

NAVIGATING THE CLIMATE CRISIS – THE INTERCONNECTION
OF EXTREME WEATHER EVENTS AND LIFE DECISIONS

by

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The climate crisis is no secret, and extreme weather events - a clear, visual manifestation of the climate crisis - are known to bring destruction in their wake. However, it is unclear how extensive of an impact they have on people. This research aims to answer the questions; how has the presence or experience of extreme weather events influenced college student's mental health and life decisions? Does this experience have a bigger impact than their knowledge of climate change? To answer this, a series of surveys (45 responses) and in-depth interviews (11) with environmental studies college students in Oregon was conducted, asking about their knowledge of climate change, experience with extreme weather events, feelings of climate anxiety, and how these impact their life decisions. Life decisions include but are not limited to whether to have kids, where to live, what to study, and career choice. Overall respondents expressed their belief in climate change and its impact on the severity of extreme weather events, and this knowledge impacted their politics, where to live, and what to study. This also led to the finding that experiencing extreme weather events can impact life decisions and mental health, but there are varying degrees of impact depending on the severity of the event, dictated by class status and knowledge of climate change. With this knowledge, there is the opportunity to advocate for better policies and initiatives around resources for post-extreme weather event care, as well as increased attention to preventative methods.

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Introduction

The climate crisis is an ever-evolving issue that has commonly resulted in more frequent and extreme weather events. Extreme weather events, defined by the United States Department of Agriculture, are “occurrences of unusually severe weather or climate conditions that can cause devastating impacts on communities and agricultural and natural ecosystems.” Events are determined to be extreme depending on their location and the typical threshold of that location, as well as the likelihood that these events occur within a certain timeframe (USDA, N.d.). A local and recent example of this for Eugene, OR was the ice storm that took place in January of 2024, where the city was shut down for multiple consecutive days and people were unable to leave their homes unless it was out of necessity. The infrastructural response to the ice storm in Eugene was not to the caliber of full preparedness because they do not commonly occur in this area. As climate change persists, the frequency and severity of extreme weather events will follow.

ABC News and Ipsos conducted a survey in 2022 of over 1,000 18–45-year-olds, asking them questions about climate change and their thoughts about having kids in the future (IPSOS, 2022). The survey found that a quarter of the people under 35 stated that climate change impacted their decisions about having children. Additionally, 75% of all respondents within the survey expressed concern for climate change’s impact on future generations. This impact can already be seen for mental health and has resulted in the creation of terms such as climate anxiety, eco-anxiety, climate doom, and more.

While there is research on the present moment and present measurable impacts on people, there is still the question of how this impacts people’s perception of their own future. What life decisions are they making now that could be impacted by these events? These life decisions can

include but are not limited to; whether they want to have kids, where they decide to live in the world, what they look for in a partner, and what they want to do for a career. To look at this further, climate change has many impacts on various aspects of the environment, but a clear and tangible manifestation is extreme weather events. While there is research around the physical infrastructural impacts of these events, there is room for research on how it has affected individuals and how they differ based on factors like where they experienced the disaster, their economic status, the political party they align with, their race, their sexuality and gender, and more.

College students are at a prime time in their lives to make big decisions, as they are dipping their toes into the “real world.” They are looking forward to their future, not only what they want to study but potentially also where they want to live and what career path, they want to take, to name a few. Examining how living through these extreme weather events impacts college students can provide a better understanding of how they are moving forward with their lives and how they envision their future in the context of climate change. Given the information known and the knowledge gap, there is room for questioning.

Research Questions

How has the presence or experience of extreme weather events influenced college student’s mental health and life decisions? Does this experience have a bigger impact than their knowledge of climate change?

Literature Review and Theoretical Framework

Climate change is an interdisciplinary issue that affects humans and the environment in many ways and has recently been researched more extensively by other subjects such as sociology through environmental sociology. Previous research has specifically been around the impact extreme events have on infrastructure and migration. (Hunter et al. 2015, Kimmelman 2019, Binder et al. 2015). Studies have also examined people's personal lives about how the climate crisis has an impact on people's ability to adapt mentally, and rising mothers' decisions around raising children in such an uncertain world (Cohen 2016, Lowe 2023, Ndeti 2024, Homes et al. 2022, Fu et al. 2022).

Environmental Disruption and Migration

When faced with life-threatening challenges, humans throughout history have used relocation to survive. An analysis of classic migration theory can help bridge this gap in knowledge between migration for survival and climate change. When a household or individual is considering migrating from their current location, there are macro, meso, and micro factors that play into the decision. In previous research, the factors are broken down into these sections as follows: macro factors such as political, economic, demographic, and social; meso factors such as intervening obstacles and facilitators like the cost of moving, diasporic links, technology, and political/legal framework; and micro factors such as personal/household characteristics such as age, sex, education, wealth, religion, language, and ethnicity. Each of these macro, meso, and micro factors plays into the decision-making. Hunter et.al. (2015) adds environmental change as another macro factor, which can include exposure to hazards, land productivity, habitability, and living resource security (food, water, energy).

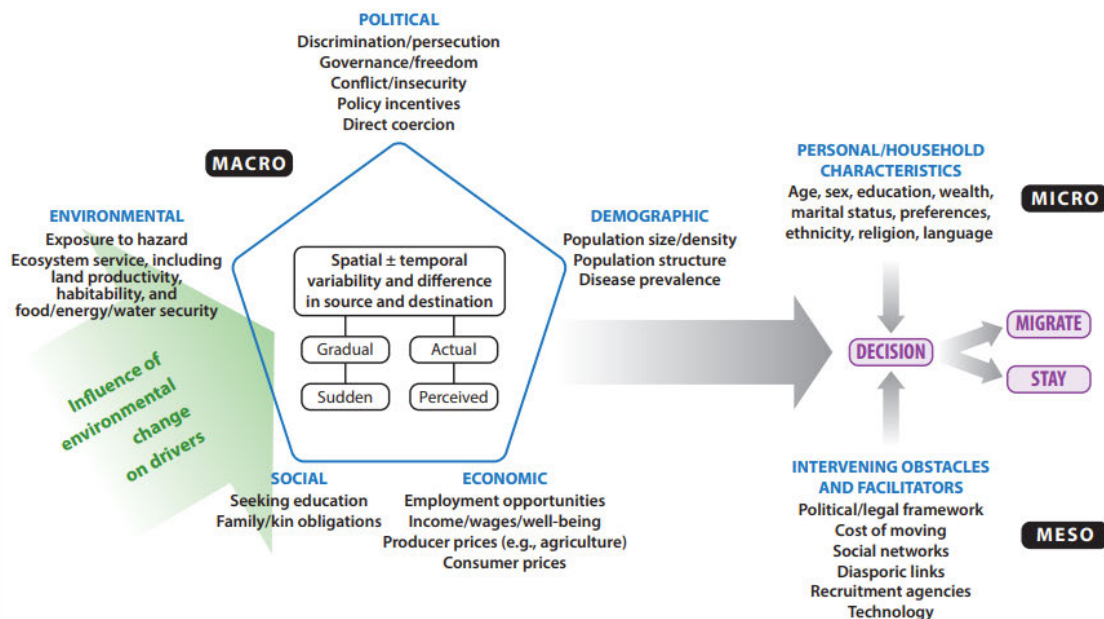


Figure 1

A conceptual framework for the drivers of migration as presented by Black et al. (2011, p. S5). Reprinted from *Global Environmental Change*, Vol. 21S, Black R, Adger WN, Arnell NW, Dercon S, Geddes A, Thomas D, The effect of environmental change on human migration, pp. S3–11, Copyright (2011), with permission from Elsevier.

Figure 1: A conceptual framework for the drivers of migration as presented in Hunter et al., 2015

These factors are not looked at individually when making the decision, but rather how they interconnect and affect each other. The institutional structures of inequality can have a hand in the susceptibility to climate change, as the power dynamic exacerbates a community's vulnerability to climatological impacts and diminishes the resiliency of a community (Hunter et.al., 2015). Resilience, as defined by Asger et.al. (2002) in Hunter et.al. (2015), is “the ability of communities to absorb external changes and stresses while maintaining the sustainability of their livelihoods.” Migration from an area with scarce resources from environmental damages could be seen as a form of resiliency, but the connection to place and the community could be a barrier to making the decision to leave and increase resiliency. This is seen in places around the world, including Puerto Rico.

Victor Manuel Torres is a resident of Puerto Rico, living in a barrio called Vietnam, located next to San Juan Harbor. Torres has lived in this neighborhood for more than half a century. Weather events have destroyed Vietnam, and when that did not cause people to leave, the police would come in and tear the houses down intending to force residents out (Kimmelman, 2019). Torres is one of the neighborhood's original residents and lives there with pride and a strong connection to the land and its community. After Hurricane Maria, a category 4 storm, ravaged Puerto Rico's neighborhoods and resulted in \$20 billion of damages, residents of Vietnam were offered free housing in other areas on the island if they were unable to rebuild their houses up to current standards of flood protection since they lived in a flood-prone area. If they succeeded in rebuilding, the Department of Housing would allocate funds to help with the building. Some residents took the offer of a new apartment in a different area, but like in the case of Torres, there were individuals who did not believe that they could rely on the authorities for security and could only rely on their community to be truly safe (Kimmelman, 2019).

There is the macro level factor of mistrust of institutional projects and the meso level factor of community that aids the decision to stay. This was seen in New York as well after Hurricane Sandy; a home buyout program was implemented as a response to certain neighborhoods being "considered at risk for future hazards" (Binder et.al., 2015). However, in a series of interviews and surveys, Bindet et.al. found that a sense of place and local community would determine whether someone would accept the buyout program. While it was the individual who decided whether to accept the buyout, the decisions of those in their surrounding community heavily impacted that decision as it related to community resilience and safety. These extreme weather events do not stop their impact on feelings of safety and resiliency, but impact people at a deeper level mentally.

Mental Health and the Climate

Extreme weather events are not a new phenomenon, but they have been worsened over time due to the changing climate. Joseph Cohen (2016) conducted a study of over 300 students aged 12-17 years old and tested them through a computer program that measures their distress tolerance and perceived social support. The baseline was conducted before they experienced a natural disaster, and then again after to determine their distress tolerance (DT) and perceived social support system (PSSS). Cohen found that those with lower distress tolerances were more likely to have symptoms of depression and PTSD after experiencing a tornado, and that “although many adolescents are resilient following traumatic events [...], the psychological toll for others is profound [...], and can be more severe than in adults” (Cohen, 2016:539). Additionally, the correlation between having a lower distress tolerance and perceptions of social support systems due to “cognitive vulnerabilities, interpersonal stressors, and other relevant risk factors” (Cohen, 2016:539) can lead to an individual having a harder time adjusting to these stressful scenarios.

Terms such as climate anxiety, eco-anxiety, eco-grief, and climate doom refer to negative and uncertain feelings of anxiety about climate change. Yale University experts define “climate anxiety,” in particular, as follows:

“Climate anxiety is fundamentally distress about climate change and its impacts on the landscape and human existence. That can manifest as intrusive thoughts or feelings of distress about future disasters or the long-term future of human existence and the world, including one’s own descendants. There is a physiological component that would include heart racing and shortness of breath, and a behavioral component: when climate anxiety gets in the way of one’s social relationships or functioning at work or school” (Lowe, 2023).

It’s important to note that climate anxiety and the general sense of worry are two different emotions, with anxiety being a perpetual state of concern and distress that can prohibit

daily functions as mentioned by Lowe, while worry is a more passive emotion that can be a motivating factor for one to become more involved in fighting the climate crisis. Experiencing climate anxiety could feed into lower levels of distress tolerance, compounding the difficulty of responding and adjusting accordingly to stressful situations. Additionally, experiencing a lower DT could also feed into higher levels of climate anxiety, creating a negative feedback loop. The mental predisposition of being unable to handle stressful environmental situations such as extreme weather events could have a longer lasting impact on decision making in the future.

So far, the pieces of literature that has been looked at has been within the United States, but there has been research done with high school students in other parts of the world, for example in Kenya. A study done in Kenya by David M. Ndeti et. al. (2024) found through a cross-sectional study of 2,652 high school students, that these students are worried about the threat of climate change on people and the planet, and they found a correlation between the feelings of worry resulting in more emotional symptoms, as well as the severity of symptoms in mental difficulties. Suicidal thoughts were particularly connected with all feelings associated with climate change (anger, fear, worry, powerlessness, and anxiety), and worry, anxiety, and powerlessness could predict a suicide attempt. They also found that there is a correlation between gender and location for that feeling of worry (Ndeti et. al., 2024:4-7). This study showcases the severity of emotional impact on high schoolers, and the feeling of not having a future has a large impact on mental health beyond distress tolerance or climate anxiety.

A crucial aspect of this data is that it is male-dominated, as access to education in Kenya is very limited for girls, so the overall results may be skewed to represent less worry than there may truly be in the community, as girls are more prone to worry than boys in the first place (Leonhardt et. al., 2022 in Ndeti 2024). Not only does this study continue to support the pattern

of negative feelings towards the climate within younger populations, but it also highlights that there is a difference in feelings between different genders and locations. This transitions to the interest in how this could impact those who can have kids and how they feel about climate change and extreme weather events.

Uncertain Maternal Futures

Living in a tumultuous climate does not make looking into the future very comforting. Mary Holmes et al. (2022:359) states “the unpredictability of the future makes rationally calculating the best course of action unfeasible and requires acknowledging the importance of feelings in guiding decisions.” This is reflected within mothers recently, as climate change unsettles the agreed-upon definition of what it means to create a family and mothering as a practice. Holmes et al. (2022) looks at human connection to other species and the environment, arguing that “cohabitability [with the environment] can drive change in how the public and policy makers think about family practices in more equitable and inclusive ways, although the particulars are not explored [yet]” (Holmes et al., 2022:360). In Holmes et al.’s study around maternal futures, over half of the respondents stated that they do not or do not plan to have children, with over half of the respondents also being 20-39 years old (2022:361). It is unclear whether most of the responses were in the younger or older side of the sample, but the decision to not or limit the number of kids is thought about and is a decision people are making as they are seeing climate change intensify, despite outside perceptions on the decision.

Considering that the research discussed so far has been from a US-centric perspective, it’s important to consider a global context with having kids. In China, there is also a rise in young people taking into consideration climate change when making plans around having kids. Xiyao Fu et al. (2022) extracted a sample of 173 21–49-year-olds worried about climate change

from a survey, with three-quarters of the respondents under 31 years old (Fu et al., 2022:203). Of the sample, 34.1% stated that climate change was a major influence with 61.8% stating a minor influence from climate change on reproductive decisions (Fu et al., 2022:203). The largest age group showcasing this concern was 20-21-year-olds, at about 28% of responses. For China specifically, their history in reproductive restriction and their one child policy from 1980-2009 is important to consider (Fu et al., 2022:202). In 2020, China's total births were the lowest it had seen since the 1960s, and at that time there was very little public discourse or studies that looked at the links between climate change and reproductive choice. Factors that had been researched included gender and age of parents, economic sources of the parents, and the peer pressure to have a child (Fu et al., 2022:202). Incorporating the global context properly acknowledges that the issue of climate change is not only affecting the decisions of those in the West and does impact those in other parts of the world.

The age range of both studies is relatively large, which skews the average age of respondents to be older. What's missing is a study that investigates a smaller range of ages and how they may think about reproductive decisions regarding climate change. Additionally, within this survey, some respondents already had kids (Fu et al., 2022:204), which can impact the feelings of concern for a child's future differently than those who do not have kids at all. Public discourse and attention to climate change are influential aspects of whether climate change is thought about with reproductive decision-making, and this begs the question of why this is not a topic of discussion.

Chosen Ignorance

Climate change is a difficult subject to talk about for those who know it exists, but there is also the population that attempts to ignore that climate change is even real. Kari Marie

Norgaard (2015) talks about this phenomenon and the lack of action that follows, quoting Stanley Cohen who calls this “implicatory denial: ‘the facts [of terrible things occurring around the world] are recognized, but are not seen as psychologically disturbing or as carrying a moral imperative to act... Unlike literal or interpretive denial, knowledge itself is not at issue, but doing the ‘right’ thing with the knowledge” (Norgaard, 2015:251). People would rather do nothing than disrupt their daily lives, which is reflected similarly but in opposition to the maternal feelings of having children. Even though they may know, they will either do what they think is right or nothing at all.

In addition to this implicatory denial, there are also the norms of attention, emotion, and conversation to consider. Norgaard explains these to be actions to block out information that can cause negative emotions and “maintain coherent meaning systems, desirable emotional states, [and] a sense of self-efficacy” (Norgaard, 2015:252). These norms of attention, emotion, and conversation outline what is socially acceptable to talk about, pay attention to, and feel to avoid negative emotions such as fear, and to maintain societal functions. As a result of these norms working together, a form of socially organized denial emerges, where a community will collectively keep “information about global warming at arm’s length” to avoid being “too negative” and feeling fear (Norgaard, 2015:253). What these norms do not cover are norms of action, which can potentially be used as ways to also avoid these negative feelings by performing actions in favor of the environment.

The rise of social media popularity and influencers brings a rise in influencers pushing for a “zero-waste lifestyle” in favor of the environment. The purpose of the zero-waste lifestyle is to implement the “5R waste management hierarchy of ‘Refuse, Reduce, Reuse, Recycle, Rot’” (Lu, 2023:12) into everyday actions. Looking through a lens of social performance theory, social

media influencers of the zero-waste lifestyle are popularizing this lifestyle and pushing it to be a social norm through “theatrical social media presentations in a public space” such as TikTok or Instagram (Lu, 2023:15). Therefore, the norm of action here would be to participate in a zero-waste lifestyle to adhere to social norms as well as combat feelings of fear around the environment, because the person engaging in the zero-waste lifestyle is acting in ways of helping instead of hurting the environment.

Influencers are gaining an audience, hoping for friendly interactions that encourage the behavior and bring forward “distant problems to everyday consciousness” (Lu, 2023:16). These influencers are creating virtual communities that create different norms of attention, conversation, and emotion by talking about climate change in a way that allows for positive action to combat it. Gen Zers are known for their social media usage, with a survey at State University of New York in Oneonta finding that about 32% of the students surveyed “admitted [to] using social media for 7-10 hours per day” (Ahmed, 2019:110), so the amount of influence on Gen Z behavior could be profound due to the amount of time spent on social media platforms and consuming information. Instagram is a common platform for influencers, and 58% of the respondents in Ahmed’s survey have Instagram (Ahmed, 2019:110), meaning that these influencers also can gain large platforms to spread their message around a zero-waste lifestyle. The influx of knowledge, with both positive and negative connotations, right at the fingertips of college students could impact their decisions, but there isn’t explicit research on that connection yet.

Gap in Literature

Given the present research, the gaps in research that my project aims to answer are whether it is the knowledge, or the experience of extreme weather events impacts these

decisions, and the most common forms of knowledge acquisition about climate change for Gen Z, especially considering the easy access to the internet and social media. Research has been done around the world on people's emotional responses and perception of the climate crisis, with a wide range of stages of life studied. Additionally, climate anxiety research is in the beginning stages as the term and awareness around its presence shifts further to the public eye. Oregon is a unique location to conduct this research as well because of its unique sample of students from all over the country, while other schools that have had research done have students mainly from in state, such as Phillips et al.'s study at Kent State about college student's perspective on climate change, where 79.1% of students in the study were from Ohio (Phillips et al., 2014:64). University of Oregon provides the unique opportunity to interact with students from different parts of the world while also adding to current research of the college student's perception of climate change, adding the element of how it impacts their life decisions.

Methods

To conduct my research, I dispersed an anonymous survey online with a brief description about my research. I received 45 respondents, where they answered a series of questions relating to their demographic information, if they've been through an extreme weather event, the impact these events have had and in what way, how they learn about them, and climate change. At the end, I included a question allowing the respondent to indicate if they would be interested in volunteering for an interview. To see the survey questions in full, please see Appendix A. Through this process, I had 13 people volunteer to be interviewed, ending with 11 completed interviews. Interviewees were asked to expand on their survey responses and share their stories with extreme weather events in more detail. The interview guide is listed under Appendix B for more details and wording for the questions. The quotes from the interviews were then used to supplement the survey data, providing specific examples of feelings and decisions made.

Once the survey data was collected, I exported the results into a spreadsheet and coded the responses. Appendix B is the codebook that I utilized. Once I coded the data, I identified patterns and input the information into the software Statistical Package for Social Sciences (SPSS) for further analysis. Within SPSS, I input the codebook as values and marked the recoded variables as nominal and numeric to cross-tabulate the responses and look for correlations in the data.

For the interviews, I utilized the program Otter.ai to transcribe and edit them for further analysis. From there, I exported some of the transcripts into Dedoose to search for patterns. Once I was able to identify certain themes, I extracted quotes further from Otter.ai and put them into a spreadsheet for a final round of coding and condensing of information, allowing me to quickly access them for writing of the thesis.

Findings

Overall, the surveys and interviews were very similar demographically speaking, as the respondents were a majority white cisgender women that make under \$15,000 a year, with the sexual orientation split between straight and LGBTQIA+ identities.

| Category | Surveys | Interviewees Only |
|---|--|--|
| Most Common Form of Learning About Climate Change | 86.6% experienced firsthand, 84% use social media with 48% using Instagram | 91% experiencing first hand and social media with 70% using Instagram and an average of 4 methods of learning/person |
| Extreme Weather Events (EWE) Experienced | 86.6% experienced ice storms, with an average of 5.5 events experienced/person | 90% ice storms and 90% extreme heat, with an average 6 experiences/person |
| Is Climate Change Related to These EWEs? | 86.6% yes | 72.7% yes |
| Scale of 1-5 Impact EWEs Have Had on You | Mean is 2.67 | Mean is 3.27 |
| Type of Impact from EWEs | Most common was emotionally, with 2.82 types of impact/person | 54.5% politically, with an average of 3 types/person |
| Is there an impact on day-to-day actions from EWEs? | Average was maybe, 37.78% said yes | 54.4% maybe |
| Recent Life Decisions Made, Regardless of Impact | 68.8% pursuing a certain degree, 53.3% job in a certain field, with an average of 3 decisions/person | 70% looking for a job in a certain field, with an average of 3 decisions/person |
| Do EWEs Impact Decisions? | 61.1% yes | 80% yes |

Table 1: Summary of Survey and Interview Findings

Out of the results listed above, there are three sections that I wanted to highlight. The first being the most common form of learning about climate change – 86.6% of surveys and 91% of all interviewees experienced an extreme weather event firsthand as their main form of learning. This was a larger number than I had anticipated and showcases how widespread the effects of climate change are because so many people have experienced an event, with an average of 5.5 events experienced per person. The next most common being social media usage, specifically Instagram across the board. This result was interesting, as it signifies the rising importance of social media as a means of sharing information among young people, while for older people the main form of learning about climate change may have been the news. The next category that is important to consider was the type of impact from extreme weather events that was most common, and for all surveys it was emotional, and for interviewees only political. Overall, each

respondent experienced about 2.82 types of impact. This signifies the different avenues of impact climate change can have on an individual, and that while physical relocation and physical environmental impact are important to consider, the effects of climate change go beyond the surface.

The final category that I wanted to highlight was the recent life decisions made, regardless of climate change's impact on the decision. The most common, across interviewees and survey respondents, were both pursuing a specific degree and looking for a certain job in a certain field, with an average of three decisions made per person. These decisions are ones that impact the person's immediate future, with area of study being within the next four years as a college student, and a job for either during college, after college, or a combination of both with their study working towards a future job. This means that students are not looking at decisions that impact their life for years and years into the future, or ones that are more "permanent" such as buying a house, marrying a significant other, or choosing to start a family with kids. This could have been linked to the emotional impact, including climate anxiety. By feeling climate anxiety, it may be harder to look into the future beyond the few years they are in college.

Through crosstab analysis, I found a series of correlated and non-correlated patterns between the demographic factors of gender and family income support and multiple categories. The categories that featured no correlation with gender or family income support were day to day impact and if they considered climate change in their life decision. The categories that featured no correlation with gender were the forms of learning through Instagram, Snapchat, Facebook, the NYT, CNN, BBC, Academia (classes or research related to school), weather apps, NPR, and local news networks. There was very minor to no correlation between the major life decisions made with gender and family income support. There was also very minor to no correlation

between gender and form of learning through TikTok, Twitter/X, and NBC, and the impact scale number a respondent would choose. Family income support seems to be correlated with someone’s form of learning being through academia and the type of impact being firsthand.

FAMSUPREC * IMPTYPEC

Crosstab

| Count | | IMPTYPEC | | | | | Total |
|-----------|----------------|----------|-----------|------------|-----------|----------------------|-------|
| | | 0 | Emotional | Economical | Political | Experience Firsthand | |
| FAMSUPREC | Under \$15,000 | 0 | 0 | 0 | 1 | 1 | 2 |
| | \$50-74,999 | 0 | 0 | 1 | 0 | 0 | 1 |
| | \$100-149,000 | 0 | 1 | 0 | 0 | 0 | 1 |
| | \$150-200,000 | 0 | 0 | 0 | 1 | 0 | 1 |
| | Over \$200,000 | 1 | 0 | 0 | 0 | 0 | 1 |
| | Not Applicable | 0 | 0 | 0 | 0 | 3 | 3 |
| Total | | 1 | 1 | 1 | 2 | 4 | 9 |

Chi-Square Tests

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------------|---------------------|----|-----------------------------------|
| Pearson Chi-Square | 32.625 ^a | 20 | .037 |
| Likelihood Ratio | 22.915 | 20 | .293 |
| Linear-by-Linear Association | .112 | 1 | .738 |
| N of Valid Cases | 9 | | |

a. 30 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Table 2: Crosstabulation of Family Income Support with Impact Type as well as Chi-square test accompanied; note that 0 for impact type was no response given.

FAMSUPREC * FOLACAD Crosstabulation

Count

| | | FOLACAD | | Total |
|--------------|----------------|-----------|----------|-----------|
| | | Not used | Used | |
| FAMSUPREC | 0 | 1 | 0 | 1 |
| | Under \$15,000 | 0 | 1 | 1 |
| | \$15-24,999 | 0 | 1 | 1 |
| | \$35-49,999 | 0 | 1 | 1 |
| | \$50-74,999 | 3 | 0 | 3 |
| | \$75-99,999 | 2 | 0 | 2 |
| | \$100-149,000 | 7 | 0 | 7 |
| | \$150-200,000 | 3 | 0 | 3 |
| | Over \$200,000 | 8 | 1 | 9 |
| | Not Applicable | 8 | 2 | 10 |
| Total | | 32 | 6 | 38 |

Chi-Square Tests

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------------|---------------------|----|-----------------------------------|
| Pearson Chi-Square | 19.281 ^a | 9 | .023 |
| Likelihood Ratio | 16.861 | 9 | .051 |
| Linear-by-Linear Association | 2.637 | 1 | .104 |
| N of Valid Cases | 38 | | |

a. 17 cells (85.0%) have expected count less than 5. The minimum expected count is .16.

Table 3: Crosstabulation of Family Support Income with Form of Learning about Climate Change through Academia.

Discussion

Access to Resources and Class Status

Throughout the interviews, as they were sharing their experience with the events they went through, having access to the resources they needed influenced the experience they had. Resources can include food, clothing, water, and electricity. Without these resources easily available, the chances of being prepared, resilient, and in some cases chances of survival, decrease. This is prevalent in Sage's stories. Sage expressed how growing up with a low income impacted their personal and family's experience with extreme weather events such as snowstorms and ice storms.

“My parents are very low income so we didn't get a generator until I was 11 or 12 maybe, so all the snow storms before then we just didn't have power[...] The ice storm was really hazardous because we didn't have power in my house for about six days. So I couldn't shower, our Wi-Fi wasn't working, and the cell towers in Cottage Grove were down. We were basically just a little huddled community waiting for somebody to come and help. And the only grocery store in town that had power by generators was Safeway, so we had like no food - we had to scrounge the cabinets. We didn't have a generator, we had little car batteries that we could plug a phone into... that was it for like 4 or 5 days.” (Sage)

I asked Sage why they did not go to Safeway to get food, especially since it was the only one open, and they told me that they could not afford to shop at Safeway even though they had almost nothing. Sage also expressed their inability to live closer to campus and a wider variety of resources because they cannot afford it. After a few days they took the journey over to Crow to visit their family, and a trip that would not typically take very long took 3 hours because of the ice. Once they arrived, they were finally able to access necessities such as food and warm water. If they were able to access more resources, their experience with this event would have been very different.

This event did not stop impacting them after the ice melted, as it seeped into their ability to access school as well. Not only were they unable to access necessities, but when the University of Oregon opened its doors again following the January 2024 ice storm, Sage expressed that they were very behind in their studies. The storm had a big impact on their mental health from the lack of resources, how behind they became with homework, and the extraordinary measures they took to get access to basic needs like showering and food. They said,

“I was crazy behind from week one until week four [of the term] because I was trying to catch up on all of [the] readings and stuff. It was just really exhausting and tiring, especially because I couldn't go to work so I lost a bunch of money. And we couldn't find diapers for my niece. It was extremely stressful. [...] And then having to immediately come back to class that Friday and resume like nothing had happened, and I hadn't just lost five days of work, it was really stressful.”

Overall, this experience took a large toll on them in multiple aspects of their life, and they did not feel supported by the University in their experience.

In 2021 Dallas, Texas also experienced an ice storm that brought profound damage in its wake. Communities all over the city were impacted in a multitude of ways including losing power and personal property damage. Interviewee Shanon shared their own story about this historic freeze. They talked about the lack of action from the Texas government, how they were warned of it coming. They lamented how Texas Governor, Greg Abbott, dismissed the concerns, having full trust in their electric grid and fossil fuels to withstand the storm. The next day Shanon woke up to no power, and they said, “Because our governor had such high trust in our power grid, no one, no one was prepared for the impact the freeze would bring. And because we're Texans, no one knows how to drive in the snow and the ice, and so nobody could leave.”

Shanon talked further about how wealthier communities, who could afford to buy more food per month, were more equipped than those communities living paycheck to paycheck such as Shanon's community, because they had food stockpiled. Their community also wasn't prioritized when power was being fixed, so people were dying in their homes by freezing, or starving to death from lack of food. Death was prevalent in their community, and this changed them and their family forever. Shanon said it took a while for their community to come back from this storm.

Drew is a case of the opposite, as during their interview while speaking of their experiences with extreme weather events, they did not express feeling the same level of impact on their life as the others. Drew, as indicated by their survey, receives over \$200,000 in familial support, and is the only interviewee to indicate this answer. They have lived in various places around the world, with Guam and Arizona being the two places they cited having experienced hurricanes and flash-flooding, respectively. During our conversation about this experience, and how they felt about them, Drew said,

“And it's very, very scary in the moment. [It's a] nice thing to look back on and laugh at. Just because I've been through a decent amount of things in my life to the point where I've started to become kind of desensitized to these things.”

Drew stated that the number of events he has experienced has desensitized him, but the ability to become desensitized and move on from this experience relates back to access to resources and the ability to “bounce back.” He has been able to move on from events because he has the resources to do so, while others do not.

In the survey crosstabulations between Family Income Support and Impact type, the SPSS system found a total of nine responses, with the most common form of impact being firsthand. Those who did not have any family support at all were the most common answer to

experiencing it firsthand, which means that they are fully supporting themselves while also being a college student. This lack of financial support would not allow for lots of opportunity and access to a large scale of resources, and the increased impact of events could cause more negative feelings and levels of fear.

Feelings of Climate Anxiety

Climate anxiety is a type of anxiety that is caused by changes in climate and the uncertainty of the future. It is a form of emotional impact that manifests in an individual, and emotional impact was the most common form of impact within the survey responses. Surveyors who elaborated about the choices they indicated, expressed emotional impacts such as climate anxiety, overall mental health decline, earthquake PTSD, and higher levels of stress. These surveyors specifically said,

“The majority takes form of climate anxiety and feelings of doom, like my future doesn't exist because the climate is changing and big polluters are so hard to hold accountable, yet I also feel that it is my duty to try to be part of the solution. Sometimes it makes me really sad” (Survey 14).

“Knowing that extreme weather is a sign of the rapid decline of our planet, it's hard not to think about the future and feel an impending sense of doom. I want to create something great with my life but what's the point if we only have ten years left. When I was in high school, I worked at Rite Aid in Washington and suddenly the power went out, and we looked outside our window and there was a tornado. Living in Washington I never thought I'd see a tornado, let alone have to worry about if I'd be safe, luckily my work wasn't in the path but a lot of homes were” (Survey 29).

This was common among interviewees as well. Seven of the eleven interviewees responded in ways that indicated climate anxiety. The following quote from Shanon represents this sentiment well:

“I definitely experience climate anxiety. For me, it looks like my most current anxiety was [when] I read an article about an oil mining field in Tennessee. I

started freaking out because I was like, "everything is happening so rapidly and as much as I'm doing to change it, and the people around me and the people I love, it's still in the hands of corporations and large systems." I had a very large lump in my throat because if I can't do anything, then what's the point? If I can't do anything, do I have a future? Will I make it to 60? Will I make it to 75 -the age of retirement? Am I gonna have to wear an oxygen mask? It just keeps building up, because I don't know what the future looks like at all. The instability in everything right now, especially the climate and how people are being affected by it, I know it's just building its way up the ladder, and it's going to get worse. My anxiety is very surrounded in the possibility of a future, and what that future looks like."

The uncertainty of a future impacts their mental health and their ability to look forward when making decisions. Even though there have been surveys conducted around the decisions of whether or not to have kids has shown that a quarter of people under 35 have decided they do not want to have kids, only a few responses throughout both the surveys and interviews mentioned that they had made decisions around or thought about starting a family. This surprised me, but then after seeing that the most common decisions being made between both groups were what to study and what job field to go into, it made more sense – these decisions are looking only a few years ahead, typically around 1-4/5 years depending on where they are in their college career, while the decision to have kids is a decision that can be made farther into the future. If there are uncertain feelings about having a future, there may not be much thought put towards having kids.

Quinn talked about climate anxiety being something they experience as well, and how social media can make the interactions with climate change information confusing because the information is "plastered everywhere, but also not everywhere at the same time" (Quinn). Thinking about the norms of attention, conversation, and emotion, and the influence of social media on these norms, Quinn's experience with social media seems to harm their overall mental well-being because the information from social media is overwhelming. Quinn also said,

"social media over emphasiz[es] how cutthroat [climate change] is and how permanent it is, like the effects of it, [and] isn't really talked about too much. It's a lot to take on, psychologically being like, 'I want to be a part of the change, but

where do I even start? How am I a part of this equation? I feel like I'm doing nothing, but I'm still going to try.' It is a little daunting, but I just feel a weird moral obligation to it pretty much."

Despite the community that influencers on social media try to create in a positive light for the zero-waste movement lifestyle, it seems that it has more of a negative impact on Quinn and their feelings. Quinn also mentioned that growing up they were taught in school that their generation was going to be the one responsible for fixing climate change, which seems to mirror their feelings after consuming social media and their feeling of needing to be involved. This could be impacting their feelings of anxiety, because it is a lot of pressure put upon a person and their generation saying they are responsible for fixing the climate.

Dakota is someone who also talked about climate anxiety, and how they took it upon their own actions and feeling a level of personal responsibility to change. They said,

"I was trying to do every single thing I could and it was so exhausting. I was trying to take room temperature, five minute showers. I was trying to use my devices less; I was trying to do every single little thing and it was so exhausting. And that exhaustion actually made me a lot more anxious because it felt like I was being tested and if I didn't do something, right, I was like, 'Okay, well that's five trees dead because I used an extra egg in my breakfast.' [...] eating less meat wasn't enough, and the feeling of doing tiny, miniscule things throughout my day was making me a lot more anxious. When I would like read the news headlines, it was a pit in my stomach, I was like, 'I'm not doing enough. I'm- I'm shaking, I can't.' I got to a point where for a few months, I couldn't even like read anything climate related, because it made me feel so guilty for like, feeling like I wasn't doing enough."

They took it upon themselves to undergo personal changes in their lifestyle to make a difference and to fight climate change, and it sounds like they were striving for the zero-waste lifestyle influencers online push for - the short showers, using their devices less, and reducing their consumption. A zero-waste lifestyle, while positive and helpful in theory, is an individualistic approach to solving climate change, and Dakota felt exhausted trying to do everything possible.

Drew is someone who believes that they alone cannot solve climate change, and it has helped them not feel climate anxiety anymore and to focus on what they can do to help. Drew said,

“I think I used to have anxiety, but I kind of realized it was just kind of useless. Because there's no point in being anxious, [...] it's happening. Me personally, by myself, I'm not going to stop climate change, but I can do my own parts, to be able to start furthering a movement towards others. Like, for me, I wanted to be in Nike, because Nike is worldwide. So being able to change all their textiles into environmentally conscious materials, from wherever they get that supply chain supply chain from, that makes me feel like I'm doing something so that anxiety does kind of tend to fade away.”

Their decision about what they want to study and the path they are choosing to take allows them to become involved in ways they can and has in turn eased their feelings of climate anxiety. It seems that having a tangible hand in combatting climate change, beyond personal lifestyle changes, does not bring as much anxiety or negative feelings about climate change and the future as focusing on individual actions and being flooded with information on social media. Drew showcases this tangible action through their studies and career goals, but it could also be a political avenue. One of the most common forms of impact for the interviewees was political, and becoming politically involved could potentially be a form of coping with climate anxiety, taking their power back that anxiety strips from them.

Climate Crisis Knowledge Impacting Politics, What to Study, and Where to Live

The most common life decisions made by the interviewees was what they wanted to study and what job they wanted to pursue for their careers. Ten of eleven interviewees are currently majoring in Environmental Studies or Science, with seven in Environmental Science, three in Environmental Studies, and the final person started their academic journey in Environmental Studies and switched to Geology. For some, the extreme weather events they

experienced was the catalyst in this decision, as they wanted to be able to help others however they can. Molly is an example of climate change knowledge shaping their political views, what they want to study, and where they want to live. They said,

“It shapes my political views, because I would say the environment is one of the things I care about the most. So I am not going to associate with a party or candidate ideology that doesn't value that as well. [...] And it's definitely, I would say, [helped me with] picking my major, because I love to just be outside in the world. And it changing irrevocably is something I'd like to reduce. [...] I feel like these natural disasters are gonna continue to happen and they're gonna happen everywhere. They're all over the country, there's no where to go where I think you can escape it, like everywhere in the world. But it definitely makes me think of places where I know how to handle it.” (Molly)

Molly is from St. Louis, MO and they have experienced multiple types of extreme weather events, including tornadoes and the Eugene ice storm in January 2024. They talked about how they know what to do in the event of a tornado, but do not know as well what to do in the case of a fire. They also talked about how growing up, they would research climate change on their own even though their family did not think it was a pressing issue because their immediate area was not severely impacted. Through their knowledge and awareness of climate change, they became more interested in becoming involved with the environment.

This is similar with Faith's journey, as they are a graduate student studying for their master's in environmental science who originally gained interest in the subject through learning about climate change and the environment in high school,

“My senior year of high school, I took an environmental science class, and that was really cool and eye opening. I've always been like, drawn to science, so I went to undergrad first to get a Marine Science major.[...] Junior year I switched into environmental studies, and I was also working at a cross cultural center at that time in undergrad. I worked there for four years, and we talked a lot about different social justice issues, and how everything's intertwined. And so I had the opportunity to bridge my two interests of environmental work, and why it's connected to my identity, and where people live. So I think a lot about environmental work in metropolitan areas.”

Faith is from Los Angeles, CA, and is a graduate student at the University of Oregon. They talk about how the environment is something that always interested them, but their concern for the environment and their community fuels their involvement. They also talked about in the interview how they can see the layer of smog in the sky and how it impacts their breathing. Their experience with extreme weather events and their knowledge of climate change has impacted their thinking of where they want to live,

“I think I definitely thought about where I'm living a little more than I would think. Like, there's places that I would just wouldn't live like, probably New Mexico, Texas, Arizona - those places are hot as hell. So I think heat is a big part, like heat exhaustion, and all those things. I don't know if I'm down for that. I'm also feeling like I can breathe better in Oregon, because the air is better, and when I go home to LA, I feel like it's so stuffy” (Faith).

What career to go into was also expressed to be impacted with Nathan, where they said, “I guess the [career] decision is based on the stuff I learned when I was younger and experiences I had that got me interested in it. And I eventually went into a career that's somewhat near or is in the same ballpark [as my interests].” They are a grad student in meteorology, wanting to pursue a career relating to tracking the weather. They haven't made the decision of where to live yet, but they expressed that their knowledge of climate change and weather in certain areas would impact their decision of where to live in the future.

There were also specific survey respondents that mentioned their knowledge of the climate crisis impacts their choices of study, politics, and where to live being impacted. These four quotes showcase this well:

“My knowledge about and experience of climate change impacts every aspect of my life. It factors largely into my political beliefs. It drives my academic pursuits. It has caused me to surround myself with people who are also passionate about ending climate change” (Survey 22).

“Eventually hope to move out of Oregon and try to find a career somewhere else., I will be voting for the party that takes climate change as a scientific fact and will be voting for the democratic party., Bachelor's in Soc” (Surveyor 28).

“Found it especially existential and dreadful to go into a career that focused on politics and environment. For my sanity, it has to be either but not both, I will be looking for the type of rock that lays under the house to assess the risk in case of an earthquake. For example, I would never live in downtown Seattle, I care about these events so I have a minor in environmental studies” (Surveyor 5).

“More environmentally conscious area, less materialistic, I think sustainable business is cool, I am also interested in sustainable agriculture” (Surveyor 19).

All four of these quotes represent that their knowledge of the climate crisis impacts their decisions around where they want to live, what to study, and their feelings towards politics. Fifteen out of forty-five survey respondents (33.3%) indicated that they were impacted politically by their knowledge of the climate crisis. Within those who chose to elaborate their choices further, they mentioned switching parties or supporting candidates to ones that care about the climate, becoming involved in politics due to political inaction from their government, labeling themselves as progressive or leftists, and moving to Europe for their political environmental goals. We see this pattern of environmental concern’s connection with political action emerging within our interviewees as well.

Environmental Concern and Political (In)Action

By not being properly equipped for these storms, Sage, Shanon, and their communities suffered greatly. They both expressed frustration with the lack of support that they received from institutional powers. Sage was frustrated with the university’s apparent lack of concern for their students and Shanon was frustrated with the state’s lack of care for lower-income communities. Shanon touched on this explicit difference in treatment, saying,

“[the freeze] triggered something in me that realized how different people are treated. I guess my experience in climate change, the climate crisis, and how people adapted to it was very based on economic status, and what you're given purely based off of that. The freeze really locked it in how important it is and how different you're treated when you're seen as more important, or seen as higher ranking. Being seen as dispensable, and not important was very, very rough. And it was my first time experiencing it. [So] a light kind of turned on that I only felt it during an extreme extreme weather event that I cannot imagine... Oh, it makes me have goosebumps... It's so frustrating [to know] that people experience it on a day-to-day basis.”

This event seemed to have a large impact on their personal life decisions, as well as their family's decisions. Growing up Shanon talked about their love for national parks and how that inspired them to become more involved in environmental work, but this freeze was their tipping point in their desire to be involved.

“The freeze really opened something in me that wanted not to fight for but to open space for people to talk [...] I don't want to act as like a hero. Like I'm gonna go get an education that I can afford to go back and provide resources for these communities and be a hero in my own heart. But I want to get an education and learn how to open space for these people to talk about their experiences and to say what they need personally. And what systematic change they want and they need” (Shanon).

Their family for a while felt like they didn't belong in Texas, and this storm seemed to be the tipping point for them to finally leave. Shanon shared,

“And after seeing the effects of [the storm we] moved out of Texas and moved to Oregon where the government is more prone to the escalation of nature and taking care of it. [...] [N]ow my whole family's out here [...] and we love it.”

Shanon's story is one of disappointment in political action, and how class status can determine a person's preparedness for these events. Even after it happened, Shanon shared how they and their family are always thinking about how they need to be ready for the next disaster, and how it changed their political views and day-to-day actions.

What this story also brings is the mental impact living through these events can bring. In the survey, there were 44 responses to the question, “Do you feel that your day-to-day actions

have been influenced by the existence of extreme weather events?” and out of those it was 38.64% yes, 31.82% maybe, and 29.55% no. Through my interviews, I found a similar pattern of different impacts even going through these events.

However, the presence of the events and the level of environmental concern also play a factor in the amount of impact these events can have. For example, Faith grew up in LA and was exposed to terrible air pollution their whole life. When they experienced an evacuation from a fire in Santa Cruz, they ended up staying home for the rest of their term. This experience had a large impact on their mental health but wasn't the largest factor in life decisions like what they want to study. Rather, their environmental concern in general played a large factor in their decisions like what to study and where to live. They said,

“Growing up I always knew that LA had some of the worst air pollution in the whole country, and how that is extremely cancerous - you can get asthma, and all these different health problems. That just felt really unfair to me that my parents live there and I'm thinking “What if it's them?” you know? I've looked at some research on where the largest population of Asian Americans live [and it's] in metropolitan areas, and they also have three times [the] chance of getting cancer as white people living in the same places. [It was] really eye-opening and definitely not equitable. [...] When I go home to LA I feel like it's so stuffy [...] there's this layer in the sky and it's the smog layer. And I don't know why other people don't see it, but it's all I can see. [S]ometimes I wish I didn't see it because I'm always thinking about it, and I feel like it does change my perception a lot because I think the environment is kind of all I think about.”

Faith currently works for an organization based in LA that creates “climate resiliency hubs,” which are spaces that people can go to obtain resources like PPE, and sees the impact on these individuals first hand. They also felt that their care for the environment truly started in 2016 when they went vegan. Through their learning and their Asian American identity resulting in their higher risk of experiencing harm, combined with their experiences, fueled their passion further. Faith shared their feelings of frustration with the University's response to the ice storm, saying,

“Our whole block of the street, we lost power two days in a row. [The university building across the street], nobody lives in there, lights on. Because they're probably the generators probably through the university [...] But I'm thinking about [how the] university could have created warming centers for people. Because my house is all electric, so we couldn't cook, we couldn't have the heater on, couldn't charge anything. The university could have used its physical resources to actually support people, but they didn't choose to do that.”

There is a common theme among interviewees of feeling unsupported, either by themselves personally or someone close to them, by their institutions during these events.

Almost every interviewee, ten of the eleven, brought up at least one area where the University could have improved in their response to the ice storm here in Eugene in January 2024.

Suggestions like providing warm spaces, transparency around resources available, and helping with access to power were the more common responses. These people sharing their stories and their opinions emphasize the importance of being more prepared for these events and responding accordingly, especially as an institution like the University of Oregon. Putting a focus on the people is crucial for their overall well-being and satisfaction.

Conclusion

It is known that extreme weather events often bring physical destruction and costly damage. In 2023, a historic number of billion-dollar disasters were reported, totaling \$92.9 billion (Smith, 2024). Even at the local scale in Eugene, The Cascades Raptor Center in Southern Eugene had to temporarily close its doors due to damages costing \$10-11,000 after the ice storm in January 2024 (Coronado, 2024). It's important to address not only the impact extreme weather events have in the immediate moment or a few weeks after, but also that they continue to impact people for time to come.

Overall, respondents expressed their belief in climate change and its impact on the severity of extreme weather events. A pattern in interviewees emerged of their knowledge of climate change and extreme weather events impacting their politics, where to live, and what to study. This also led to the finding that experiencing extreme weather events can impact life decisions and mental health, especially causing feelings of climate anxiety, but there are varying degrees of impact depending on the severity of the event, which is impacted by class status' access to resources, and overall knowledge of climate change. Additionally, the failure of institutions influenced people's personal political actions, often encouraging them to become more involved with politics and environmentally related careers. With this knowledge, there is the opportunity to advocate for better policies and initiatives around resources for post-extreme weather event care, as well as increased attention to preventative methods.

This research has added to research around the impact extreme weather events have, supplementing the research known about climate change from a college student perspective. It also informs us how students now are mostly learning about the climate crisis and what's happening in the world through either first-hand experience or social media, specifically

Instagram. Social media is a newer form of sharing information that is becoming more and more popular and is important to understand the relevance of it in college student's lives as a source of information when making decisions. It also adds to the discussion around the different social media communities created involving climate change, and how there could potentially be detrimental effects due to the high volumes of information taken in at once.

Limitations and Areas for Future Research

This research consists of a smaller sample size of 11 interviewees and 45 survey respondents, and the interviewee sample was solely Pacific Northwest college students majoring in Environmental Studies or Environmental Science (10 out of 11, one studying Geology). The small sample size is not fully representative of all environmental studies students or of college students across the country, and the interviewee sample does not fully represent all Pacific Northwest college students either. Additionally, since the survey to recruit interviewees was done with a purposeful, non-probability approach, they are more likely to be already aware of or pay attention to the environment in some capacity due to their majors. They are likely more aware than students who have no academic connection to the environment, which was done with the hope that there would be more students likely to respond and volunteer to be interviewed.

Future research could be on college students not involved in environmental studies in any capacity. This would be a point of comparison, and potentially a point of advocacy to include environmentally related courses in all areas of study. A specific sample that could be looked at would be those who do not believe that the climate is changing, and do not think that extreme weather events are related to climate change in any capacity. This could bring an interesting point of comparison and allow for a broader understanding of a larger population of college students. Additionally, since the demographic of my sample was 73.3% white, and were majority

cis-gender women, future studies could be more racially diverse, and feature a wider range of gender identities as well. About half of my interviewees were from the West Coast (54%) and two happened to be from Texas, so featuring a sample with students from other parts of the country or maybe even other parts of the world would expand the research as well.

Since my research also is generally broad when it comes to looking at the decisions made, future research could dive deeper into individual decisions like whether or not to have children and area of study. Additionally, it could also dive deeper into the aspect of mental health, focusing more on climate anxiety and perhaps a closer look on the impact climate anxiety has on people's lives. There also could be other mental health aspects to look at like the earthquake PTSD mentioned in the survey.

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Appendices

Appendix A – Survey Questions

Appendix B – Codebook for Survey

Appendix C – Interview Guide

Appendix A

Survey Questions

Demographic Information

1. Please check this box to indicate you have read the message above, are 18 years of age or older, a student in college either undergraduate or graduate, and voluntarily consent to participate in the survey.
2. Please select which of the following best describes your gross (before taxes) annual income
 - a. Under \$15,000
 - b. \$15-24,999
 - c. \$25-34,999
 - d. \$35-49,999
 - e. \$50-74,999
 - f. \$75-99,999
 - g. \$100-149,999
 - h. \$150-200,000
 - i. Over \$200,000
3. If you receive financial support from your family, please indicate their gross (before taxes) annual income
 - a. Under \$15,000
 - b. \$15-24,999
 - c. \$25-34,999
 - d. \$35-49,999
 - e. \$50-74,999
 - f. \$75-99,999

- g. \$100-149,999
 - h. \$150-200,000
 - i. Over \$200,000
4. Please write in your current age.
 5. Please indicate your current class standing based on credits.
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Graduate Student
 6. Please select the racial identities with which you identify, and in the text box below the identity selection, please specify how you identify ethnically (country of origin, ancestry, etc.)
 - a. White
 - b. Black or African American
 - c. American Indian or Alaska Native
 - d. Asian or Asian American
 - e. Native Hawaiian or Pacific Islander
 - f. Hispanic or Latine/a/o/x
 - g. Multiracial
 - h. Other Racial/Ethnicity Identity Not Listed
 7. Please select your gender identity that you most align with, and please elaborate in the text box below the identity how you like to present your gender identity (feminine, masculine, etc.)
 - a. Cisgender woman
 - b. Cisgender man
 - c. Transgender woman

- d. Transgender man
 - e. Nonbinary
 - f. Genderqueer
 - g. Other gender identity not listed above
8. Please select the sexual orientation you identify with and please elaborate in the text box below any other specifics you'd like to mention (i.e. romantic vs sexual attraction)
- a. Straight
 - b. Lesbian
 - c. Gay
 - d. Bisexual
 - e. Pansexual
 - f. Asexual
 - g. Queer
 - h. Two-Spirit
 - i. Other sexual orientation not listed above

Extreme Weather Events and Their Impact on You

Extreme weather events, as defined by the US Department of Agriculture, are “occurrences of unusually severe weather or climate conditions that can cause devastating impacts on communities and agricultural and natural ecosystems.” Events are determined to be extreme depending on their location and the typical threshold of that location, as well as the likelihood that these events occur within a certain timeframe (USDA). Additionally, these events are not part of a typical climatological pattern for a place and time.

9. With the paragraph above in mind, what extreme weather events have you experienced in your life? Select all that apply to you.
- a. Flooding

- b. Landslides
- c. Extreme Drought
- d. Hurricanes
- e. Acid Rain
- f. Air Inversion
- g. Ice Storms or Long-Lasting Freezes
- h. Snowstorms
- i. Extreme Heat or Long-Lasting Heatwaves
- j. Tropical Cyclones
- k. Heavy and Excessive Rain
- l. Tornadoes
- m. Wildfires
- n. Earthquakes
- o. Other

10. Do you believe that the experiences you have gone through are linked to climate change? Why or why not?

11. Which of the following methods do you use to learn about extreme weather events? Please select all that apply.

- a. Social media – please put which platform(s) such as TikTok, X, etc.
- b. News Outlet – please put which outlet(s) such as FOX, CNN, etc.
- c. Friends and Family
- d. Print Media (articles, magazines, books) – please put which print media such as NYT, etc.
- e. Experiencing it firsthand
- f. Other
 - i. *Common answers for other include academia/classes and weather channels/apps*

12. On a scale of one to five, one being no impact and five having changed your life completely, how impacted are you by your knowledge of extreme weather events?

a. *Sliding scale from 1-5 was then presented for respondents to answer*

13. Please check all of the ways that you have been impacted by extreme weather events.

- a. Physically such as forced relocation, broken bones, newfound disabilities, more susceptible to disease, chronic illness, etc.
- b. Mentally such as new or worsened mental health (depression, anxiety, PTSD, etc.), memory loss, etc.
- c. Emotionally such as difficulty regulating and feeling emotions, elevated amounts of stress, etc.
- d. Socially such as the ability to form or maintain relationships, comfortability in social settings, ability to interact with others, what you look for in relationships, etc.
- e. Economically such as a loss money or wealth through property or personal belonging loss, loss of a job, ability to find a job and earn money, etc.
- f. Politically such as a shift or reinforcement of your political beliefs, becoming politically active or involved in your community, etc.
- g. Experienced it firsthand such as being in the location as the event was happening, or having to relocate to safety due to where the event was happening.

14. As a follow-up to the question above, in all the ways you selected, please go into more detail about what this impact looks like for you.

15. Do you feel that your day to day actions have been influenced by the existence of extreme weather events?

- a. No
- b. Maybe
- c. Yes

16. As a follow up to the question above, please explain your choice.

17. Please select the major life decisions you may have made recently or are planning to in the near future, and please elaborate in the text box below your selection.

- a. Moving to a new city, state, or country

- b. Marrying or having a serious commitment to your significant other
- c. Choosing to start a family soon, or have aspirations/plans in the future
- d. Looking for a job in a certain regional area, or changing/quitting the one you have
- e. Looking for a job or career in a certain field, or changing/quitting the one you have
- f. Your political affiliation, specifically in preparation for the 2024 election
- g. Buying a house or wanting to buy one someday in a certain regional area
- h. Pursuing a specific college degree or major for a Bachelor's, or choosing to continue in higher education to a Master's, PhD, JD, MD, etc.
- i. Any other life decision that is not listed above

18. Have you taken into account the existence of extreme weather events when making these decisions? Please explain why or why not below.

19. If you have experienced an extreme weather event and would like to discuss it further, I would like to interview you about that experience. Additionally, if you haven't experienced one but would still like to talk about how your knowledge of them has impacted you, I would like to interview you.

If you are willing, please put your name and contact information so that we can set up a time to meet. Thank you in advance for your participation!

Appendix B

Codebook for Survey

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|----|--------------|----------------|-----|----------------|-------------------------------------|------------------|--------------------|--|------------------------|------------------------|---------------------|-----------------|---------------------------------|-------------------------------|--|------------------------------------|------------------------|
| | Income | Family Support | Age | Class Standing | Race&Ethnicity | Gender | Sexual Orientation | Weather event experienced | Climate change linked? | Form of learning | FOL Additional Info | Scale of impact | Ways that they've been impacted | Day to day actions influenced | Major life decisions made | taken into account climate change? | Were they interviewed? |
| 1 | <15k | <15k | 18 | Freshman | White | Cis woman | straight | flooding | no | social media | Instagram | 1 | physical | no | moving to new place | no | yes |
| 2 | 15-24,999k | 15-24,999k | 19 | Sophomore | Black or African American | Cis man | lesbian | landslides | maybe | news outlet | Snapchat | 2 | mental | maybe | marrying or serious commitment to partner | maybe | no |
| 3 | 25-34,999k | 25-34,999k | 20 | Junior | American Indian or Alaska Native | Trans woman | gay | extreme drought | yes | print media | Tiktok | 3 | emotional | yes | choosing to start a family | yes | |
| 4 | 35-49,999k | 35-49,999k | 21 | Senior | Asian or Asian American | trans man | bisexual | hurricanes | | friends and family | Facebook | 4 | social | | looking for a job in a certain regional area | | |
| 5 | 50-74,999k | 50-74,999k | 22 | Grad Student | Native Hawaiian or Pacific Islander | nonbinary | pansexual | acid rain | | experiencing firsthand | Twitter/X | 5 | economical | | looking for a job in a certain field | | |
| 6 | 75-99,999k | 75-99,999k | 23 | | Hispanic or Latine/a/o/x | genderqueer | asexual | air inversion | | other | NYT | | political | | political affiliation | | |
| 7 | 100-149,999k | 100-149,999k | >23 | | Multiracial | other not listed | queer | ice storms or long lasting freezes | | | NBC | | experience firsthand | | buying a house or wanting to buy one | | |
| 8 | 150-200k | 150-200k | | | Other not listed | | two-spirit | snowstorms | | | CNN | | | | pursuing a specific degree | | |
| 9 | >200k | >200k | | | | | other not listed | extreme heat or long lasting heatwaves | | | BBC | | | | other | | |
| 10 | | Not applicable | | | | | | tropical cyclones | | | Classes/academia | | | | | | |
| 11 | | | | | | | | heavy and excessive rain | | | Weather Channel | | | | | | |
| 12 | | | | | | | | tornadoes | | | NPR | | | | | | |
| 13 | | | | | | | | wildfires | | | The Daily Emerald | | | | | | |
| 14 | | | | | | | | earthquakes | | | Other | | | | | | |

Appendix C

Interview Guide

1. Please tell me a little bit about who you are, specifically your age, what you're studying, what you do for a living, and whether or not you have experienced an extreme weather event.
2. Before experiencing the extreme weather event firsthand, what was your perception of the climate crisis? Why was this your perception - what influenced it to be this way?
 - a. *if no event - what is your perception of the climate crisis?*
3. Is there a pivotal moment, event, or experience that changed your influence or began your journey of thinking about climate change?
4. What was the extreme weather event you have been through? Could you share some of your story on what happened?
 - a. *if no event - do you think that extreme weather events are a result of climate change? Do you know anyone who has been personally impacted by them?
5. How has that experience impacted your perception of life? Are there any decisions you've made after this experience that have been heavily impacted? This could be what you look for in a partner, what you look for in a career, and/or your political views.
 - a. *if no event - what influences your perception of life? Are there any life decisions you have made that have been influenced by this perception?*
6. Do you believe that you experience climate anxiety, and what does that look like for you?
7. What resources, courses of action, or information do you believe should be made widely accessible? Is there anything you'd recommend to the University of Oregon if they came asking for your opinion?
8. Is there anything else important that you'd like to mention?