, and I deviated from this list of questions only necessary to glean more information.

- Ask broad questions to get a baseline.

    o What are your top 3 societal concerns?

    o What are your opinions on transitioning to renewable energy sources like wind, solar and hydropower?

- Present policy verbally.

    o What is your opinion of this policy?

    o On a scale of 1 to 10, with 1 being not at all and 10 being extremely likely, how likely would you be to support this policy?

- Present frame 1

- Get their opinion.

    o How does this article affect the way you think about transitioning to renewable energy?

    o Based upon reasons stated in this article, on a scale of 1 to 10, with 1 being not at all and 10 being extremely likely, how likely would you be to support this policy?

- Present frame 2

- Get their opinion.

    o How does this article affect the way you think about transitioning to renewable energy?

    o Based upon reasons stated in this article, on a scale of 1 to 10, with 1 being not at all and 10 being extremely likely, how likely would you be to support this policy?

- o How do you feel about this article compared to the first one?

- o Which do you think is a stronger argument? Why?

- Ask more specific questions.

  - o Do you think global temperature is changing? (Do you believe in climate change/global warming?)

  - o What is causing the change?

  - o How important is to you personally?

  - o How important is it to society?

  - o Will it affect you personally?

  - o On a scale of 1 to 10, with 1 being not at all and 10 being completely support, how much do you support a policy to fully transition to clean energy?

  - o What things, if any, concern you most about a transition to renewable energy?

  - o What things, if any, excite you about a transition to renewable energy?

  - o What is God's role in the environment?

  - o How does God want us to interact with the environment?

Appendix D

Participant	Gender	Age	Belief in ACC	Unframed	CS	Rec.	NS	EO
7	F	19	yes	3.5			5	5
23	F	21	yes	10	10		11[a]	
15	F	27	yes	7	7			8
20	F	46	yes	10		10		10
5	F	50	yes	9.5	9.5		10	
1	F	51	yes	8	9			9
22	F	61	yes	8	10		10	
4	F	62	yes	8		8	8.5	
16	F	63	yes	6	6	6		
3	F	25	unsure	8		10		10
12	F	53	no	0[b]	0	0		
9	F	78	God	10		10	10	
Average scores for women:				7.3	7.36	7.3	9.08	8.4
2	M	25	yes	7	5	7		
17	M	47	yes	10		8		10
19	M	56	yes	6			7	6
6	M	62	yes	2.5	2.5		4.5	
18	M	66	yes	10			10	10
25	M	66	yes	8		8		8
14	M	42	unsure	10	10			10
13	M	58	unsure	0	0		0	
10	M	65	unsure	1		1	1	
8	M	55	no	2		1.5	0.5	
21	M	62	no	4	4		4	
24	M	67	no	1		2.5	0	
11	M	64	God	8	8	8		
Average scores for men:				5.35	3.58	5.14	3.38	8.8
Average scores overall:				6.3	6.23	6.15	5.82	8.6

Appendix D. This table displays the demographic information, belief in anthropogenic climate change, and policy support ratings for each participant.

[a]Participants were asked to rate the renewable energy policy on a scale of 1-10. However, Participant 23 deviated from that scale, rating the national security frame at 11. She read the

national security frame last and liked it so much that she felt it deserved more than the 10 she

gave to the prior frames.

[b]Like Participant 23, other participants deviated from the 1-10 scale. Several participants gave a

zero rating for one or multiple frames.