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SOCIAL CLIMATOLOGY:

AN AGE COMPARISON OF WOMEN'S SUSTAINED COMMITMENT TO COLLECTIVE ACTION AGAINST CLIMATE CHANGE

By

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Bachelor of Arts, University of Montana, Missoula, Montana, 2018

Thesis

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Social Climatology: An Age Comparison of Women's Sustained Commitment to Collective Action Against Climate Change

Chairperson: Dr. Kathy J. Kuipers

Climate activists urgently emphasize action to prevent catastrophic and apocalyptic-like damage from climate change. The foundation of the institutional change needed to combat climate change is collective action, which I study here through a collective action frame. These frames can gain traction for policy agendas: they are solution- and action-oriented.

I interviewed women climate activists to understand how they frame the problems from, causes of, and solutions to climate change, as well as how they urge others to act against climate change. I compared my informants based on age because beliefs, values, and lived experiences are important in how activists approach problems, and I expected that collective action frames would differ by generation. I conducted 20 in-depth, semi-structured interviews with ten activists who were 18 to 36 years old (younger cohort) and ten activists who were 55 years and older (older cohort).

The cohorts disagreed on what were the greatest impacts of climate change. The younger cohort's top concern was the social destabilization that will result from climate change, whereas the older cohort believed it was the exacerbation of inequalities. The cohorts also disagreed on the best ways to incite climate action. The younger cohort argued the best strategy was to find common ground with people while the older group believed the best strategy was to empower people. Both cohorts agreed that the root cause of climate change was the industrial revolution and the ideologies that it perpetuated. Both cohorts also agreed that the main solution for climate change would be an ideological revolution that must be achieved by reconnecting with others. I found that both cohorts agreed that solving climate change could happen only when we come together and not apart. Combatting climate change should be based on a collective understanding of the ways in which humans are inextricably interconnected.

SOCIAL CLIMATOLOGY:

AN AGE COMPARISON OF WOMEN'S SUSTAINED COMMITMENT TO COLLECTIVE ACTION AGAINST CLIMATE CHANGE

1: INTRODUCTION

At the World Economic Forum (2019), Gretta Thunberg, a youth climate activist from Sweden, had a powerful message in response to ineffective progress within climate change decision-making entities: "I want you to act as if our house is on fire!" Climate activists of all ages are emphasizing the urgency for action on all scales to prevent irreversible damage to human and natural systems from climate change, but recently there has been an outburst of young people engaged in action against climate change. I ask how approaches to combatting climate change might differ between younger activists and older activists.

I analyze how the beliefs, values and lived experiences pertaining to climate change, a recently dominating global narrative, among younger women climate activists versus older women climate activists might differ. Age is important because differences in perspectives can add more diverse ideas to discussions around action against climate change. I analyze only women because researchers have linked the gender imbalance in climate change decision-making to on-going ineffective and slow institutional responses to the issue (Nagel 2015). More gender balance in climate change discussions can improve the efficiency and effectiveness of institutional climate decision-making (Alston 2013).

I use social framing theory to understand the perspectives of women climate activists. The ways in which we understand the issues of and solutions for climate change are shackled to the ways that we frame, or organize meaning behind, the phenomenon (Benford and Snow 2000). Climate change has been framed in many different ways (Blue 2015). The extensive

literature on climate change framing analyzes the ways in which different frames can influence perceptions of and responses to climate change (Blue 2015). Diverse frames for climate change illustrate different policy considerations to alternative issues, causes, and solutions (Blue 2015).

My project is a solution-oriented and action-oriented frame of climate change. I focus on the foundation of the institutional change that is necessary to combat the climate crisis: collective action, or "the struggle over the production of mobilizing and countermobilizing ideas and meanings" (Benford and Snow 2000:613). I ask how women's sustained commitment to combatting climate change can be viewed through the lens of a collective action frame. This frame involves four steps: (1) identify the main problem; (2) identify the main causes of the problem; (3) identify the most appropriate solutions to the problem; and (4) engage and guide others to take necessary, solution-oriented actions.

Institutional change is a critical approach to combat climate change, but it has been ineffective and slow. Its pace has been linked to gender imbalance within climate decision-making. However, institutional change begins with the mobilization of change itself. I focus my research on a gendered perspective of the building blocks of institutional change: collective action. My project presents a necessary step toward identifying more effective, gender-informed, and age-informed solution-oriented responses to climate change.

2: LITERATURE REVIEW

Climate Change

Human activities[1], especially the burning of fossil fuels, release copious amounts of carbon dioxide and other gases that trap energy from the sun in the atmosphere (World Health Organization 2018). The "greenhouse effect" occurs when this trapped heat gets radiated back to earth and significantly warms the globe. Global warming changes and alters the climate,[2] which has increasingly extreme, frequent, and potentially irreversible consequences for the planet and its systematic processes, as well as human security, health, and well-being (IPCC 2018). The severity of threat to humans depends on both location and demographic features (IPCC 2018).

In 2018, the Annual Climate Change Report by the United Nations Framework on Climate Change (UNFCCC) stated that we must meet a global warming at or below 1.5°C above pre-industrial levels in order to avoid loss and damage to both human livelihoods and the planet's systematic processes. The global mean temperature for 2019 was 1.1°C above pre-industrial levels, as the past five years, 2014 through 2019, are the five warmest on record (WMO 2019). To keep global warming at 1.5°C above industrial levels, our global community must reach net zero carbon dioxide emissions by 2050 and drastically reduce other greenhouse gas emissions (WMO 2019). Amidst a global crisis, effective responses to climate change are necessary (UNFCCC 2018).

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[1] "Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels, with a *likely* range of 0.8°C to 1.2°C. Global warming is *likely* to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate (*high confidence*)" (IPCC 2018:6).

[2] "Climate risks depend on the magnitude and rate of warming, geographic location, levels of development and vulnerability, and on the choices and implementation of adaptation and mitigation options (*high confidence*)" (IPCC 2018:7).

Gender Imbalance in Climate Change Decision-Making and Negotiations

The "painstakingly slow pace" of international of climate responses can be "analyzed based on gender dimensions of the institutions that dominate international climate change research, planning, and negotiations" (Nagel 2015:202). Although Nagel (2015) argues that effective climate change decision-making begins with women's more equal representation in climate-related conversations and research, Alston (2013) reports that it is rare that climate policies, frameworks, discourse, and solutions are gendered.

Since 1995 in Berlin, Germany, the Conference of the Parties (COP) to the United Nations Frame Convention on Climate Change (UNFCCC) have gathered annually to discuss climate change and try to develop solutions to reduce the rate and scale of global warming. In 1997, an international women's forum sent a letter to the UNFCCC, which requested that gender be a focus in future COP meetings (Alston 2013). It was not until COP13 in 2007 that a Gender Action Plan was established (Alston 2013). However, COP meetings still consist mainly of male negotiators (Nagel 2015). The Women's Environment and Development Organization (WEDO 2019) stated that at COP23 in 2017, women held 36% of total delegates, and at COP24 in 2018, the number rose by only 2%.

Since its establishment, COP meetings have not produced effective decision-making strategies for the past twenty-some years around climate issues (Nagel 2015). The Union of Concerned Scientists (UCS) deemed the most recent COP meeting, COP25 in Madrid, Spain, as disappointing, lacking in urgency and action, and exhibiting a disconnect from the action that is required by climate science (UCS 2019). Researchers argue that more gender balance in climate change decision-making and discussions can combat the slow pace of climate action and improve the efficiency and effectiveness of climate responses (Alston 2013; Nagel 2015).

Climate change itself is a gendered phenomenon: it will influence everyone differently based on their socioeconomic, cultural, and environmental context (Djoudi et al. 2016). It has a strong link to intersectionality, or the intersection of race, class and gender, which impacts people's capacity for agency and adaptation (Djoudi et al. 2016). Alston (2013) argues that it is critical to focus on a gendered approach to climate change because, in addition to a social justice and a human rights perspective, research shows disproportionate gender impacts, especially for minority women, from climate change. "Without a 'sociology of climate change'" and the recognition of unbalanced power relations, we will not be able to understand the root causes of the climate crisis and will fail to tackle global warming" (Djoudi et al. 2016).

Gender and Climate Change

Here, "gender" is a contextual, dynamic, and socially constructed practice on a spectrum, influenced by changing societal factors like gender norms and expectations (Alston 2013). Globally and in the United States, socially constructed "gender-specific vulnerabilities of women" result in "higher female disaster mortality rates compared to those of men" (Dankelman 2010:14). This is because inequalities are exacerbated by climate change (Dankelman 2010). It is central to emphasize that women who experience multiple marginalized identities will experience much greater vulnerability to climate impacts (Verchick 2004). For example, minority women are much more likely to live in poverty, receive less education, economic support, institutional support and information, fewer resources after natural disasters, and have more difficulty attaining decision-making roles (Alston 2013). As some feminists argue, there is no climate justice without gender justice: environmental issues are inherently feminist issues (McKinney and Fulkerson 2015).

Gender and Climate Activism

Here, "activism" refers to specific actions taken to support and perform activities that are solution-oriented behaviors (Tindall et al. 2003). Although women do not dominate global and national climate decision-making, "America's most visible and effective environmental justice [grassroots] organizations are led by and consist mainly of women" (Verchick 2004:63). Environmental justice activism focuses on the social dimensions of environmental issues, rather than the mainstream environmental movement (Bell and Braun 2010; Verchick 2004). Women make up 70% of activists in local and state environmental justice organizations in the United States (Bell and Braun 2010).

Women effectively mobilize communities to respond to natural disasters by taking leadership roles within their families and communities to build community resiliency and adaptability (Alvarez and Lovera 2016; Dankelman 2010; Haber 2018). They are effective because, first, women hold knowledge and agendas that might enhance climate adaptations and activism that focus on "energy, water, food security, agriculture, health, biodiversity, and disaster risk management" (Alston 2013:10). Second, Acha (2017) reports they women have a unique understanding of overlapping, intersectional struggles against climate change. Third, they take action against climate through integrative, rights-based, and community-driven approaches to fight the challenges (Alvarez and Lovera 2016).

One of the main explanations in research for the domination of women in grassroots environmental activism is provided in a review of gendered socialization and gendered social roles. First, women have a unique propensity, impacted by social expectations and gender roles, to alleviate these impacts and safeguard the health of a community (Fitzgerald 2019; Haber

2018). Socialization begins in childhood with gendered lessons, where we develop different values and expressions of such values based on our gender (Bell and Braun 2010; Fitzgerald 2019; Hunter et al. 2004; Tindall et al. 2003). Broadly, women are taught to value and perform more altruistic, nurturing roles related to well-being and health, both of which are threatened by climate change (Fitzgerald 2019).

Similarly, gendered social roles explain that social role expectations differ based on gender. For example, men are socialized to focus on labor force participation and less on caretaking and homemaking responsibilities (Fitzgerald 2019). Verchick (2004) illustrates this phenomenon as it relates to environmental activism, explaining that women activists might see their work as linked to their roles as primary caretakers and nurturers of the health and safety of their friends and families. For example, women are more likely to be sensitive to social and humanitarian-related impacts from climate change, such as the impacts on human health (Nagel 2015).

Perceptions of Gendered Activism. Ideologies and perceptions are the building blocks of actions and ideologies shape our perceptions. Perceptions refer to how we interpret a phenomenon. As a result, the ways in which we perceive climate change can dictate the actions we take. In 2019, the Yale Program on Climate Change Communication (YPCCC) stated that ideologies, or worldviews, on climate change have a crucial influence on decision-making policies about global warming reduction. Ideologies are formed by our beliefs and attitudes; the actions we take are explicit ways through which we practice our ideologies.

Environmental justice scholars have found that women's motivations for their activism are closely tied to societal perceptions of their identities as nurturers and mothers (Bell and Braun 2010). Hunter et al. (2004) assert that researchers

overwhelmingly report that women have a greater amount of participation in pro-environmental behaviors and justice-focused activism. Moreover, people who are concerned about environmental threats and have environmental values are "more likely to act, without considering the calculus of individual decision making, in a collective action setting" (Lubell 2002:432).

Within a cultural context, people perceive women to be caretakers and nurturers, expecting them to be the primary engagers in protecting the health and livelihoods of their families and social networks, leading them to develop the "motherhood mentality" when it comes to the natural world (Bell and Braun 2010; Hunter et al. 2004). Researchers argue that the "motherhood mentality" is responsible for women's protective attitudes towards the environment and a protective attitude of their friends and family in the face of environmental threats (Bell and Braun 2010; Hunter et al. 2004). "Women as caretakers" results in the perceived social obligation and social norm of women to place responsibility for protecting their family's health above all else, and, human health is extremely threatened from climate impacts (Bell and Braun 2010).

Age and Climate Activism

Researchers depict climate change as a "wicked" problem to illustrate its complexity (Frumkin et al. 2012). However, the recognition of its complexity and its prevalence has evolved over time. Starting in the 1980s, climate change itself has not been a dominant issue and political narrative until the last few decades (Borras et al. 2018). Even more recently, within the last couple of years, the global community has seen a monumental outburst of young people engaged with climate activism. Frumkin et al. (2012:1434) argue:

> The problems, solutions, costs, and benefits extend over a long-time frame—well beyond the lives of those now addressing the problem—and there is a need for immediate action. The meaning of this long-time frame and its implications for problem solving may vary over the course of a life span. This is an important observation in an aging society—one in which more and more citizens belong to older age groups.

Frumkin et al. (2012) assert that older people are concerned about climate change for reasons that relate to their age because, first, they are vulnerable to the health impacts from climate change, and second, as people age, they hold their political and social values more rigidly and this conditions their perspectives on climate change. Third, they feel a sense of legacy, where they are concerned with what their generation is leaving to a younger generation.

Contemporary climate activism focuses on an awareness for the future of younger generations, with high concern for the impacts on younger generations from government (in)actions in the present (Schlosberg and Collins 2014). Significant energy and excitement within the climate movement has been sparked by younger generations. Borras et al. (2018) assert that this might be because young people expect to live another 50 or more years. They are also most vulnerable to the legacy of decisions made by adults now (Corner et al. 2015). Research by Corner et al. (2015:524) show that although there is growing skepticism among young people about political parties in the United States, distrust in political figures and actions, and an increasing "alienation from mainstream politics," data suggests that younger people are more likely to engage with "cause-oriented" issues like climate change. Younger people are also more likely to blame government inaction for the cause of climate change (Corner et al. 2015). Corner et al. (2015) also argued that younger people exhibit stronger feelings of self-efficacy and are more likely to feel less apocalyptic about climate change and more confident in the ability to

"solve" it. As a result, because they are especially aware of the potentially catastrophic effects in the near future and because of their dissatisfaction with government on climate change, this could explain their increased receptivity towards the issue of climate change in large numbers in comparison to older generations (Borras et al. 2018).

The Collective Action Frame

Framing is a mechanism of organizing meaning behind lived experiences (Benford and Snow 2000). Framing is the processing of data, the contextualization of information, and the ways in which we convey meaning towards an issue (Benford and Snow 2000).

One method of framing is collective action framing. Social movement scholars study collective action framing because it allows people to "locate, perceive, identify, and label occurrences" in their life (Benford and Snow 2000:614). To do this, Benford and Snow (2000) explain that an issue or a phenomenon must be situated in a certain place in time and space. This is because the goal of this method is to produce an action-oriented set of beliefs (Benford and Snow 2000). Collective action framing can mobilize institutional efforts because they are intended to gain support, mobilize others to engage in solution-oriented actions, and "demobilize antagonists" (Benford and Snow 2000:614).

Research Suppositions

Inspired by Benford and Snow's (2000) research on collective action framing, I structure my research suppositions to parallel my theoretical approach. I produce suppositions for each part of the collective action frame. First, the primary action of a frame is to articulate a problem or a condition. Next, it seeks to decide on who or what is

to blame for the issue or problem. Third, it produces an articulation of what needs to change in order for the problem to be solved. The final part identifies methods and tactics to urge others to act in solution-oriented ways.

Problem identification frame. Regarding the problem identification frame, I have two suppositions. My first is based on Acha's (2017) literature on women's grassroots environmental activism, which finds that women climate activists will have a unique understanding of the intersectionality of climate change. I expect to find that women will emphasize problems that focus on the ways that climate change impacts different groups of people in different ways because of intersecting inequalities. My second supposition focuses on the participants' ages, where I expect that, based on Borras et al. (2008), the younger cohort's most concerning problem from climate change will be a future-oriented view (more so than the older cohort's) because they expect to live longer and have more optimism for their ability in the future. As Frumkin et al. (2012) explain, climate change is an issue that persists beyond the lives of those who are combatting it now.

Cause identification frame. Second, in reference of the cause identification frame, my supposition is based on the research by Corner et al. (2015) which argues that younger people are more likely to blame government inaction for the cause of climate change. Thus, I expect to find that the younger cohort's primary cited cause of climate change will be government inaction.

Solution identification frame. Third, regarding the solution identification frame, my supposition is based on Alvarez and Lovera's (2012) research in that women identify climate solutions that are community-driven and integrative. I expect to find that women highlight solutions based on values of social connecting and community building. When it comes to age, my second supposition for the solution identification frame is informed by Corner et al. (2015),

who found that younger people exhibit stronger feelings of self-efficacy, so they are less likely than older people to feel “apocalyptic” about climate change and will feel more confident in society’s capacity to “solve” the problem and take the necessary actions to do so.

Urging others to act frame. Lastly, pertaining to ways to urge others to act, Alvarez and Lovera’s (2012) research also leads to my supposition for solutions to climate change. I expect that women’s strategies to urge others to act will be based on community-driven and integrative approaches. I expect to find that these strategies, urging others to partake in climate action, will be embedded in community-driven approaches that connect people to each other and to climate groups.

3: DATA AND METHODOLOGY

I conducted 20 in-depth, semi-structured interviews with women climate activists from two different age groups. Ten women activists, those of the younger cohort, were 18 to 36 years old, and 10 women activists, those of the older cohort, were 55 years and older. I determined this age distinction to represent a gap significant enough to compare and contrast two different generations of women.

However, I suggest that a limitation to the quality of my data is that women in my sample are demographically similar, such that most are white and well-educated. As demographics impact our ideologies, experiences, actions, and perceptions, my data reflects a more homogenous sample of climate activists despite their age difference.

Qualitative Design

Qualitative research methods examine complex processes and experiences, seeking to provide a deeper explanation for structured or unstructured phenomena. To gather qualitative data on the meaning-making of climate change, my methodology was heavily informed by Hesse-Biber (2017). I conducted in-depth interviews with participants because I wanted to understand the experiences surrounding participants' developed perspectives of climate change, and how they developed those perspectives. This method of gathering data is the most meaningful way to engage with others when asking about deeper explanations of climate change and learning about the experiences that lead them to those explanations.

All of the 20 in-depth, semi-structured qualitative interviews were voice for transcription purposes and later deleted per Institutional Review Board (IRB) standards. The average interview lasted a little over one hour. The settings of my interviews were varied; most took place in local coffee shops, other in the offices of the participant, which were in the Missoula

community or on the University of Montana campus, and some were in my office on the University of Montana campus.

I used a semi-structured interview guide to facilitate the discussion (see Appendix A). This involves a small set of main questions, where some main questions have smaller sub-questions to obtain a more in-depth response. My semi-structured interview guide allowed me to practice reflexivity throughout the interview, meaning I ongoingly reflected on the participants' answers to each question and formed appropriate probes and discussion points in order to explore a deeper understanding of the discussion. Reflexivity is important because it allows me to reflect on my research questions and practice a continual process of ensuring that I understand what the participant is explaining, not only during the interview, but also while conducting the data analysis.

My interview guide is organized so that I could build rapport with the participant by learning about how they became interested in environmental issues. After learning about those experiences, I asked questions about when their interest in climate change began, what climate activism means to them, how they exercise their activism, and how their activism might impact the people around them. Then, I asked questions that followed Benford and Snow's (2000) four-part framework of a collective action frame: identify a (1) problem; (2) cause of the problem; (3) solution to the problem; and (4) ways to urge others to act.

The final questions were focused on hope because climate change is a topic that can elicit feelings of anxiety, fear, and distress. I asked the participants what helps them maintain hope when engaging with climate change and what they hope their climate activism impact is in the future.

Part of the interview process also included a short questionnaire (see Appendix B) which noted participant characteristics. I asked about age, degree and place of education, and where participants had grown up for additional younger versus older cohort comparisons.

Recruitment of Participants

I defined "women" as a socially constructed gender, where gender is a phenomenon that we perform based on social expectations and roles (Alston 2013). I found it important not to define what a climate activist is because I wanted participants to tell me about what this role means to them as well as how they perform its duties. I identified how women were placed in either the younger or older cohort because I followed each interview with a short questionnaire (discussed above) which included an age cohort confirmation question (see Appendix B).

However, an activist is someone who intersects their knowledge of the social and political context surrounding an issue and engages in actions that find solutions to that issue. I wanted to understand the ways that participants engage in solutions to climate change, how they developed those solutions by understanding the problems and causes of those problems, and how they urge others to act on those.

To recruit participants, I contacted them via email to request their participation in my study. I practiced two non-probability methodological techniques: purposeful sampling and snowball sampling. To purposefully sample, I identified potential participants through my social connections with professionals doing climate and environmental work on the University of Montana campus and in the surrounding community. I also used my connections with formal and informal organized groups in the community that are focused on combatting climate change. To snowball sample, some participants that I interviewed connected me with other women climate activists they knew. I was able to gather high quality data because I built meaningful rapport

with participations in a number of ways: I had past introductions or interactions with them before the interview process, I relied on a mutual social connection as a referral for my study, or I shared a similar passion for combatting climate change and made that evident prior to the interview process.

To be considered for my study, each participant had to: (1) identify as a woman; (2) be between 18 and 36 years or 55 years and older; (3) be affiliated with an environmentally-focused organization, institution, program, department, or project; (4) reside in Western Montana; and (5) have a focus on climate change, climate issues, or climate mitigation within their form of activism. This focus on climate could be more explicit, such as within a job title, or implicit, such as when engagement with climate change concerns is not obvious or observable. Participants did not have to engage in paid work for their activism to be considered for this study. For example, they could be community volunteers working on climate change activities and events.

Analysis

Using *Microsoft Excel*, I sorted 207 pages of transcription data from 20 recorded interviews into analysis-ready data. I sorted data into thematic topics through a qualitative method called coding. Coding is the process of assigning meaning to a body of text. My first coding step involved open coding, where I analyzed transcriptions from all 20 interviews and developed main excerpts (i.e., initial codes) which followed the four-part collective action framing structure[3]. Next, I practiced content coding within each excerpt, where I analyzed my

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[3] Identify a (1) problem; (2) cause of the problem; (3) solution to the problem; and (4) way to urge others to act.

data to ensure that each main excerpt, or code, accurately reflected the patterns that were emerging and to which they were assigned. Third, I practiced focused coding, where I categorized my data based on whether it belonged to the younger cohort or the older cohort. My fourth coding step was to more broadly interpret my data as it pertained to each cohort in order to discover distinct patterns and approaches when participants discussed themes and to assess how the cohorts talked about themes in different ways, and to identified how they ranked the importance of each theme. This step enforces the quality and trustworthiness of my data because it allows me to ensure that my data fits my theoretical framework, which is the collective action frame.

Although my findings cannot generalize to a population because I used a non-probability sampling method, the quality and trustworthiness of my data is strong because my study measures what it is proposed to measure: characteristics of collective action frames against climate change as they vary based on age. Not only did I structure my interview guide to ask questions that yield responses that form a collective action frame, but I coded my data based on the collective action frame structure.

Ethical Considerations

Before I was able to collect my data, my project was reviewed by the University of Montana's Institutional Review Board[4]. Before participation in my research, each participant was notified that her identity would not be linked to the data. I asked participants if I could use their direct quotes in my data, and 19 of 20 participants indicated permission to use direct quotes

[4] Institutional Review Board, University of Montana, Missoula, Montana 59812. Project Number: IRB #222-19. Approval Date: November 27th, 2019.

within the written project. The participant who did not indicate permission to use her direct quotes within the written project is not represented via quotes in any part of this written paper.

4: RESULTS

Sample Description

Of the 20 women climate activists[5], 10 women were between 18 to 36 years old (younger cohort) and 10 were 55 years and older (older cohort). Below, Table 1 illustrates each participant's age cohort ("Y" is younger cohort and "O" is older cohort), level of education, place of highest education[6], and geographic location during childhood, as most activists noted interests in climate and environmental issues began in childhood.

Table 1**.** Description of Sample

Interviewee	Age Cohort	Level of Education	Place of Highest Education	Geographic Location During Childhood
IE1	Y	Master's Degree	University of Montana	Georgia, Tenessee, and Montana
IE2	Y	Some College	University of Montana	Washington State
IE3	Y	Master's Degree	University of Copenhagen	New York
IE4	O	Bachelor's Degree	University of Montana	Montana
IE5	O	Master's Degree	University of Montana	Zimbabwe
IE6	Y	Bachelor's Degree	University of Montana	New Jersey
IE7	O	Master's Degree	Pacific School of Religion	Washington State, Vermont, New York, and Montana
IE8	Y	Bachelor's Degree	University of Montana Western	Washington State
IE9	O	Bachelor's Degree	University of Montana	Montana and Oregon
IE10	O	PH.D. or higher	Washington State University	Missouri
IE11	Y	Some College	University of Montana	Washington State
IE12	O	PH.D. or higher	Johns Hopkins and U of Louisville	Kentucky
IE13	O	Some College	n/a	Minnesota
IE14	Y	Some college	University of Montana	Idaho and Alaska
IE15	O	Some College	University of Montana	Ohio
IE16	O	Bachelor's Degree	North Dakota State University	North Dakota
IE17	O	Master's Degree	University of Montana	Ohio
IE18	Y	Bachelor's Degree	Western Washington University	New Jersey
IE19	Y	Bachelor's Degree	University of Wisconsin-Madison	Indiana
IE20	Y	Master's Degree	University of Montana	North Dakota

[5] Because my sample is based on referrals and I knowingly focused on accessing contacts in the Missoula, Montana area, it is likely that graduates and students from the University of Montana will be over-represented and it is likely that themes, emphases, and points of view of faculty and speakers at the university will influence the responses here.

[6]The three younger participants who are current students at the University of Montana were undergraduates and each were enrolled in different programs and departments. Regarding the three participants in the younger cohort who are past students at the University of Montana and three participants who are present students, none were enrolled in any classes or participated in any coursework with me in the past or present. Furthermore, I have not been exposed to any participants in the older cohort through coursework participation or through their affiliation with the University of Montana.

Each participant had to be affiliated with an environmentally focused organization, institution, program, department, or project to be considered for my study, but many participants held more than one of the following positions. Within the younger cohort, seven held positions at local nonprofits, institutions, or organizations within the Missoula community, and three were students who were actively engaged in studying a facet of climate change and spreading awareness to their peers. Within the older cohort, six held positions at local nonprofits, institutions, or organizations within the Missoula community, four activists were on the board of leading national environmentally or sustainability-related organizations, four were involved internationally with climate and environmental action, and three were long-term and consistent volunteers within the Missoula community that were active with climate-related events and activities.

Collective Action Frame: The Four-Part Framework

I followed the four-part framework of a collective action frame to guide my data analysis to focus on how activists (1) identify a problem; (2) the cause of the problem; (3) solutions to the problem; and (4) ways to urge others to act. After analyzing 207 pages of transcriptions from 20 interviews, I identified 37 themes that pertain to the collective action frame. However, Table 2 illustrates the most important themes that were identified pertaining to each portion of the collective action frame. Although there were many similarities as to how the cohorts identified the most important causes of climate change, solutions to the problem, and strategies to urge others to act, the ways in which activists discussed and framed these themes were very diverse.

Table 2. Collective Action Frame Themes

	Themes from Younger and Older Cohorts
Problem Frame	Social Destabilization Exacerbating Inequalities Physical Destabilization Power Struggles
Cause Frame	Industrial Revolution Human Supremacy Mindset
Solution Frame	Ideological Revolution Institutional Changes
Urging Others to Act Frame	Group Level Strategies Individual Level Strategies

Below, I structure my results according to the four-part framework of a collective action frame. For each collective action frame part, I provide the most important themes that emerged, and I compare the age cohorts relative to each theme.

Collective Action Frame: Identification of the Problem

These are the results that pertain to the first part of the collective action frame, which is to identify the most concerning problems having to do with climate change. When I asked all participants to identify the main climate change problems that most concern them, the most common answers fall within four dominant themes. (See Table 3 for a more detailed outline of collective action frame themes that emerged for the identification of a problem. They are ordered from most important to least important in each cohort).

Table 3. Themes Cited for the Identification of a Problem.

Younger Cohort (18-36 years old)	Older Cohort (55 years and older)
Social Destabilization 1. Apocalyptic Devastation 2. Rate of Destruction 3. Violence 4. A Divided Society	**Exacerbating Inequalities** 1. Shouldering the Burden 2. Health Impacts 3. Natural Disaster Mitigation
Exacerbating Inequalities 1. Shouldering the Burden 2. Natural Disaster Mitigation 3. Health Impacts	**Physical Destabilization** 1. Species Loss 2. Loss of the Natural World 3. Natural Disasters
Physical Destabilization 1. Loss of the Natural World 2. Natural Disasters	**Social Destabilization** 1. Rate of Destruction 2. A Divided Society 3. Apocalyptic Devastation 4. Violence
Power Struggles 1. Fossil Fuel Control 2. Administration Barriers	**Power Struggles** 1. Status Quo Lifestyle 2. Administration Barriers

Younger cohort: social destabilization. Seven activists from the younger cohort, representing the majority, said that the most concerning problem relating to climate change is the social destabilization that will likely ensue. Younger activists identified the most concerning ways that we will see social destabilization from climate change. For example, two activists noted the way that it divides society. Climate change has driven a "giant social and political wedge down the middle of people" and as a result, this will have profound effects on our "collective security and faith in our institutions."

Two activists discussed another way that the result of the social destabilization from climate change will occur: violence. One asserted:

> Climate change means higher costs for just about everything and it means less access to food, potentially at critical times. So, when

> people get scared, they get violent. They get violent explicitly or they get violent towards the institutions that they used to trust because they're not serving them anymore.

Another younger activist noted that "when you get stress you get aggression," and "when you get aggression, you get war." In drawing a parallel to COVID-19 and stress, she noted how the pandemic has "disrupted every single person on the planet's daily [life]" and that "climate change [is a] much bigger stressor," especially when keeping in mind that "we go to war over resources."

Another form of social destabilization from climate change that was discussed was the rate of this destruction, but this was only discussed by one activist in the cohort. What felt most pressing for this activist is that it is already happening: "climate change is already affecting people and killing people" but, in terms of visual violence, we cannot track it like "a pandemic" because it "works much slower."

Three younger activists reflected on the ways that the social destabilization from climate change "feels very apocalyptic," where it feels like "the end of the world," or, at least, the end of the world "as we know it." They described that we will not recognize our planet anymore because "peace and prosperity will be minimal."

Older cohort: social destabilization. Social destabilization from climate change was the second greatest concern for the older cohort. Three activists talked about the "unprecedented" rate of this destruction. One said it is "devastating" to have taken place in her lifetime. One activist discussed that the amount of greenhouse gases that have accumulated in "30 years . . . half of in the past 30 years . . . that's during my working years in my career." Similar to an activist in the younger cohort, an activist in the older cohort drew a parallel with the rate of social destabilization to COVID-19. She asserted:

> Look what just happened with it coronavirus, right? I mean, China basically shuts down. [A] massive player in that world economy and they basically have virtually closed their borders and put the country on hold because of a new virus. I think we just saw what the kind of impacts it could be.

Other activists reflected on the ways that the social destabilization from climate change feels apocalyptic, such that "this is a different world." They noted that the destabilization from climate change feels like it has created an "undefinable world" which we have never been through as "human beings before" and we have "no idea how to live" in it. We are on our way to a climate that is not "conducive to supporting human life."

Only one older activist discussed violence. She said it causes a "more topsy-turvy" world. Two activists underscored the way that climate change divides and destabilizes our society, as we are not "working collaboratively and cooperatively" in a way that illustrates how we are part of an "interdependent and interrelated" whole. As a result, we are going to "devolve into authoritarian governments" when society is so destabilized.

Younger cohort: exacerbating inequalities. Younger activists noted that the exacerbation of existing inequalities was the second most concerning problem from climate change. Three younger activists talked about the impacts of climate change from natural disasters on already disadvantaged populations of people. According to one, the "environmental justice implications from climate change should be prioritized." Some examples of disadvantaged populations that were provided by the informants were "impoverished nations at the equator," farm workers exposed to challenging food supply impacts, and those who do not have time and resources to evacuate and rebuild their homes from storm systems.

One activist in the younger cohort was especially concerned about the refugee crisis that is a result of increasingly frequent and intense natural disasters. The same activist also discussed

a concern for climate change-induced wildfires and incarcerated people, as many incarcerated people were recruited to fight the recent devastating California wildfires and earned only $2 to $6 a day.

A few activists in the younger cohort expressed concern for how those who are most affected by climate change are shouldering the burden of the impacts but are the least responsible for climate damage. One claimed:

> I live in a very privileged lifestyle and the fact that we, in the industrialized western world, are largely the cause of climate change, and yet will, because of our economic system and our buffer of privilege, be some of the last people to feel the effects of climate change in a very primal and basic way.

She continued by describing that those who are most "privileged by society" have "the best shot of riding it out," and, even more, those who do not have the best shot at riding it out are having their voices "not prioritized or centered in conversations" surrounding climate change.

Only younger activists argued that the health impacts from climate change to people experiencing "catastrophic events" are devastating. One activist referenced wildfires in Australia while noting that "environmental anxiety" is an increasingly important and distressful issue.

Older cohort: exacerbating inequalities. The major concern of activists in the older cohort were the ways that climate change exacerbates inequalities. Three activists from the older cohort talked about the subsequent health impacts to disadvantaged populations; one activist noted that "there's bound to be more viruses that pop up because of warming weather or warming water temperature," and the affects from COVID-19 are a sneak preview of our future. Other health impacts that activists discussed were "rising numbers of respiratory issues" and "rising levels of cancer," which is an impact of "all that shit being put into our environment." One activist explained that she had "sadness and angst" about the ways that climate impacts the

health of people in disproportionate ways, because those people who will suffer the most will have “foreshortened possibilities.”

Similar to the younger cohort, a few activists in the older cohort talked about how those who are most affected by climate change are shouldering the burden of climate impacts but are the least responsible for climate damage. According to one, “life can become unlivable” for people with fewer resources. Another explained that the people who didn't cause this” are hit hardest. She said that “I can't put my head around [it]. It is the least deserving who are bearing the biggest part of the problems.”

Another activist from the older cohort discussed the impact that natural disasters will have in regard to the exacerbation of inequalities, elaborating on the impact on people who live by an ocean on the coast, indigenous people who live in the Arctic and Antarctic, and people who live in Africa.

Younger cohort: physical destabilization. The third greatest concern for the younger activists was the physical destabilization of the natural world. Three younger activists noted the general loss of the natural world, such as disruptions of natural systems, and the fact that we are reaching a tipping point of “ecological collapse.” One activist emphasized the warning by the Intergovernmental Panel on Climate Change (IPCC) regarding emissions scenarios, where the IPCC stated that we must hold global warming below an average of 1.5°C, and then pointed out that we are on track to warm much more than that. One younger activist argued that physical alterations to our climate resulting in natural disasters involving “pressing infrastructure and flooding issues” are of greatest concern. More intense storms will bring higher death tolls and greater livelihood struggles.

Another activist emphasized that, yes, physical destabilization is an important result, that we should put physical impacts into perspective with “bigger issues,” because many people are “worried about things like losing their home[s].”

Older cohort: physical destabilization. Seven activists from the older cohort ranked physical destabilization as another main concern. Only emphasized in the older cohort, and not in the younger cohort, was the loss of species as a result from the physical destabilization. Four activists were very concerned with the loss of biodiversity: the hundreds of species going extinct every day. This is because “most microorganisms [and] many mammals are niche creatures” and when we lose these creatures, “we've disrupted everything.” Two activists from the older cohort expanded on the threat to microorganisms being a great concern. One stated:

> A lot of antibiotics we use have this antibiotic resistance going on right now. And so we're seeing a rapid change in in bacteria and viruses and that actually is one of the bigger threats that we're going to face from climate change that nobody's really talking about and nobody's really seeing.

Losing large numbers of species and reducing biodiversity means that, right now, we're “committed to irretrievable loss.” She stated that the loss of biodiversity translates to a loss of food supply and food systems, because we will not have “the pollinators, the prey, and the predators.” When we lose species, our natural systems begin to fall apart, and then those systems fail.

Just two activists from the older cohort argued that the physical impacts of extreme weather events that result in rising sea levels, drought, and warming temperatures were of greatest concern. It means everyone will have to adjust. One activist reminded us that in Missoula, we can adjust to different weeds that pop up or different pests that surface in our

gardens, but she wondered how coastal communities adjust to rising sea levels when massive glaciers break off and raise water levels around the globe? "How do you survive that?"

Younger cohort: power struggles. The fourth most discussed problem identified by both the younger cohort and the older cohort was the resulting power struggle between people who control polluting industries and those who fight to tackle climate change. This was only discussed by two activists in the younger cohort. They both emphasized the ways that fossil fuel industries maintain power to perpetuate the status quo lifestyle of overconsumption and overproduction. One argued that fossil fuel companies have exercised "massive propaganda efforts" to "intentionally protect their business model" so that they can continue to hide their "bad motives." She claimed that they even have illustrated a fake divide between climate "believers" and climate "deniers."

> This [climate] conversation is being seen as this 'us versus them' scenario, where this other 'them' is this imaginary giant group of people who don't actually believe in climate change or exist to just cause strife. [It] is really small compared to the group of people who are willing to engage in this work and this field.

This activist went on to argue that the production of doubt has been effective and that we must acknowledge that we "have a communication issue" surrounding power struggles for the frame of climate change.

Older cohort: power struggles. Similar to the younger cohort, the older cohort identified power struggles between people who control polluting industries and those who fight to tackle climate change as the fourth most concerning problem with climate change. Three older activists discussed power struggles that perpetuate the status quo lifestyle of overconsumption and overproduction because our whole lifestyle is "built off of growth" and we "recruit" and exercise the sense of privilege that stems from how we are told we should be living. One explained that

those who have the power and influence are focused on immediate gratification. Another older activist asserted that those who dominate and control our lifestyle choices reflect our inability as humans "to understand cause and effect and think about [the cause] before we create the [effect]. We're much better at reaction than prevention."

Another older activist reflected on growing up in the 1950s, a time where the dominant society bought into efforts that made life easier. For example, toxic pesticides to make lawns greener, gardens bigger, and pests non-existent were normalized by society. Illustrating dominant societal tendencies to value immediate gratification, this activist explained that these practices eventually occurred on a much grander scale. It was not until after environmental and health damage had occurred that society realized the poor lifestyles choices that were practiced, resulting in "devastation on a really large scale." In addition, another activist explained that the Trump administration that is currently in power "will not even acknowledge" our climate crisis and works hard to continue to reframe climate change as a belief, while perpetuating barriers to climate action.

When it comes to the problems that ensue from climate change, the younger cohort was most concerned with the potential of social destabilization, highlighting the way that society quickly becomes divided, violent, and potentially apocalyptic. The main concern within the older cohort was the exacerbation of inequalities, such that some groups will suffer disproportionate health impacts, exposure to natural disasters, or those least responsible will have to shoulder the greatest burden of suffering. Although the younger cohort's second and third perspectives of the main impacts were ranked differently from the older cohort's perspectives, both groups discussed the physical destabilization that will occur, including the loss of the natural world and

the increasingly intense natural disasters. However, the older cohort noted species loss, while the younger cohort did not emphasize this.

Both cohorts agreed on a fourth impact of concern: the power struggles between those who control polluting and exploitive industries and those who do not. For the younger cohort, the main power struggle was identified as the power that fossil fuel corporations have over polluting and politics. For the older cohort, it was the struggle between the status quo lifestyle of consumption and the necessity of changing our lifestyles. Both groups agreed, however, that the power struggle that the current Presidential administration has over resisting and halting climate action is an important problem regarding the issue of climate change.

Collective Action Frame: Identification of the Cause

Two dominant themes emerged from participant answers to the cause of the problem. The first reason, cited by an overwhelming 18 participants, was the Industrial Revolution, as it has led to many negative ideologies and tendencies to exploit the planet. Thirteen activists argued for the second most-cited cause of climate change, the supremacy mindset of humans, how we think of ourselves as a dominating entity with the right to control and claim the planet and its resources. (See Table 3 for a detailed outline of themes that emerged as the cause of the problem. They are ordered from most important to less important for each cohort).

Table 4. Themes Cited for Cause of Problem

Younger Cohort (18-36 years old)	Older Cohort (55 years and older)
Industrial Revolution 1. Corporate Control; Consuming Economies; and Measuring Success by Consumption 2. Fossil Fuel Emissions	**Industrial Revolution** 1. Measuring Success by Consumption 2. Corporate Control; and Consuming Economies
Human Supremacy Mindset 1. Anthropocentric Complex 2. Lack of Collectivity	**Human Supremacy Mindset** 1. Lack of Collectivity 2. Disconnection from the Natural World 3. Anthropocentric Complex

Younger cohort: industrial revolution. Nine of the activists from the younger cohort emphasized that the cause of climate change was the Industrial Revolution because, as one said, it "wastes too many resources," "exploits too many people," and it has put our environment and our climate in this current state.

One of the most emphasized impacts of the Industrial Revolution that was discussed was the subsequent role of fossil fuel emissions. One noted that fossil fuels are like a "drug that is addicting to economies." Once Industrial Revolution began, fossil fuels "literally conquer[ed] the world." Only one activist discussed fossil fuel emissions in Missoula where 37% of total emissions come from transportation. She used this example as a call for action in how Missoula sets up its transportation services and opportunities. The city can lower fossil fuel emissions by providing more biking opportunities, more sustainable transportation options, and by teaching businesses how to use greener transportation practices.

Only one activist in the younger cohort advocated for more power to indigenous communities, because fossil fuel billionaires have a "stranglehold on American politics." She argued if people challenge fossil fuel power and support indigenous communities, they challenge

the root cause of climate change. However, she also pointed out that the role of tackling fossil fuel emissions and the entities who have polluting power can be portrayed as a problem so big and hard to comprehend that it becomes “incomprehensible and insurmountable” to deal with.

Three activists from the younger cohort insisted that the Industrial Revolution has created a society in which we measure success and progress by consumption and production. One activist framed progress, however, as part of human nature. From a biological standpoint, the Industrial Revolution makes a lot of sense, because, as she explained, that is “what life does.” It progresses so that our existence can remain. She said we developed tools and grew crops, and that is how we “improved our state.” She concluded that the Industrial Revolution, then, makes a lot of sense.

What she reaffirmed, however, is similar to how another activist explained that whereas we believe progress is natural, the Industrial Revolution has focused on progress in terms of developing “only in material goods,” rather than focusing on the development of “communities and [the] development of relationships.” A third activist agreed with this stance, arguing that the main cause of climate change is the way that we use our economy. It is very “divorced from any sort of management” that “actually sustains our lives.” This activist argued that the mentality of the Industrial Revolution is a “made-up, hypothetical reality” that has led us to believe that it is the best approach that meets our needs, will sustain us for the long-term, and is inevitable.

Two activists from the younger cohort reflected specifically on the consumptive values that the Industrial Revolution perpetuates, emphasizing the system, ideas, ideals, and functions of capitalism. One examined the functions of capitalism within climate change in her interview:

> I'm someone who's incredibly privileged and I've benefited a lot from capitalism. But I do think that a lot of the inequalities inherent in capitalism, as it currently functions, have allowed us to

> ignore climate change and ignore things that could have helped prevent climate change, or prevent it getting to this level.

For some of the activists, capitalism, inherent to the Industrial Revolution, is just this "theory of needing more" and a mindset of never having enough, or never having things that are "good enough."

Only one activist in the younger cohort debated this argument. She described that the dominant consumptive mindset is not specifically inherent to our economic system. She explained that capitalism can exist without degrading out natural world, but that it is us up to the people to change the values of industries and corporations to achieve a sustainable version of capitalism.

Older cohort: industrial revolution. Similar to the younger cohort, all but one member of the older cohort argued for the Industrial Revolution as the top cause of climate change. However, what was most heavily asserted by the older cohort was the role of corporate control, the consumptive nature and values of our systems, and how the United States measures success by consumption and production.

Four activists reported on dishonesty within the corporate world. One explained that corporations are the "Merchants of Doubt." They have diverted us from valuing the common good. She said they did this by "lying, dissembling, and covering up" the evidence of climate change on a large scale. Another activist felt ashamed of her generation for buying into corporate lies that ignore the idea that if we continue to wreck the environment, we wreck the world for our children and grandchildren. A third activist confirmed the role that corporate dishonesty played in the climate crisis:

> After the first hundred years after the Industrial Revolution, we were all oblivious, except for a couple of scientists, who mentioned in passing that this might happen. But sadly, given that we've

> known about it for the past 50 or 60 years, unfortunately, it's been the hushing of the science and the discrediting of the science, mostly by fossil fuel industry.

A different activist had a similar argument, examining the role played by "elected officials who work for Exxon Mobil," to corrupt leadership in labor movements, to people in power who knew what they were doing was wrong, but were doing it anyway. There are many systems and people to blame, and, importantly, as she asserted, people do not seem to ask who is to blame, and maybe they should.

Four activists in the older cohort focused on discussing the consumptive values promoted by the Industrial Revolution. The "growing worship of money and greed" is "astounding" in its ability to allow us to forget the value of humans. One activist claimed that these consumptive values were driven in the early 1940s and 1950s by the rise of the advertising industry. This multi-billion-dollar industry tells people, every single day, that "if we just buy this house, buy that car, and have these clothes, we will be happy." In addition to material consumption, we use too much energy. Yet, she demanded that we refrain from blaming other high-polluting, energy-consuming countries for causing climate change, such as China or India. This activist urged us to ask: "Why is China using as much energy as it is?" It's because "they're producing shit for our markets." U.S. consumers, with their consumptive values and practices engrained in them at the beginning of the Industrial Revolution, are driving industrial manufacturing in China.

Four activists demanded that we critically understand the ways that people measure success. They argued that our systems are "based on growth," allowing us to live like "kings and queens" and, with ease, taking things for granted. Decisions that were seen as positive years ago are now, as we understand their impact, "bad choices." One activist said that because we made choices, we can choose to understand progress and growth in different ways.

Only one activist in this cohort reflected on countries that measure their gross domestic product as happiness. She suggested that we ask ourselves how we can get there. How might we change to measure our success in terms of “environment and equity” as opposed to “capitalism and comfort?” Concluding this idea by posing a question, this activist asked, “What if the value of human life was not measured by what we have?”

Younger cohort: human supremacy. The second greatest cause of climate change identified by eight young activists was the supremacy mindset of humans. They emphasized it in two ways. First, the ways that humans exert supremacy over each other. These result in a lack collectivity with each other, and thus a lack of ability to collectively respond to an issue like climate change. Second, the ways that the majority of lifestyle choices favor humans without thoughts of consequences to other species. This results in a lack of acknowledgment for the role that humans play within a bigger collective system of all species that exist on the planet. This lack of collectivity was the second most cited cause of climate change for the younger cohort.

Five activists in the younger cohort argued that because we have prioritized the human species over all other species, we see ourselves as “other,” rather than as a piece of a collective planet. One said that we have reached a level of “impressive power” over our planet, while at the same time, having “animal brains” ourselves. She continued, explaining that this makes it hard to understand the idea that we have “destroyed” everything around us because it is we who have led us to our demise. She encouraged people to reflect on the book *Ishmael* by Daniel Quinn:

> It's a narrator who is actually a gorilla talking to a human male. It’s a teacher-subject relationship, where the gorilla is the teacher, and he is explaining the mythology that humans have adopted, and that we continue to live by. The core to that myth is that the very root of our problem is our supremacy as humans over other life. I still make decisions, sometimes, in ways that don't quite align with what I would like to believe or are my values. At the heart of our predicament, and all of our environmental challenges, and

> probably most of our social challenges, is that humans think that they're better than every other part of our natural system. We have these big brains, and I totally get how we ended up here.

Three other younger activists talked about the Anthropocene, which some recognize as the current geological epoch, recognized as the era "shaped by humankind." Just one younger activist used this concept. She warned about the ethical dilemma within this term, where, in fact, it has not been all humans that have been impacting our environment in such negative ways. The industrialized world can take "significant blame" for its impact, but by buying into the term Anthropocene, people absolve themselves of any personal responsibility for the current state of the environment. She said, in addition, it is not all humans who are living in such destructive ways. As a result of humans' power over the planet of species, one activist viewed humans as a whole as a "parasite on the earth; myself included." Soon, before we know it, the earth is going to figure out "how to get rid of us" and "she's going to keep on going." This activist concluded that "humanity is like a grain of sand" within the history of the planet. She said that we are but a glimpse, and it is bad that we are changing it so drastically without respecting it.

The second way that the younger cohort framed the mindset of human supremacy was by discussing our lack of collectively acting together. Four activists explained that this was a cause for climate change because it means we cannot collectively respond to issues like climate change. One activist argued that our planet is "diseased and dying," and the degradation of our planet is a symptom of the degradation of our collectivity as humans. She said that "negative [human] emotions of jealousy, fear and rage" contribute to the sickness of the climate. She explained that these emotions drive the pursuit of power over each other. This breaks down our larger community of humans. The result is an inability to respond collectively and effectively to

an issue. Another activist pointed to the “hustle, hustle, hustle” mindset of seeking power and resources as a contributor to the breakdown of our collective approach.

Only one younger activist noted that our society is “built on exploitation.” She argued that it was built by putting resources and power into the hands of the few, which has devastating effects on both other people and the planet. She drew a parallel to how our human supremacy mindset drove industrialization itself. She described this by emphasizing how the level of industrialization that we have reached would not have been possible without two things: colonization and slavery. She said that our version of capitalism in the United States is racially influenced and would not have been possible without a lack of universal collectivity; it would not have been possible if we saw others as valuable and equal. Moreover, she observed that valuing our land and water for itself and for its capacity to sustain us is contradictory to our economic system. This is why she explained that “indigenous organizing” is the most powerful threat to our current system because it’s so contrary to exploitation. She concluded that a culture that is “divisive” and “punishing” to each other is a culture that contributes those tendencies to the devastation of the climate.

Older cohort: human supremacy. Five activists argued that the supremacy mindset, the belief that humans have supremacy over the rest of nature, is the cause of climate change, and though they were mostly parallel with the ways that human supremacy was discussed in the younger cohort, the older cohort framed human supremacy mindset differently.

Three activists asserted that the mindset of human supremacy has caused disassociation from and disrespect of the natural world. This is a perspective of a human supremacy mindset that the younger cohort did not discuss. As one older activist explained, our reliance on technology and the ways in which we are “glued to our phones” results in a lack of respect for

the outside world because we do not spend as much time with it. She said that when we do not respect the outside world, we take it for granted. A third activist had a different approach to explaining our disassociation from the natural world as a cause of climate change, claiming that perhaps we resent our reliance on our natural world, meaning we do not see ourselves as a collective part of its systems, making it natural for us to "take and not to give."

Three activists in the older cohort asserted that our lack of collectivity has acted as a barrier for climate action. This was a similar stance to the younger cohort, illustrating that a lack of collectivity with each other means we cannot collectively respond to an issue like climate change. One activist in the older cohort suggested that we think about how Rachel Carson's 1962 book *Silent Spring* urged abrupt and large-scale action to ban DDT within five years because people, collectively, took to heart the negative impact that DDT had on human and environmental health. Another activist acknowledged the disassociation from, not only the earth, but from each other, as "nationalism" and "defensiveness" have worsened climate change. A third activist contributed to this argument, emphasizing that we think of other people as "remote from us," and we think of climate change as "happening to 'them.'" If they're not North American and White, then they're "small" and "nobody really cares." She continued, what we do not realize, however, is that someday, we are "all going to be climate refugees."

A similar stance to the younger cohort, three activists from the older cohort focused on the human-centered approaches to the ways that we dominate our world, where we do not understand ourselves as "part of an interconnected, interdependent, and interrelated whole." Rather, as one older activist claimed, we think we can innovate ourselves out of our environmental problems. We see nature as something of an "alien other," or as something to be subdued and conquered." She asserted: "Yes, let's recycle. But, let's [also] examine our

foundational relationship to the natural world or nature." Another activist supported this stance, emphasizing that much of what we do is "based on what we consider our right." Thousands and thousands of years ago, people were likely also striving for power and success. The "failure of great civilizations" often occurred when so much power was achieved but was only held by the top 1%. This led to the catastrophic degradation of that society and also of the earth. A third argued that disrespect for other species, other nations, other races, and other genders results in a lack of love and justice for the natural world. For example, one activist concluded that it is disastrous to see humans as separate from the natural world, and to assume ourselves as the "crown of creation" because it requires the dominance of nature. Another concluded that we have an "evolutionary opportunity" in front of us to mend those broken bonds and reignite respect for others and the planet.

Both cohorts agreed on the main cause of climate change, citing the Industrial Revolution. However, the ways that they reflected on why the Industrial Revolution was the main cause differed between cohorts. The younger cohort highlighted the control that corporate industries gained over all facets of society. They were also most concerned with how our economy is structured to promote consumption and how we measure success by consumption. The older cohort instead felt that the ways that we measure success by consumption was the main reason that the Industrial Revolution has caused climate change. Their second emphasis was the control of corporations over social systems.

Both cohorts also agreed that the mindset of human supremacy is the second cause, but they talked about this mindset in different ways. The younger cohort highlighted the human-centered nature of our lifestyle choices, where we disregard consequences to other species. They also focused on discussing how we lack collectivity with each other. The older cohort discussed,

first, that our lack of collectivity with each other is the main cause. Secondly, they were concerned that we are disassociated from the natural world, distracted by technology and unappreciative of the natural places around us, but the younger cohort did not mention this.

Collective Action Frame: Solution to the Problem

Activists emphasized two dominant solutions: an ideological revolution that would allow us to reexamine the ways in which we think about ourselves, other people, and our place in the natural world and the need for institutional changes that shift the way in which power is distributed as a solution to climate change. (See Table 5 for a more detailed outline of collective action frame themes that emerged for solutions to the problem. They are ordered from most to less important within each cohort).

Table 5. Themes Cited for Solutions to the Problem.

Younger Cohort (18-36 years old)	Older Cohort (55 years and older)
Ideological Revolution 1. Holistic Thinking; and Reconnecting with Each Other 2. Individual Responsibility 3. Education	**Ideological Revolution** 1. Holistic Thinking; and Reconnecting with Each Other 2. Individual Responsibility 3. Reconnect to Nature; and Sense of Urgency 4. Education
Institutional Changes 1. Redistribute Power and Resources 2. Equitable and Outcome-Focused Policies	**Institutional Changes** 1. Redistribute Power and Resources 2. Equitable and Outcome-Focused Policies 3. Sustainable Technology

Younger cohort: ideological revolution. Eight activists in the younger cohort determined that an ideological revolution is the best solution to climate change, as we need to change the foundational ways in which we think and operate in regard to each other and our individual selves within the natural world. There were a variety of ideologically revolutionary approaches that younger activists denoted as solutions to the climate crisis.

Four younger activists asserted that we need to reconnect with each other by treating others with kindness and compassion. One explained that treating each other with kindness and compassion might mean that we spend less on our military budget and invest more in solutions to climate change. She expanded:

> Look at the amount of money and resources we put into prisons; into this idea of never forgiving people; into this idea of slavery reincarnated; into treating others as if they're nothing. That doesn't come from feelings of kindness and empathy and compassion.

Another reaffirmed the role that kindness and compassion can play as a solution to the climate crisis because reconnecting with each other in those ways means that we care about the people living in developing countries; we care about the people living on coastlines and the people in California experiencing devastating fires. It means that people make choices that are not ignorant, but rather, choices about how we get our energy and where we get our resources from are informed by the ways in which the results of our behaviors impact other people. She urged us to understand that even if our federal administration does not have empathy and compassion, that we still can. The ways in which we can have empathy and compassion are, for example, by "strengthening our interpersonal connections." A third activist claimed that not only are strong interpersonal connections good for climate resiliency, but if one has a strong social network, they are less likely to depressed and overwhelmed about climate change. Another activist said that another way we can reconnect with each other is by listening, without judgment,

to others. Validating their experiences, acknowledging their circumstances, and allowing them to be vulnerable are ways that we can reconnect with each other and build a collective network, because "ideology is how we got here," but it is also how we can build community and a connection.

Four activists in the younger cohort argued that an ideological revolution must consist of systems-thinking approaches to climate change. One activist explained that our global systems are much like our ecosystems; they consist of feedback loops and interrelationships that are constantly changing and adapting. As a result, we cannot tackle climate change by "one parameter at a time." Instead of an "instant gratification and hyper-individualistic" approach, we must do work that will sustain the climate for the "long haul." Another activist similarly thought about solutions having to be adaptable and flexible so that various geographic communities can adopt them, and so that the needs of the most marginalized are centered.

Just one activist articulated that a holistic approach means centering "black feminism theory, feminist theory, black voices" and perspectives that are most marginalized. If we create holistic solutions that benefit the most vulnerable, then everyone benefits. Rather than saying, "fossil fuels are bad; end of story," we can create jobs, grow food, and adjust energy systems to move to sustainable energy sources.

Three activists believed that an ideological solution to climate change incorporates an emphasis on individual responsibility for action during the climate crisis. One activist explained that climate change feels like a "moral obligation." She posited that if those of us in our industrialized Western culture do not do something about it, then we are blind beneficiaries of a society, culture, and a line of people who caused this climate crisis. Yet another activist insisted that it is our job to find meaning and value in our chosen work; we must "give ourselves to

something greater than ourselves." Although the younger activists felt a significant amount of grief from climate change and responsibility to the issue, they similarly found meaning in their own work, allowing them to feel committed and impactful. A third activist contributed to the perspective, emphasizing finding meaning and value in our work so that we look at "work," or "climate work," as something "purposeful and productive" rather than "something we have to get through" in order to have enjoyable times. Reframing perspectives of engaging with responsibilities to the climate crisis is a solution, because by changing our attitudes and perspectives, we alter our societal foundations.

One activist in this cohort indicated we need education that is revolutionized. She said that education must teach that collective action on climate change cannot happen without collective action that addresses inequalities. Education is key to thinking about how inequalities are exacerbated by climate change, and why it is unrealistic that everyone takes individual responsibility for more climate-friendly lifestyles. She insisted that education systems must teach people about how climate change exacerbates inequalities and how we can't place homogenous expectations on everyone to combat climate change.

> People get very frustrated with people who seem like they don't have the time and interest in recycling their cans, or not using plastic bags. But, when people are concerned about putting food on their tables and feeding their families and finding a place to sleep at night, it's not their top priority. . . it's not always their fault that they don't have time or money buy or invest in a reusable bag rather than a plastic bag.

A solution to climate change, then, is education that teaches us where to place our frustrations about the difficulty of collective action around climate change, and the steps that need to be taken to get there.

Older cohort: ideological revolution. Similar to the younger cohort, the older cohort's most cited solution to the climate crisis was an ideological revolution. Four activists agreed for the need to reconnect with each other. One activist reminded us to think about the things that really give life meaning: "Is it everything you got from Target the other day that will end up in a landfill? Or, is it family, friends, our connection to nature, and our engagement with community?" Similar to activists in the younger cohort, one older activist stressed the need for "compassion, kindness, and generosity." When we value these attributes, we value community, and we find groups who support our values. Another older activist explained that reconnecting with people will allow us to find support groups for people dealing with anxiety and distress around climate change. We must also remind ourselves that we need to reconnect with the people who are passionate about work that protects the climate. As another activist observed, there are millions and millions of people and projects around the world that are headed in the right direction. There are millions of individuals who are working towards a healthier climate.

> There's 1% of humans that are psychopaths, and another 4% are sociopaths. So that's only 5%. The other 95% of us actually want a healthy world, and we want kindness and we want concern for each other.

Her argument explains that if we can figure out how to connect ourselves to others who are committed to doing something drastic about climate change, then we can find many ways to contribute, as a collective group, to the problem.

Four activists among the older cohort, like the younger, believed that we must have systems-thinking approaches to climate change such that, as one activist put it, "whatever we do, we think about why we are doing it." One activist reported that in the Missoula community, we need a diverse set of people, where, for example, we have someone working on energy, others on ecosystem adaptation, and so on. Weaving together solutions and approaches from multiple

angles and perspectives allows us to look at climate change with different scales and from different levels. Another activist echoed her, explaining that, "we need this thing happening while that thing happens and then this thing, and so on" because solutions need to be multi-faceted, originating from different angles. "Grassroots efforts and government efforts" happening at once can truly have a big impact.

The older cohort argued that a holistic approach to climate change must address inequality, because we "cannot tackle climate change without tackling inequality." One activist declared that this is an "all-hands-on-deck" type of situation. All governing decisions, systems, and organizations must address climate change and inequality, because we don't have time *not* to. If we do not holistically understand and approach the climate crisis, we won't have governments, systems, or organizations at all.

Three also focused on the necessity for taking individual responsibility for one's role in fighting climate change. Two activists in the older cohort, and none in the younger cohort, noted that we must promote a sense of urgency surrounding climate change. One acknowledged that although climate change feels dire, if we individually give up hope, then we collectively give up hope. Another explained that if people do not feel hopeful, then they will give up. However, we need everyone to do what they can. Ensuring that people feel like they are making a difference when they fulfill their individual responsibility can have a "compounding effect." Everyone must start somewhere, and each person doing something adds up. If the compounding effect adds up, then big powers start to listen and things start to change. One activist called for individuals to understand how their actions can also have negative impacts. She asked whether instead of choosing to travel all over the world, what if we were to stay here, and enjoy what we have? At some point, in addition to system changes, we need to make individual changes.

Just one activist within all 20 participants (in the older cohort) said that we need to promote a spiritual reconnection with the natural world, where if we fall in love with our natural world, then we are more likely to protect it.

One activist in the older cohort (similar to only one activist in the younger cohort) argued for education. She urged education that helps people understand the climate crisis in such a way that allows them to establish a connection to it, because a lot of what education encompasses is "changing values."

> Major events over time, [like] the recession and the significant weather events that we've had across the globe, seems to wake people up for a while. How do we stay awake longer? And I hope it's not because we keep having more catastrophes. I hope it's because we change our values and our understanding, based on education.

She believed that an experiential education can help us understand our ecosystems. For an example, she posed concepts that we should be teaching in our educational systems: "What is a tree? What is a wetland? What do these things do, and how do they sustain life?" She argued that education can help us care, because if people do not understand why species are dying, then when will they care?

Younger cohort: institutional changes. Six activists from the younger cohort argued for institutional changes as a solution to climate change. This was ranked as the second most important solution. One said that we need to "fundamentally rethink the way we run our institutions" and the way we distribute power and resources. Another activist thought of climate solutions more systematically rather than individually, focusing on tackling the system from the top-down to allow us to divest from dirty energy sources and regulate emissions. A third activist confirmed this approach, where devolving hierarchal power is an important effort to divert power

to localities. That way, local systems will have more resources and a better ability to, for example, grow and consume their own food, their own energy, and their own materials.

One younger activist wanted us to question the notion that corporations have only negative impacts. She pointed out that corporations can also play a big role in changing systemic issues, but we first need to focus on how corporations can change themselves. Another echoed this perspective by arguing that, although polluting, consumptive, and exploitive industries exist, they exist "in their definitions," meaning that we can define them differently so that they are not consumptive and exploitive. She further argued that although most of them are "looking to serve themselves," these industries, supposedly, are meant to serve us. Because they are meant to serve us, they have the potential to still exist for us in ways that are sustainable and climate-friendly if we can change their definitions. One activist added to the idea that redistributing power and resources is essential if we are to find sustainable, long-lasting institutional changes. In addition, when we are able to make change and redistribute power and resources, we must center marginalized voices in climate issues. Another expanded on the kind of resources that need to be redistributed by focusing on economic inequality. Because the wealth gap is so large, it is impossible to represent the majority of people's interests. Putting women's and indigenous movements in the center of climate conversations, for example, means that we are focusing on protecting and advocating for all people's interests.

Three activists in the younger cohort focused on institutional policies that are centered in both equity and outcome. From an industrial point of view, one reflected on how policies like the Clean Air Act and Clean Water Act allow us to understand our impact and the amount of good that they brought. Another activist asserted that the Green New Deal is a governing solution and agenda that addresses the "issue at the scale of urgency that it needs to be addressed." If we

rapidly transform society, we need to ensure that we are *actually* changing and uplifting people's lives for the better. Measuring outcomes will help us assess whether or not it is not just "another sacrifice on the part of the working and middle class." In other words, we will not know progress unless we measure it.

Older cohort: institutional changes. Similar to the younger cohort, the members of the older cohort argued that institutional changes are necessary solutions to combat climate change. The same as the younger cohort, six activists in the older cohort emphasized how we must redistribute power and resources, but the older activists emphasized how individuals can partake in this shift by being politically and civically engaged. One activist declared that we must "pick leaders who will take this problem seriously." Another had the same idea, noting that we cannot be civically engaged as "warm bodies." We must be actively engaged. For example, we can give our money to candidates who will do what we need. Another activist reaffirmed civic engagement, explaining that voting is key, especially for candidates who recognize that fossil fuels need to stay in the ground. And another declared that putting people in power who will invest in renewable energy and storage will push us in the direction we need to go.

One activist believed that "real leadership" is the necessary solution for positive institutional change. She said it ensures that power and resources are going to climate-friendly changes. She reflected on what strong leadership looks like, when during the oil embargo, Jimmy Carter "put on a sweater and turned the thermostat down in the White House."

Also similar to the younger cohort, three activists in the older cohort said we needed institutional policy solutions that are focused on equity and measured outcomes. One explained that, in their profession, they constantly assess their effectiveness. We do not need to be "slaves to the data," but we do not have time to waste with just "good ideas." She wondered, are those

ideas truly effective and outcome-oriented? And, as stated by another activist, do those ideas have proceeds that will "go back to the poor people?" For example, if we put a price on carbon, then virtually everything will increase in price, and it will disproportionately impact those who are poor. If we reframe these policies to make them more equitable, then we are measuring progress while focusing on equity. Similar to an activist in the younger cohort, only one older activist proclaimed the Green New Deal to be an intertwining, solution-oriented approach to many societal and climate issues that will ensure all of us are better off, rather than the top 1%.

Three activists in the older cohort and none in the younger cohort emphasized the importance of sustainable technology and innovation as solutions to the climate crisis. One warned that technology and innovation must not be some "crazy, wack-a-doodle thing of spraying some other substance up into the atmosphere" where we do not know the consequences. Institutional innovation must be holistic, such that we understand its impacts. Another activist discussed pulling carbon out of the atmosphere with both real and mechanical trees. A third activist pointed out that we must pull carbon out of the atmosphere with a carbon sink, and, stated that we can plant a million trees, but we still need to capture carbon immediately. Even if we stopped fossil fuel emission today, said another activist, we will not stop climate change tomorrow. We must pull carbon out of the atmosphere and put it back into the soil and the ocean. Regenerative agriculture is an approach that requires us to ask: What would nature do?

> Carbon is a major food source for plants. What we have to do is figure out how to get the carbon back into the soil and in the oceans because nature will deal with it. And regenerative agriculture is one of the ways to do this. And, of course, there are ways to do it in the ocean as well. But industrial agriculture is a big driver of climate change because of industrial fertilizers, pesticides, and monocultures . . . And the reality is, while in the United States we're doing a lot of industrial farming, and of course in some other Western countries, the majority of farmers in the world are small farmers . . . So, if we actually put systems in place

> that encourage that kind of farming and trained people, we could turn this thing around.

She also reflected upon learning about regenerative agriculture. Feeling previously depressed and discouraged from the reality of climate change, she noted that regenerative agriculture was a solution that had the greatest potential for the necessary positive, drastic, and large-scale institutional change.

When it came to the most dominant solutions for climate change, this framing portion was very similar among both cohorts. Both agreed that the priority solution is an ideological revolution, and specifically, it is by enacting holistic, systems-thinking approaches to the climate crisis as well as reconnecting with each other and building resilient communities that value kindness and compassion. The cohorts also agreed, next, that we must promote individual responsibility for what each person should be doing to help combat climate change. The cohorts also discussed education in which the focus is on holistic concepts, like inequalities or experiential approaches, is a solution. Two solutions, however, were noted by the older cohort and not by the younger cohort: reconnecting to nature in an effort to see ourselves as one piece in an interconnected world, and promoting a sense of urgency surrounding the issue of climate change.

The second dominant solution for climate change was also agreed-upon by both cohorts: institutional changes. The first change that both cohorts argued for was the necessity of redistributing power and resources so that it is in the hands of many, and not a few. The second change, which was also agreed-upon by both cohorts, was to implement policies that are focused on equity, and that can be measured so that we know if we are making an impact. In other words, we must enact outcome-focused policies. There was one last solution mentioned by the older

cohort, and not by the younger cohort, which was sustainable and innovative technology that helps us get carbon out of the atmosphere and is focused on long-term results.

Collective Action Frame: Urging Others to Act

When I asked participants to tell me about ways they urged others to act, many noted this a difficult question, and two dominant themes arose. Eighteen activists talked about ways to urge others to act that occurred at the group level, focusing on how a collective group of people fighting climate change should urge others to act. Nine activists focused on ways to urge others to act at the individual level, emphasizing ways that individuals who combat climate change can urge others to act. Table 6 shows how strategies urging others to act differed for the two cohorts.

Table 6. Themes Cited for Ways to Urge Others to Act

Younger Cohort (18-36 years old)	Older Cohort (55 years and older)
Group Level Strategies 1. Common Ground 2. Promote Urgency 2. Empower People; and Frame for Feeling 3. Bite Sized Pieces	**Group Level Strategies** 1. Empowering People 2. Frame for Feeling 3. Promote Urgency; and Bite Sized Pieces 4. Common Ground
Individual Level Strategies 1. Kindness and Compassion 2. Normalize Climate Change	**Individual Level Strategies** 1. Normalize Climate Change 2. Kindness and Compassion 3. Model Sustainable Behaviors

Younger cohort: group level. Nine activists in the younger cohort identified a variety of ways to get others to act by focusing on group actions. Four activists said that finding common ground around climate change, or "tailoring your message" in a way that provokes the biggest impact to your "target audience," is an approach to ensure that climate change does not go "over people's heads." For example, one activist explained that when framing sustainability efforts within an institution in which its main purpose is not sustainability, these goals are not framed as 'sustainability goals.' Rather, they are framed as "institution-wide goals" so that everyone feels like they are working towards a common goal. For example, in framing a sustainability campaign that focuses on reducing paper waste, a visual graph shows the workers of an institution how much paper was being saved by the institution on a month-to-month basis.

Efforts to find common ground are also "on the ground." One activist explained that urging others to act takes diverse forms. "It's talking to people. It's putting on events. It's tabling at other people's events. It's writing posters." Another activist agreed that we must find common ground to urge others to act, but gave an example surrounding the transition away from fossil fuels. Maybe they "do not care or know that climate change is happening right now" and that it is going to affect them. Rather, they care about maintaining their job and their ability to meet their basic needs. This activist suggested that we urge these people to act towards climate change by positioning climate change in a job-centric perspective by saying, "Look at this job! It has more longevity, it pays better in the long run, and it has many other health benefits and it's healthier for natural resources."

A different activist explained that the term "climate change" does not frequently come up in their work, because they take intentional efforts of "wrapping the case for sustainability" in the bundle that is appealing to a certain perspective. For example, this activist takes many steps

when navigating professional relationships to make those with whom they work more aware of the challenges they will face that pertain to socioenvironmental issues: no one wants to face health insecurity or financial insecurity, so if we promote initiatives that protect human health and secure financial longevity, then we are also promoting sustainability initiatives. In short, activists urged figuring out the common ground that makes sense to the audience so the audience can translate climate change through the lens of their worldview.

Three activists from the younger cohort argued that when urging others to act, a sense of urgency must be promoted. One activist said that she approaches the climate crisis through a lens of, "We have to act now!" If we keep framing climate change as a faraway issue that we will have to deal with in a future world, then we absolve people of any notions of an obligation to act on climate change. A second activist said that to get people "fired up," and to promote urgent climate action, discussion of the urgency through the lens of the steps we need to take is critical to reach common goals, one of which is a "livable future." Instead of focusing on what is preventing society from getting there, people can shift their focus to recalling what they are working towards, and work toward that goal with urgency.

Shifting the focus of urgency was also discussed in focusing urgency on the goal of getting different groups of people involved in climate issues. One activist reflected on whether it is worthwhile to engage with this "other big, giant, imaginary group of people" who do not believe climate change exists. The fake "us versus them" scenario pushes the divide that inhibits climate action. When a focus is placed on the urgency of including the "other" group, activism moves forward more effectively and efficiently. Another activist explained this approach by drawing a parallel to the experiences of trans-people in the LGBTQ+ community, and how, historically, they have been left out of organizing efforts in the LGBTQ+ community because

their rights have been seen as a more “difficult issue to surpass” so they are left behind. This activist said this is a slippery slope because we are leaving behind groups that need to be included in order to combat the social and environmental issues at hand. She explained how this also happened during the women’s suffragette movement in the United States, where white women said, “Okay, we’re going to figure out how to vote, but we’ll come back later and make sure women of color can vote. We’ll get there.” If we are talking urgency in climate action, then we need to make sure we’re not moving forward without these “other” groups.

Only two activists in the younger cohort believed that framing climate change for feelings and emotions strikes a chord in people and “makes them comfortable” with the issue. So, the activists argued that if we really want to get people to act, we have to make them comfortable rather than scared. One activist acknowledged that climate change can be a “trigger word” for more conservative individuals, sparking emotions of rage and defensiveness. Although experts should not “sugar-coat” climate change, they can talk about the issue in ways that spark more resonant emotions. A different activist said that they focus on urging others to act by engaging their “hearts and minds.”

Two younger activists urged that we need to focus on empowering groups of people so that we spark hopefulness and positive energy in order to act in solution-oriented ways. One activist focused on tone when communicating climate change, such that information is paired with a communication about hopeful solutions. She said it is empowering to urge others to act by framing climate change as a challenge: what can experts continue to keep doing to move in the right direction? A second activist supported this approach:

> I don't know how to make it not scary because it's a scary, it's fundamentally a scary issue. It's talking about our demise down the line. But I think that the solution is that it's mostly scary because you feel like you don't have a hand in it. It’s like standing there and

> watching something coming towards your face, like a car or train coming towards you, but you can't move. How many people have that dream? [It's] the scariest one because they're totally helpless and frozen. So making people feel like they can step out of the way. Or, [they can] call the train operator and stop the train. Giving them the sense that they have the potential to change how things are going makes it less scary . . . Changing the way that people consider themselves in relation to the world where they feel empowered that they have a voice.

With more empowerment and sense of control, this activist concluded that the monumental implications for the next several centuries means that, rather than screaming into a void, activists are screaming into an "echo chamber," where they can hear the other people in this fight, too.

Two activists in the younger cohort explained that urging others to act occurs if we communicate climate change in bite-sized pieces. One said that it is done by putting complex climate ideas and information into the simplest form. It is communicating climate change and sustainability knowledge as "professional skill sets." It is "using less jargon," and using vocabulary that people who are not climate scientists can understand.

Older cohort: group level. Nine activists in the older cohort discussed ways to urge others to act that occurred at the group level; four of them noted that empowering people to act is done through storytelling rather than facts and figures. One activist explained that telling stories of climate change that emphasize the sense of community and agency ignites an urge to act because stories help others understand that, if people "pull together and act together," then they can "bring the system to its knees." A different activist said that urging others to act means that, sometimes, we emphasize being able to act is in itself a relieving and empowering thought. One activist felt most mobilized to act while listening to Gretta Thunberg's message that asks people to "join us," where the keyword is "us." This activist argued that to join an existing group is empowering because it means that there are many others who will work alongside each other.

Another activist emphasized that even if people are not experts on climate change, but they understand the issue, then they can connect with others to join “climate spaces.” In fact, she explained one of the main goals of some of her initiatives and events is to help people find places and groups to join, whether they “act, advocate, or assist,” they can get plugged into climate action.

Three activists in the older cohort explained that discussing climate change in a way that sparks emotions means that, as one activist put it, experts do not “beat them over the head” with climate facts and statistics and tell them to “wake up!” Instead, it means that experts make climate issues local and personally relevant, so it ignites an emotional connection to a personal experience. For example, one activist talked about the power behind climate change-induced wildfires when Sperry Chalet burned down in Glacier National Park in 2017. These stories can make climate change much more personal and sadder, and people will want to act to prevent those occurances. Another activist verified the way that we urge others to act by making issues more local and personal. She described that, when getting others on board with climate solutions and sustainability efforts, experts bring issues “close to home” so that people can “feel them” or “touch them.” It makes people wrap their minds around the fact that this is happening here and this is happening now.

An informative example of this this concept is explained by one activist. She described how the Missoula community convenes at Fort Missoula for a wide array of community events, community sports leagues, community programming efforts, and much more. The soil at Fort Missoula was created by using local materials such as woody debris and wastewater affluent mixed with poorer quality soils. If, one day, Missoula finds that it needs local agricultural land for more food at home rather than space for a sports turf, then Fort Missoula will make some of

the best agricultural land that consists of homemade, prime soil. Telling local stories like this make sustainability efforts and climate adaptation approaches more personally relevant and comprehendible to get others on board.

Three activists explained that promoting urgency around climate change advances efforts. One activist emphasized the ways in which urgency can influence us to "really put ourselves out there" and put our "bodies on the line." She also asserted that no matter an individual's current skills and experiences, they are enough to get involved with climate action. Using her own personal sense of urgency, she called for action.

> I have my gifts. I have my work. I have my degrees. I have my voice and my writing skills. I have my experience in history, and all that I have, and all that I am is something that I can bring to this, even if I feel completely inadequate and not enough and not skilled enough and not of authority or important enough or whatever, but it doesn't really matter.

A different activist talked about urgency in the way that it has utility for getting people on the right track, and to recognize when people are on the wrong track. If there was one thing about President Trump's election that this activist appreciated, it was that "people are on fire now." Similarly, another activist discussed the urgency we must convey toward civic engagement, because "we are losing our democracy," and if we lose our democracy, we lose many facets of climate action.

Two activists noted that breaking climate change into bite-sized pieces and resources for comfortability makes climate change less threatening and makes the direction of where efforts need to go more tangible. One activist illustrated this concept by asking, "How do you eat an elephant? One bite at a time." In other words, if we are going to make change, then all we can do is take one step at a time, and with each step, look in the right direction.

Only one activist from the older cohort discovered that finding common ground around climate issues can get people to both care and to act more. She emphasized the way that health professionals can play a powerful role in framing climate change because one area of common ground that people all certainly have is personal health and familial health. She explained that perhaps people do not care as much about saving the polar bear standing on the sheet of ice thousands of miles away quite as much as they care about the lungs of their child when there is thick wildfire smoke from a changing climate. She argued that when health professionals communicate about the climate impacts to health, it is especially powerful, because health providers are among the most trusted group in the United States. Even more, they have money to spend on the issue. She added that healthcare workers can also retire earlier to practice climate activism and advocacy.

Younger cohort: individual level. The second way that activists discussed strategies to urge others to act was at the individual level, where there are specific approaches that individuals must take when communicating about climate change.

Three activists from the younger cohort claimed that individuals can urge others to act in solution-oriented ways if, when they talk about climate change to people, we do so with kindness and compassion. Urging others to act through kind and compassionate efforts means that, as one activist explained, we "do not attack," and we don't tell people that their livelihoods are contributing to the climate crisis. A different activist noted that if someone works in a coal mine, we must build a positive and compassionate relationship with them if we introduce the impact that their work has on the climate in order to create mutual respect and the expression of information that is both valid and valued. The goal is not to force our views on others, but instead, as she explained, even if talking to them does not change their mindset, maybe it sparks

an awareness. She concluded that awareness can spark curiosity, which is a very constructive spark. Another activist described that she has a special awareness that she always holds when communicating about climate to others, because sounding like a "zealot" or "harping on the negative" will not gather people to help them facilitate change. An additional activist reaffirmed these approaches by emphasizing that we must also find common ground on an individual level with compassion and kindness because it creates space for the conversation. Growing up on a farm in a conservative area, this activist explained:

> Just being like, 'I hear you, and I can understand.' Surprisingly, I'm a hippy, but I can relate to that. And I think that is opens up for a better conversation, [even] with the most right-wing, "MAGA[7]"-wearing guy. But I feel like if you can find common ground, you can talk to them like a person.

If we negatively approach those with livelihoods that we view as negative, then we should expect a negative response when we urge others to be actively involved in climate solutions.

Two activists from the younger cohort declared that individuals must normalize climate change in our everyday lives. Just one activist emphasized the importance of discussion in driving a solution. She said that it's important to talk about it if we are going to solve it. A significant misconception is the "so-called climate change debate" which falsely illustrates an even-sided debate. She explained that there is a massive media misrepresentation of climate deniers, which then implies an equal representative community of consensus regarding two camps: those who believe in climate change and those who do not. She says that in reality, this faux debate sparks tension around the issue that results in an unnecessary partisan debate over an

[7] Popularized by Donald Trump for his presidential campaign in 2016, the slogan "Make American Great Again" is often abbreviated as "MAGA." This campaign slogan has been both criticized and celebrated. Some suggest it is loaded with many problematic messages while for others, it is celebrated and frequently used in social-media platforms.

issue that is not partisan whatsoever. This debate, however, was created and perpetuated by fossil fuel companies and their subsequent media outlets, and it has sparked divisiveness surrounding the issue of climate change that produces efforts to shy away from even using the term "climate change" or "global warming" in every-day conversations. However, even if it "might be really uncomfortable," a different activist said that the only way we can get people to act on climate change and think about the issue is to talk to them about it. She said that "it's really important to get to the root" of the illusion of the climate debate by talking about the scientific consensus of climate change.

Older cohort: individual level. Five activists emphasized the necessity of an individual obligation to normalize climate change, referring to the importance of bringing it up in day-to-day situations because regular discussion can make it feel less daunting. One activist said that, even if it is just talking about climate change for a few minutes, activists have an obligation to bring the topic up and pull others into it. She acknowledged that bringing up climate change is tricky because people get "fearful, angry, resentful, or pissed off." However, we "can't *not* talk about it." A second activist said that they send all of their relatives, sisters, brothers, and parents books on climate change for Christmas. A third activist reasoned:

> We need to create spaces for conversations where we can help people think of how to create change. I think people are so paralyzed by climate change. It's so huge that they just go, 'Well, what can I do?' And I think if you can help people see what they can do at the individual level, but also how to be engaged citizens, that is really important . . . We could all host people for dinner in our homes and have conversations around these issues, and make it so that people can do bite-sized changes, because when you try and think about it on a whole global level, it just feels like it's too much and people feel paralyzed.

Another activist focused on ways to create spaces for climate conversations in their everyday life and in everyday places by "just looking for meaningful openings." She explained

that at the gym, her friends talk about various trips they are taking halfway around the world, but she looks for spaces to say something about the impact that their travels have on the climate. By talking about what they are worried about at the right time, there is an opportunity for a meaningful climate conversation.

One activist highlighted the utility of kindness and compassion when talking about climate change with others since, despite many living in silos, they often feel the same way. People feel fearful, anxious, and, at times, hopeless about the future of the world in a changing climate. This activist also took courses in compassionate listening to learn about ways to connect with others around difficult conversations, like climate conversations. She reflected on her own mindset, where talking about climate change could be much more meaningful and effective by "being a good person, being the best [person] I can be, and being kind with someone who might feel differently [about climate change]."

Just one activist from the older cohort, and no activists from the younger cohort, said that experts must model climate-friendly and sustainable behaviors and urge others to act in similar ways. We must "walk the walk." This occurs by setting examples. One activist reflected on a powerful experience of modeling behavior:

> I was visiting [one of my oldest sets of friends], and I had been drinking a soda that was in a can. And I asked my friend, 'Where's your recycling bin?' I'm not saying recycling is everything because it's highly problematic. She said, 'Oh, I don't have [one] because I don't have any space in my kitchen. And I was pretty shocked because she's also progressive. So, I gave her a hard time. She said, 'I'd just put it in my basement, which would mean I'd have to run up and down the stairs every time.' And I gave her a little bit of a hard time, but just lightly. I didn't say a whole lot, and I let it go. And then, years later, she came out here to visit me. I was in the kitchen in the morning and [was] washing out this cat food can. And she goes, 'Oh, that's disgusting! Why would you do that?' And I said, 'Because I'm going to recycle it.' And then the next time I went back to her house, there was a recycling can in her

> kitchen. And I said, 'Oh, look at you. You got a recycling canister!' And she said, 'That's all because of you.'

She further argued that setting examples of how to live our lives more sustainably can also occur without preaching or yelling and should take place in "safe spaces," because people are less likely to hear, listen, or learn if on the receiving end of preaching or yelling.

When activists discussed ways that they urge others to act against climate change, one said, "Well, perhaps if we knew that, we wouldn't be here!" Nonetheless, there were a variety of strategies to urge people to act that both cohorts discussed. Both cohorts prioritized group level efforts to urge others to act, meaning ways to engage groups of people. The younger cohort felt strongly about finding common ground with groups regarding climate issues, but the older cohort noted that empowering people with an understanding that they can make change is the top strategy. Other strategies, such as promoting a sense of urgency, were discussed by both cohorts, but in different forms. The younger cohort focused on promoting urgency to include other groups in climate conversations: even groups that don't believe in climate change. The older cohort framed the promotion of urgency, predominantly, in ways that get people "fired up" to act now, and not tomorrow, or next week.

The second approach to urging others to act were strategies aimed at the individual level, meaning ways to engage individual people. The younger cohort prioritized building kind and compassionate relationships with others as a means for action-promotion. The older cohort prioritized normalizing climate change or making "safe spaces" to meaningfully bring climate change up in daily conversations with people in our lives. Second to normalizing climate change for the older cohort was building kind and compassionate relationships and forms of

communication. For the younger cohort, normalizing climate change was important because if we don’t talk about climate change, how will we solve it?

5: DISCUSSION

The women I interviewed reported feeling a deep obligation and internal responsibility to sustain their commitment to combatting climate change. The end goal for these activists was not so much that we are to "solve" climate change, but that we are to do a darn good job of *trying* to. Many considered themselves optimists, though some were more specific, labeling themselves as "eternal optimist," "optimistic realist," "neutral optimist," or a "pragmatic optimist."

A growing body of literature shows that women's participation and leadership in environmental decision-making results in more effective and efficient environmental responses. If there is an environmental issue (one layered with dimensions of social, political, economic, health, etc.) that desperately needs a much more effective and efficient response, it is climate change. This same body of literature also showed the historic commitment of women as leaders of environmental justice and issue activism. Women illustrate a sustained commitment to combatting climate change by building collective action against it.

It is clear that the ways in which people understand a phenomenon is heavily impacted by how the issue is framed. This is because it allows them to create meaning behind it, which dictates the response to an issue. Framing determines our perspectives of the impacts or problems from, causes of, and solutions for an issue. Collective action framing analyzes the theoretical building blocks (i.e. collective action), so to speak, of the drastic and efficient institutional change that is needed to combat climate change. When it comes to a multi-dimensional, massively scaled, highly consequential, and, to some, apocalyptic issue like climate change, it is pertinent that research focuses on how climate change is framed to build solution-oriented collective action, because that is among the first steps for sparking necessary institutional change.

Problem Identification Frame

I developed two suppositions for the problem identification frame. My first was based on Acha's (2017) literature on women's grassroots environmental activism, which found that women climate activists would have a unique understanding of the intersectionality of climate change, or a specific understanding of the ways that climate change impacts different groups of people in different ways because of intersecting inequalities. My second supposition was based on age, where I expected to find that, based on Borras et al. (2008), the younger cohort's most concerning problem from climate change would be based in a future-oriented view.

First, regarding Acha's (2017) research on women's understanding of intersectionality, my findings overwhelmingly reinforced this, especially with the older cohort, who suggested that their most concerning problem with climate change was the exacerbation of existing inequalities. They were concerned, especially, with the ways in which those who are least responsible for global warming will, and currently are, shouldering the burden of suffering. The members of the younger cohort did not reinforce this expectation of intersectional inequality as the *most* concerning problem, but they did find the exacerbation of inequalities from climate change to be the second most concerning problem from climate change. However, they matched the older cohort with a specific concern for the notion that those who are least responsible are shouldering the burden.

Both cohorts discussed a concern for the inequitable health dimensions of climate change, but the older cohort talked more about unequal health impacts than the younger cohort. Literature from Bell and Braun (2010), Fitzgerald (2019), Hunter et al. (2004), Tindall et al. (2003), and Verchik (2004) suggest this finding, with research showing that women emphasize the humanitarian and social dimensions from climate change more than the physical dimensions.

My findings were reflective of this with regard to health inequities, but perhaps the older cohort might have been more concerned about health because of gender socialization from childhood. This is informed by research that explores how women's perceptions of their social roles are to fulfill nurturing, altruistic, and caretaking duties within their families and their communities, and these roles relate to protecting their loved ones from environmental issues. Even more, most women in the older cohort who had children reflected on the health of the world that they will be leaving for their children and their children's children. Bell and Braun's (2010) literature speaks to the concept of the "motherhood mentality" that may have been present in my findings, where women who are mothers feel a sense of obligation to combat environmental crises that threaten their children's future, well-being, and livelihood.

My second supposition, informed by Borras et al. (2008), was that the younger cohort's problems would be based in a future-oriented view because they expect to live another 50+ years. Although my findings confirmed the future-oriented view by the younger cohort, I found that the older cohort also held a similar view. In terms of the most concerning problems with climate change, the younger cohort emphasized the social destabilization that is predicated to occur in the future. Some discussed the catastrophic and apocalyptic fate of the "demise of humans," and most were concerned with the quick rate of social destabilization that will occur from the quick rate of global warming, and the subsequent unraveling of society into violence and divisiveness. This finding is also linked back to the solution frame, as the solutions they developed were similarly future-oriented, with a focus on longevity and sustainability.

Another problem, discussed not as frequently within both cohorts, was power struggles within climate decision-making and climate action. Dankelman's (2010) literature might speak to this finding, in which she discusses gendered power struggles that exist between those who hold

the decision-making powers and those who are not decision-makers. For both the older cohort and the younger cohort. power struggles were ranked as the last concern among the problems from climate change that were discussed. Even more, the power struggles which young activists talked about were different from the gender imbalance within climate negotiations. The younger cohort was more concerned with the control and power that fossil fuel companies have over our political systems, but the older cohort was more concerned with the power struggles between lifestyles. Our "Western culture," fossil fuel addicted lifestyle must change, but the "status quo" lifestyle that is dominant and still perpetuated is one that is dated to the ideals of the Industrial Revolution, to constantly produce and consume. The younger cohort's greatest power struggle concern was fossil fuel's control of power and money in politics, supporting research by Corner et al. (2015) which shows a growing skepticism among young people regarding political parties and distrust in political figures and their actions.

Cause Identification Frame

My supposition for the cause frame was that, according to Corner et al. (2015), the younger cohort would be likely to blame government inaction for the cause of climate change, but my data did not explicitly reinforce this. I found that the younger cohort blamed the Industrial Revolution and its ideals for the top cause of climate change. They emphasized that the cause is related to the control that corporations have over politics and their freedom to pollute, as well as the consumptive and productive nature of our capitalistic economic system. Although these causes hint at government inaction to regulate pollution, develop a greener economic system, and push corporate money out of politics, the younger cohort did not emphasize government inaction as causing climate change.

The older cohort similarly found that the Industrial Revolution was an irrefutable cause of climate change, but they emphasized the problematic ideologies behind this phenomenon: as they put it, we problematically measure success and happiness by our consumption of material goods. The older cohort did not reinforce Corner et. al.'s (2015) findings, which showed that younger people are more likely to blame government inaction for the cause of climate change since the older cohort also alluded to government inaction as the cause of climate change. For example, one activist in the older cohort discussed how the United States should refrain from blaming high-polluting, energy-consuming countries for causing climate change. She encouraged the critical view of how United States consumers and consuming values that perpetuate the market production in other countries. She argued that, historically, our government has engrained those practices within us: the practice of driving industrial manufacturing. This perspective parallels Foster and Holleman's (2014) research on metabolic-rift analysis, which explains the dynamics, or "metabolism," between human and non-human, such that ecological destruction is characterized by the metabolism of capitalism. Capitalism generates inefficient industrial processes and structures that disrupt the metabolism of the ecological system and, instead, is efficient at generating only capital (Foster and Holleman 2014).

For both cohorts, the most cited cause of climate change is the mindset of human supremacy, such that our species commands domination and exploitation of not only our planet, but of each other. This obsessively controlling mindset perpetuates climate destruction, and activists in both cohorts shared reflections on the notion that 'humans have big brains' which leads to "big egos," but some activists said humans have "lizard brains" and "big egos." Both reflections were efforts to communicate that it makes sense how we got to this point, because

humans do not like delayed gratification; instead, we focus more on cleaning up messes after the fact, and less on the prevention of messes.

Solution Identification Frame

I developed two suppositions for the solution identification frame. The first was based on Alvarez and Lovera's (2012) research, such that when it came to solutions, they would be based in community-driven and integrative approaches, meaning that I expected to find that they will emphasize social connecting and networking as climate solutions. Evidence from my data supports this literature, where both cohorts identified one of the top solutions as reconnecting with others and establishing kinder, more compassionate, and generous relationships with people. These relationships should, they argued, be based on a collective understanding of the way in which humans are inextricably interconnected. Solving climate change happens when we come together and not apart. This explicit solution combats one of the main *problems* with climate change that both cohorts emphasized: how climate change divides our society and that feelings and behaviors of greed, selfishness, and dominance perpetuate environmental degradation.

Interestingly, the solution frames that were developed by the younger and older cohorts were almost identical in regard to how they ranked the importance of each solution theme. The priority solution for both cohorts was an ideological revolution, with subsequent matching lists of top solutions in precisely the same order: holistic and systems-thinking, reconnecting with each other, individual responsibility, and education. Many activists from both cohorts used the term itself, "systems-thinking" when discussing solutions to climate change.

Solutions that the older cohort mentioned that were also mentioned by the younger cohort, however, were reconnecting to nature and promoting a general sense of urgency around

the climate crisis. The older cohort similarly mentioned the disconnection from nature as a cause of climate change, but the younger cohort did not mention this at all. Some changes to the climate are gradual, and some are not. For example, intense natural disasters and quickly shifting weather patterns are sudden; whereas erosion, species degradation and extinction, precipitation changes are gradual. These alternations happen incrementally, and research by Brownlee et al. (2013) explains that an older person's perception of such incremental shifts over time can result in what is called "generational amnesia," where the "natural" environment from childhood has become evidently degraded and different over the course of one's life, so one is more concerned with place-based matters and features of environmental degradation.

Regarding the older cohort's emphasis on the promotion of urgency as a solution to climate change and the younger cohort's lack of noting this, perhaps the younger cohort has been exposed to the dominant apocalyptic frame of climate change more regularly throughout the course of their lives. Blue (2015) noted that this frame is often perpetuated by the media. It might be because of this that the younger cohort translates the promotion of urgency into fear, which may not be a useful action frame. Norgaard's (2006) research discusses the social organization of denial, such that fear around the topic of global warming yields emotions of helplessness and guilt, insecurity, and threatens individual and collective identities. These emotions are directly related to participation in movements or actions against an issue (Norgaard 2006). As a result, emotions associated with fear from the urgency of catastrophe could lead to avoidance and dissonance.

My second supposition for the solution identification frame was based on research by Corner et al. (2015) which showed that younger people exhibit stronger feelings of self-efficacy, so they are less likely to feel apocalyptic about climate change and more confident in society's

ability to "solve" it. On the one hand, some activists in the younger cohort did feel apocalyptic, but on the other hand, all members in the younger cohort, but some more than others, reflected on their belief that we will take action and combat this issue, win or lose. Their responses illustrated that they held an awareness of what Blue (2015) called one of the most dominant frames of climate change, "apocalyptic," but they didn't illustrate feelings of hopelessness and helplessness because of this frame. It was as if awareness of the catastrophic scale of potential change was all the more reason to push solutions forward even harder.

In terms of solutions to push forward by the younger cohort, they prioritized an ideological revolution, and specifically valued solutions that are based in holistic thinking and not in immediate gratification. Echoing literature from Borras et al. (2008) where younger people will be focused on climate change with future-oriented views because they expect to live another 50+ years, the younger cohort also emphasized the solution of long-term, individual responsibility for combatting climate change and the education of younger generations. Indeed, these solutions are future-oriented, focusing on making drastic ideological and systems-thinking transitions, and emphasizing that all individuals need to take responsibility to play their part, even when more explicit institutional changes are made.

Urging Others to Act Frame

When it came to urging others to act, Alvarez and Lovera's (2012) research also informed my supposition. Similar to my supposition for solutions to climate change, I expected to find that strategies to urge others to act would also be based in community-driven and integrative approaches, and my data supported this supposition. In one example, both cohorts rated group-level strategies that urge others to act as a priority over individual ways to urge others to act. These group-level strategies varied by cohort, as the top priority for the younger

cohort was to find common ground with groups of people who are not highly concerned with climate change as it is, or perhaps do not "believe" in it. However, the top priority for the older cohort was to empower groups of people to understand that their actions can make change, and that their participation in combatting climate change is necessary. An argument can be made that finding common ground with a group of people is related to empowering people, so perhaps these arguments are more related than different as they are both community-driven, collectively-driven, and integrative in nature, focusing on multiple ways to bring different groups into spaces and conversations surrounding climate change.

There were other ways in which both cohorts argued for group-level strategies to urge others to act that were not reflective of Acha's (2017) explanations of community-driven and integrative approaches. One example was a commonly talked about strategy of "framing for feeling," or framing climate change to groups in an effort to spark emotions that are personal and deep so that it brings climate change close to the heart and makes it more likely for people to care and act. Though this is related to finding common ground, it appeals more to an individual's emotions and perspectives and less to community integration. Often, however, discussions about appealing to an individual's emotion were explained through examples that were based in community settings. Many activists, especially from the older cohort, argued that telling stories about climate change impacts and solutions that are localized is an effective approach. They explained this was an effective strategy of appealing to individuals' emotion because it has a specific orientation towards the local efforts of combatting climate change that are happening in someone's home. They said it might make someone say, "Look at what my community is doing right now. I'm proud, and I should join." As a result, this is less reflective of Acha's (2017) ideas

of a community-driven *strategy* of urging others to act, but more-so speaks to the *goal* of perpetuating collective action for community-driven approaches.

The second strategy of urging others to act was the same for both cohorts, which were individual level efforts to urge others to act. These efforts were described as the normalization of climate change in everyday conversations and enacting more kindness and compassion for each other. In this frame, one thing that the older cohort talked about, but the younger cohort did not, was the individual-level strategy of modeling climate-friendly behaviors so that other people take note of these behaviors and adopt them too. Frumkin et al.'s (2012) research on age and climate change asserts that older people might be more concerned with the legacy that they exhibit and uphold to their families and friends around them, where leaving a legacy that promotes a personal lifestyle commitment to combat climate change is deemed especially important.

Characteristics of collective action frames did vary based on age, but I can conclude they were more similar than different in terms of how they ranked the importance of each theme (the problems from climate change, the causes of climate change, the solutions for climate change, and the strategies of urging others to act). Specifically, the cohorts described differences in solutions and strategies to get others to act, but their explanations were driven by approaches that connect people to each other and are based on an understanding of the collectivity of humans. Even more, among both cohorts, the social and humanitarian dimensions of climate were consistently at the forefront of each frame. Whether discussing the problems or solutions to climate change, or reflecting on strategies to urge others to act, there were consistent positions taken, regardless of age. For instance, all focused on equity, community, and the necessity of collective respect for our natural world and its species. Constantly underscored, in addition, were conclusions that what keeps activists engaged with the problem of climate change, despite its

complexity and “apocalyptic” nature, is that there is no choice whether to engage or not. The decision is a natural acceptance that each of us exhibits an obligation to be a part of the solution, regardless of suppositions that we are – or are not – to successfully “solve” the problem of climate change.

Research Limitations

Like most research, there are some limitations to my study and I have some suggestions for improvements with future research. One limitation of my study is that I cannot generalize my findings to a broader population because I practiced a non-probability sampling methodology. My sample is also restricted to women who are well-educated, living in Missoula, Montana, and predominantly white. I argue that future research on women’s collective action frames should compare data and explore differences between, for example, differences in socioeconomic status, race and ethnicity, and geographic location. In addition, future research on collective action frames should include women, men, and non-binary people from marginalized disaggregated identities in order to explore the unique ways in which people with intersecting inequalities approach collective action against climate change. Perspectives on climate change would include those who shoulder the greatest burden of climate impacts but have the least power in climate decision-making. More diversity could result in a greater variety of perspectives on the main causes of and solutions to climate change, as well as other approaches to getting people to act against climate change. This is important because there are a number of ways to build collective action and combat climate change.

6: CONCLUSION

One activist shared a powerful quote that sets an all-encompassing tone to the interview process: “You are not expected to complete the task, but neither are you allowed to put it down.” The apocalyptic nature of climate change is ridden with feelings and visions of uncertainty about humanity’s ability to “solve” climate change and escape our demise, as well as the distress, anxiety, and fear about what the world will look like and feel like with crumbling social systems, inequitable experiences of suffering, natural disasters, mass spread of disease, increasing sea level rise, resource wars, forced migration, and other catastrophes. My research was oriented to contend with this apocalyptic frame by posing a solution-oriented project surrounding the climate crisis.

Although institutional change is necessary to combat the climate crisis, it has been ineffective and slow. The lack of effective institutional responses to climate change has been linked to the gender imbalance within climate decision-making and research. My research project contributed to a gendered perspective of climate action. The conclusion is that more gender balance in climate decision-making and research leads to more effective climate responses. However, first, institutional change does not appear out of thin air. It is collective action that is the foundation of such necessary institutional change. More knowledge on collective action means more knowledge on effective institutional responses. Second, collective action surrounding environmental issues is dominated by women. My research is an illustration of the importance of women in building collective action to sustain their commitment to climate change. The objective of my study was not to test whether women frame climate change differently than another group, but instead, to explore the different ways that they do frame climate change, and how framing might vary by age group. The younger cohort, representative

of the Millennial generation, and the older cohort, representative of Baby Boomers, have many similarities. They also express important differences in how they approach the problem of climate change, such as the older cohort suggesting that we must reconnect with our appreciation for the natural world, and the younger cohort explaining that it is urgent that, in the fight against climate change, we include marginalized groups that are commonly left behind. These differences demonstrate the importance of including voices from across generations within climate discussions. I underscore women's historic and contemporary commitment and dedication to combatting environmental issues because it can achieve more effective and diverse responses to climate change.

Theories of social framing by Benford and Snow (2000) assert that collective action frames produce an action-oriented set of beliefs by placing a phenomenon in a certain space and time while mobilizing protagonists to act. In my study, activists illustrated that climate change, in all of its intricately intertwined dimensions and complexity, is a tough phenomenon to place in a certain space. It is clearly a global issue with a multitude of impacts and related problems. It exacerbates existing social and physical problems and it creates a complicated web of new problems that humanity has yet to experience. It was also evident that climate change is difficult to place in a certain time because much of how our climate got to the state that it is in is based on ideologies, practices, dominant norms, and systems that appear to be cemented into our existence.

To conclude, these women climate activists want others to know, first, that these ideologies, practices, norms, and systems are, in fact, *not* cemented. They can be broken down and built up into stronger, more compassionate ideologies and more environmentally responsible practices and norms that operate simultaneously with sustainable systems that are focused on

equity and longevity. Further, these women want others to know that we cannot break these falsely cemented ideologies and systems without each other, and we also cannot build up more compassionate and equitable ideologies and systems without each other either. Climate change takes a collectively sustained commitment to action.

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APPENDIX A: INTERVIEW GUIDE

1. Will you describe what led you to become concerned with environmental issues?
    a. When did those experiences happen?
2. Do you consider yourself a climate activist?
    a. What helps you determine if or if you do not consider yourself a climate activist?
3. Tell me about your activism today. Will you describe what kinds of climate-related activism you are involved in?
    a. Say that someone who has no idea what activism means asks you to talk about your own definition of "climate activism." What would that definition be?
    b. Are there ways that you use your past experiences with climate activism for your climate activism today? Will you give me an example? What was the past experience and what changes has it made in how you conduct your activism?
4. How do you think your climate activism impacts other people?

PART 1 OF COLLECTIVE ACTION FRAME: problem identification

5. Will you describe what you think are some of the *most* pressing impacts and issues resulting from climate change that we face?
    a. These impacts can feel overwhelming, because a lot of them are so intertwined. How did you come to identify those impacts as the most pressing?
6. Will you tell me some of the reasons you continue to be engaged in climate activism?

PART 2 OF COLLECTIVE ACTION FRAME: entity blaming

7. Will you describe who, or what, might be responsible for the pressing climate issues that you highlighted earlier?

PART 3 OF COLLECTIVE ACTION FRAME: solution identification

8. What solutions do you feel are most effective to combat those most pressing climate impacts that you were discussing earlier?
9. Describe for me what do you do in your personal life to deal with the climate change.

PART 4 OF COLLECTIVE ACTION FRAME: engaging others to act

10. What are the ways in which you influence a community or a group of people to engage with these climate solutions – how do you get people to act?

    a. Will you walk me through an example of when you urged others to act? What was the issue addressed? What were the actions?

11. Have you reflected on whether gender impacts one's perspectives of climate change?
    a. How do you think this impacts women's climate activism?
12. Have you reflected on whether one's generation or age impacts their perspectives of climate change?
    a. How do you think this impacts their activism?
13. How do you find hope within your activism?
14. Could you describe the impact that you hope your climate activism has on others?

APPENDIX B: MINI QUESTIONNAIRE

1. What is your age?

A. 18 - 36 years old
B. 37 - 54 years old
C. 55 - 73
D. 74+
E. Prefer not to answer

2. What is your highest level of education?

A. Some High School
B. High School
C. Some College
D. Bachelor's Degree
E. Master's Degree
F. Ph.D. or higher
G. Trade School
H. Prefer not to answer

3. From where did you receive your highest level of education?

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4. Where did you grow up?

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