

Eco-Anxiety:

Exploring Existential Anxiety and Ontological Security Among University Students

By

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**Abstract:** *The physical and mental health consequences of climate change are, and will be, an extremely important issue in the anthropology of climate change. Already, we are seeing countless examples of the effects of climate change in Canada, and around the world. Although the physical consequences have been theorized for quite some time, scholars have only recently started to study the mental health effects. An emerging component of which is eco-anxiety. Studies on eco-anxiety thus far have predominantly been studied using quantitative methods. Qualitative and mixed-methods approaches have yet to be explored in a similar way. The purpose of this honours thesis was to contribute to the overall understanding of eco-anxiety using in-depth, qualitative, semi-structured interviews. The study consisted of nine Dalhousie University students who were enrolled in programs that pertained to environmental studies i.e., Biology, Sustainability, and Environmental Science. The overall findings were fourfold. Firstly, eco-anxiety is derived from existential anxiety, which is ultimately derived from existential environmental threats. Secondly, eco-anxiety is not pathological but rather, a rational response to the climate crisis. Thirdly, the mental health effects observed usually correlated with pre-existing mental health conditions, such as general anxiety. Eco-anxiety does not typically create new mental illnesses, rather it exacerbates pre-existing ones. Lastly, there are various strategies the participants used for mitigating the mental health effects of eco-anxiety.*

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## Introduction

Over the past decade, the prevalence of eco-anxiety has steadily been increasing (Baudon & Jachens, 2021; see also Friel, 2019). There are three fundamental reasons for this; Firstly, there are more frequent environmental catastrophes such as hurricanes, droughts, and heat waves (Friel, 2019). Secondly, the media has increasingly produced more material pertaining to these environmental catastrophes, thus increasing the exposure and knowledge of environmental crises around the world (Ojala et al., 2021). Thirdly, it is the most significant existential threat permeating many societies (Giddens, 1991). When the potential dangers of climate change first gained some legitimacy in the late 1960s-70s, it was during the height of the Cold War (Tsing, 2000). The environment hardly mattered in the face of nuclear holocaust (Dyer, 2009). How could there be an environment to protect if there were no humans left to protect it? However, when the Soviet Union collapsed in 1991, there was a spike in environmental activism, and environmental disciplines received much more legitimacy in the labyrinth of academia (Tsing, 2000).

Since the 1990s, a sizeable literature on the anthropology of climate change has steadily been increasing, and even more so in the 2010s. One relatively new field to emerge from this literature is the anthropology of climate change and mental health, and more specifically, eco-anxiety (Ojala et al., 2021). Thus far, eco-anxiety has predominantly been studied by sociologists using quantitative methods (Coffey et al., 2021). The focus of this study, however, was to flesh out some of these quantitative analyses and to explore some of the nuances that may lay within, i.e., what causes eco-anxiety and how is eco-anxiety experienced by eco-anxious students. This study will contribute to furthering our understanding of eco-anxiety in a

qualitative way and will address four major themes. Firstly, eco-anxiety is derived from existential anxiety. Secondly, eco-anxiety is not pathological but rather, a rational response to the climate crisis. Thirdly, the mental health effects observed usually correlated with pre-existing mental health conditions. Lastly, there are various strategies the participants used for mitigating the mental health effects of eco-anxiety.

In order to understand eco-anxiety, it is imperative to understand why climate change is a contemporary problem and how climate change has emerged as one of the most significant existential threats permeating many contemporary societies. This will be addressed in Part I of the following section. Part II will pertain to why climate change is causing many people to be eco-anxious and will be theorized using Anthony Giddens' concept of ontological security and existential anxiety. Furthermore, Part II will also pertain to the ways in which scholars have studied and understood eco-anxiety.

## **Literature Review: Understanding Eco-Anxiety**

### *Part I: Understanding Climate Change*

The current geological era, the Holocene, can be characterized by the recession of continental glaciers. In other words, it is a period of gradual warming (Roberts, 2014). This begs the question: Why are people so concerned with our current predicament if this is a naturally occurring planetary phenomenon? The concern geologists and climate scientists have is not with the intrinsic fact that the earth is warming, but rather the rate at which it is warming. The social implications of which are human death, species extinction, infrastructural damage,

climate refugees, and a diminishing ontological security and existential anxiety (consequences we are already beginning to see in certain, if not all, regions of the planet).

Humans have had profound effects on their local and regional environments since their evolution 200,000 years ago, with the most profound effects occurring first, with the rise of agriculture, and then with the industrial revolution in the late 18<sup>th</sup> century. Since the industrial revolution, humans have released an exorbitant amount of greenhouse gases into the atmosphere which first began with coal and the steam engine. This has led many scholars to characterize contemporary climate change as anthropogenic.

In 2000, Paul Crutzen and Eugene Stoermer (2000) published an article titled *The Anthropocene*, and like agriculture, the term took off. They argued that the most profound atmospheric and climatic changes of the Holocene era can be attributed to anthropogenic causes, rather than natural processes. As William Ruddiman (2013) has pointed out however, humans have existed on this earth for millennia; therefore, there must be something more than the intrinsic nature of humans that is causing such catastrophic changes. Jason Moore provides the most plausible interpretation with his conception of the *Capitalocene* (2016; 2017; 2018; see also Patel & Moore, 2018).

It should be noted that Moore (2018) does not intend to rename the geological era the *Capitalocene*, but rather to acknowledge that our global economic system encourages the cheapening of nature, the over-consumption of resources, and most notably, economic growth as hierarchically more important than the environment. Capitalism, Moore argues (2016; 2017; 2018; see also Patel & Moore, 2018), is the driving force behind climate change; climate change

is not anthropogenic, as Crutzen and Stoermer (2000) suggest, instead it is capitalogenic. Moreover, it is not humans everywhere, as the *Anthropocene* may suggest, but only certain humans who are engaged in the global capitalist economic system. Most scholars still prefer to use the term the *Anthropocene*, but since its conception in 2000, many scholars have challenged its implications.

Some alternatives to the *Capitalocene* that scholars have conceived are the *Plantationocene* (Haraway, 2015; Haraway et al., 2016), the *Technocene* (López-Coron & Magallanes-Guijón, 2020), the *Polemocene* (Antonacci, 2021), and many more. Donna Haraway and Anna Tsing's conception of the *Plantationocene* argues that plantation agriculture—which persists into the present day—is the driving force behind anthropogenic climate change. Likewise, the *Polemocene*, as suggested by John Peter Antonacci (2021), places war as the major driving force. The *Technocene* too, places technology as the source of anthropogenic climate change. To me, however, these are all rivers deriving from the same lake, branches of the same tree, and tentacles of the same octopus. Capitalism is the nucleus that binds all the -ocenes together.

Climate change as a naturally occurring planetary phenomenon is not new. It is true, as many climate change deniers claim, that climate change is cyclical and that an earth devoid of humans would nonetheless be warming. Most climate scientists do not disagree with this claim. Where they disagree is whether humans or nature is the cause of climate change. One climate scientist who has profited from the propogandist misinformation that humans have zero effect on climate, is Ed Berry and his book *Climate Miracle: There is no climate crisis, Nature controls*

*climate* (2020). Nature may control climate change, but humans, and more specifically capitalism, control its pace.

### *Part II: Eco-Anxiety*

Eco-anxiety can generally be defined as a chronic fear of environmental disasters and ecological degradation in either future or present contexts (Coffey et al., 2021). Although some scholars are framing eco-anxiety pathologically (Baudon & Jachens, 2021), others are framing it as a rational and reasonable response to the climate crisis and government inaction (Hickman, 2020; see also Pihkala, 2018). The reason why people are anxious about the future can be elucidated using Anthony Giddens' (1991) conceptions of ontological security and existential anxiety.

Giddens' (1991, p. 183-85, 243) conception of ontological security can be defined as a stable mental state derived from a sense of continuity in regard to the events in one's life. One can easily imagine a situation where a hurricane, forest fire, drought, or heat wave might disrupt one's sense of continuity and thus affect one's ontological security. Coupled with Giddens' conception of ontological security is his conception of existential anxiety. Existential anxiety is the result of two key factors. Firstly, there must be existential threats either real or perceived, and secondly, there must be a belief that the existential threats are not being solved effectively. Giddens argues:

"If most [people] successfully bracket out such possibilities and get on with their day-to-day activities, this is no doubt partly because they assess the risk involved as very small. But it is also because the risks in question are given over to fate... A person may put such contingencies out of mind and assume that things will turn out well, or at least that, should global catastrophes of one kind or another occur, others will bear the brunt of

them; alternatively, she might trust governments and other organizations to cope effectively with the threats that present themselves” (Giddens, 1991, p.183).

People who experience existential anxiety, and by extension eco-anxiety, are those who feel as though the risk is not small, that others will not bear the brunt of ecological catastrophes, and that governments and other organizations are not coping effectively with the threats that present themselves.

Although Giddens did not necessarily state that there is a hierarchy of existential threats, I think it is important to suggest that such a hierarchy might exist. For example, it is hard to imagine Ukrainians right now perceiving climate change as the hierarchically more important existential threat and the most significant threat to their ontological security. Furthermore, within affluent nations, it is hard to imagine individuals in impoverished situations placing climate change as hierarchically more important than basic human needs such as shelter, food, and water. Moreover, people who generally believe that governments and organizations are, or will, effectively solve climate change, or who place the burden on others, typically do not perceive climate change as a significant existential threat and might perceive other risks as more important (such as the economy). To have existential anxiety over existential threats, one must perceive the existential threat to be legitimate.

In nations where climate change is believed to be a legitimate existential threat, some themes have emerged. For example, in a study by the University of Bath, the researchers polled 10,000 youths between the ages of 16-25 from 10 different countries (Usher, 2021). The results of the study were staggering: 75 % perceived the future to be frightening, 56 % believed that humanity is doomed, and 39 % were hesitant to have children because of current

environmental issues (Usher, 2021). In another cross-national survey of twenty-five countries, Ogunbode and colleagues (2021) looked at the correlation between eco-anxiety and self-rated mental health. What they concluded was that 72 % of countries correlated with insomnia, and 84 % correlated with self-rated mental health. In other words, eco-anxiety proved to be a significant factor in determining one's self-rated mental health. It is evident from these studies that eco-anxiety is affecting many people's ontological security.

In a study conducted by Bas Verplanken and his colleagues (2020), 85 % of their participants claimed to be concerned with climate change, and a further 52 % claimed to be very concerned. Despite this, their study revealed a positive correlation between eco-anxiety and pro-environmental behaviour. The more anxious their participants were, the more likely they were to implement pro-environmental behaviour in their daily lives. It is certainly unhealthy for any individual to obsessively think about environmental threats and to constantly ponder the ills of humanity, but as Verplanken and his colleagues show, it does have a certain motivating quality.

The greatest differences in how eco-anxiety manifests between global populations is based primarily on environmental vulnerability. As Panu Pihkala (2018) notes, people generally make assessments about global conditions based on local ones. Moreover, people who personally experience climatic events are more likely to support policies and show higher levels of guilt, fear, and sadness (Ojala et al., 2021). Populations that are more vulnerable to climate change and extreme weather events, unsurprisingly, report higher levels of eco-anxiety and eco-guilt. These are general differences between regions, but within regions, more patterns emerge. For example, people who lean towards the left and people who value global equality,

justice, and peace, are more likely to report having eco-anxiety (Ojala et al., 2021). Likewise, women also tend to report higher levels of eco-anxiety.

In a study by Eisler and colleagues (2003), they conducted a trans-national study to explore inter-regional and gender differences among American, German, Swedish, and Japanese participants. What they observed was that on average, women show more concern for the environment and perceive risks to be more serious. Men, alternatively, tended to focus on the probability of risk. Furthermore, women believed, to a greater extent than men, that the protection of nature is an important aspect of human existence. Regardless of gender, those who value equality, justice, peace, and the environment as important tenets of human society are more likely to be affected by global inequalities like the climate crisis, and are thus more susceptible to eco-anxiety.

In addition to gender and general world views, there are also important distinctions between age. In a paper by Caroline Hickman (2020), young adults and adolescents (16-25) are much more worried about climate change than older generations, and they are also much more worried than they were a year ago. Young adults, generally, believe that they have been unfairly burdened with finding solutions to the climate crisis, which has led to many younger people to experience eco-anxiety.

Narrowing the scope further, students who are enrolled in environment-related courses tend to report higher levels of eco-anxiety when compared to their general cohort. In a study by Peter Graham and his colleagues (2021), they looked at several Canadian universities and surveyed first year sustainability students. What they discovered was not only extremely high

rates of eco-anxiety, but also the belief among students that they inherited a disproportionate amount of the problem, and that they were unfairly burdened with finding a solution. The primary emotions that students elicited when thinking about various environmental issues were sadness, disgust, guilt, and worry. Students were, however, somewhat optimistic about energy resource use. The professors who conducted this study found themselves at a crossroads. On the one hand, they want to discuss environmental issues with their students and strategize solutions, but on the other hand, they don't want their lecture halls to be a place of anxiety and worry. Discussion, however, is incredibly important.

In Australia, about 80 % of students feel somewhat or very anxious about climate change, and about half said that they experience these emotions on a weekly basis (Baudon & Jachens, 2021). Eco-anxiety became such a pervasive issue in Australian public schools that all discussions about climate change were ultimately removed from the curriculum (Hickman, 2020). The school board defended its position by stating that no one wanted their students to feel anxious. Some teachers defended the decision by stating that they aren't the students' therapists. However, Caroline Hickman (2020) and Panu Pikhala (2018) advocate that talking about climate change is a therapeutic process and alleviates—or at least mitigates—eco-anxiety.

There is a slight tension between some scholars as to whether eco-anxiety should be pathologized or not, and as to whether eco-anxiety should be regarded as a rational response to climate change. Baudon and Jachens (2021) suggest that more psychiatrists should be trained in anticipation of increasing rates of eco-anxiety, and that mental health infrastructure should be expanded. Hickman (2020) and Pikhala (2018), however, strongly urge other scholars

to view eco-anxiety as a rational response to the climate crisis. Both Hickman and Pikhala argue against the socially constructed silence of climate change, and the overall belief that ignoring climate change discussion is the best strategy to address eco-anxiety.

Although literature on eco-anxiety and its various terms and conceptions have been of scholarly interest since the 1970s, it never garnered much scholarly attention (Ojala et al., 2021). Within the last decade and especially in the last half-decade, eco-anxiety has become one of the most forthright issues of our time. In 2019, the UN climate summit in New York named climate change as “the defining issue of our time” (Baudon & Jachens, 2021). The International Psychoanalytical Association named climate change as “the greatest global health threat of the 21<sup>st</sup> century” (Baudon & Jachens, 2021). Already, millions of people worldwide have been, and will be, affected both physically and mentally by climate change. What is perhaps most frustrating to most people with eco-anxiety is that they know climate change is inevitable, and they know that there is a chance to at least mitigate its effects, yet it seems as though little is willing to be done by governments and corporations (Bright & Eames, 2022).

## **Methods**

The objective of this honours project was to explore qualitatively, the various ways in which environmentally knowledgeable students from Dalhousie University experience eco-anxiety.

This project had five goals:

- 1) To understand how participants perceive climate change.
- 2) To explore how participants experience eco-anxiety.

- 3) To understand the mental health effects of eco-anxiety.
- 4) To explore the various strategies participants use to mitigate the effects of eco-anxiety.
- 5) To explore nuanced differences between the participants and other populations.

To meet these goals, I used in-depth, semi-structured interviews. This method was used primarily for two reasons. Firstly, it provided an opportunity for participants to answer in nuanced and meaningful ways (Bouma et al., 2016). Secondly, qualitative studies on eco-anxiety are scarce in the existing literature (Coffey et al., 2020)

Participants were recruited using several methods. The first method was to e-mail professors in the department of Earth Sciences and the College of Sustainability to advertise my honours project to potential participants. Professors were given a pre-written script (Appendix A), which was then posted to their Brightspace page if they agreed. The second method used was similar to the first method; I asked the administrators of the *Dalhousie Earth and Environmental Sciences* and the *College of Sustainability Dalhousie University* Facebook pages if they could post Appendix A. Both administrators agreed. The third method was using an e-mail chain. This third method I was unaware of until I asked a participant where they saw the recruitment post, and they said that they received it through their Dalhousie e-mail. I suspect one of the Facebook administrators sent a chain e-mail to all the students enrolled in that program. The fourth method of recruitment was verbal recruitment. One participant was an acquaintance of an acquaintance, and three other participants I knew personally.

In total, nine people participated in this study. Of the participants, six were women and three were men. The average age of participants was 23, and the median age was 22. The age

of participants ranged from 19-28. Most participants (7) were from Canada, while two were international students (Caribbean/Asia). Each participant was asked to participate in an in-depth, semi-structured interview that was between 45-60 minutes. Some interviews lasted longer, and in each case where this occurred, interviewees were given the option to continue or to terminate the interview.

The interviews took place either online or in person. All the online interviews were conducted using Microsoft Teams, and all the interviews were recorded using a password-protected recording device. No visual recording devices were used. For the in-person interviews, two took place in the Killam Memorial Library, and the other at a local café. No visual recording devices were used for any of the interviews.

In total, there were thirty-one questions in the interview guide (Appendix C). Some questions were relatively short, while others required a substantial amount of time to answer. The questions were based on the Hogg scale, which sought to understand and explore the various ways in which participants conceptualize climate change, as well as their general perceptions of both the present and the future. The second section of the interview pertained to the various ways in which the participant experienced eco-anxiety, the various ways in which it does or does not affect their mental health, and the various strategies used to mitigate the effects of eco-anxiety. The final section pertained to demographic information such as gender and age (Hogg et al., 2021).

In total, approximately 650 minutes of interview data were collected for an average of 72 minutes per interview. The data was then manually transcribed and each participant's

transcription was saved as a Microsoft Word document. All identifying data was removed, and each participant was given a pseudonym. The transcriptions were then coded by their content, which roughly corresponded to the interview questions.

Each participant was given a copy of the consent form (Appendix B) during our e-mail correspondence. Before commencing the interview, each participant was asked if they had read and understood the consent form. All participants verbally confirmed that they had read the form. Following their confirmation, they were asked if they had any questions or concerns pertaining to the project, the consent process, or any other issues that may have arisen. All participants confirmed that they knew and understood what they were being asked to do. The participants were informed that their participation was voluntary, and as such, they were not obligated to finish the interview if they did not want to, and they did not have to answer any questions they did not wish to answer. Once the participant verbally confirmed that they understood, permission to record was requested. All participants agreed to be recorded, and then the interview commenced. At the end of the interview, another opportunity was provided for questions or concerns pertaining to the interview, the project, or the consent process. All participants verbally confirmed that they understood.

No participants withdrew their participation from this study, and all participants asked to have a final copy of the thesis. Participants who wished to have a transcription of their interview received one.

## Findings

Of the nine participants, three were men and six were women. The average age of participants was 23, while the median age was 22. All the participants are or were Dalhousie University students, and all were extremely knowledgeable about environmental issues—a knowledge that usually begins at a young age. Heather recalled the times she went camping with her family as a child, and Brittany remembered going on walks with her mom and picking up as much garbage as they could. Isabelle even recalled watching a documentary about whales when she was five and how she immediately created a sign to protest with. She then walked around her neighbourhood for ten minutes waving her sign to protect the whales. For Andrew, Chloe, Dianna, and Elizabeth, they discovered their passion for the environment during their undergraduate degrees at Dalhousie University. In every case, somewhere within everyone's life history, there were moments where they knew that the environment was something they wanted to study, and more importantly, that the earth was something they wanted to protect.

### *Eco-Anxiety: Causes and Origins*

Collectively, all the participants recognized humans as the primary cause of global climate change, although Chloe and Dianna did recognize climate change as a naturally occurring planetary phenomenon as well. Nonetheless, humans were perceived as the primary cause of contemporary climate change and participants were often more specific as to which humans, and which social systems, have the largest impact. Heather explained:

“I would say corporations, less so people themselves. But it's also integrated into the way we live. Many of the things we do are harmful to climate change. I would mostly place the blame on corporations and the capitalist system that easily allows for exploitation of resources without accounting for the harms.”

Those harms, according to Diana, stemmed from how goods are produced and consumed:

“To have ramped up production and ramped up consumption means that resources are being used faster than they can be replenished. Pollutants are being introduced into the environment and they can't filter them fast enough. I think production and consumption would be my biggest cause of climate change. In this case, I guess not generally, but in this kind of climate change that we're going through right now. I think there's obviously lots of different causes of climate change through periods of history. But right now, it's humans.”

Brittany concurred that, “It has a lot to do with people's greed and the vast need for progress. Just pushing everything aside for money.”

The origins of climate change are neither linear nor ahistorical, and despite the many different reasons as to why and how anthropogenic climate change has emerged as a global social phenomenon, participants' understandings were consistent. For example, first and foremost, contemporary climate change is anthropogenic; it is a social phenomenon. Likewise, no single individual is responsible for climate change. It is a collection of governmental, societal, and economic structures.

### *Perceptions of the future as sources of anxiety*

Eco-anxiety, as defined by most scholars and institutions, is the chronic fear of environmental degradation and extreme weather events (Coffey et al., 2021). These climatic changes pose serious existential threats to millions of people today, and millions more in the future. Recent events, such as the B.C heat dome (The Canadian Press, 2021) or the continuous forest fires on the West Coast of North America, are serious existential threats and as such, they diminish a person's ontological security. The latter concept, drawn from Giddens' (1991) work, is the stable mental state derived from a sense of continuity in regard to the events in

one's life (p. 183-85, 243) and an existential threat in that one's life and safety are uncertain (183-185). In addition to these events posing serious risks to public health and even potentially death, they also affect people's mental health in the forms of post-traumatic stress disorder, and in some cases, pre-traumatic stress disorder (Baudon & Jachens, 2021). Mental health is both affected by, and in anticipation of, ecological catastrophes. The chronic fear and worry of the potentiality of these events in conjuncture with governments and organizations seemingly not doing enough to mitigate or otherwise eliminate these threats, is the primary source of eco-anxiety.

When asked to describe the future, participants perceived it to be bleak, inevitable, crazy, precarious, stressful, cautiously hopeful, and changing. The most common answer was bleak, although most participants used multiple words to describe the future.

Presently, none of the participants believed that climate change was being satisfactorily solved or mitigated under current governments. Many participants believed that although governments were doing some things well, it ultimately is not enough given the severity of current circumstances. The reason why governments are not doing enough, most participants noted, was because of shareholder power and vested interests:

"I know that governments often have to prioritize their shareholder interests over environmental interest. I think pure environmentalism is not something you can really see in any government right now, although some governments do better than others at prioritizing climate interests. I don't think there's any government that could be held example of actual environmental government as much as ones that will enact environmental legislation and still prioritize shareholder interests." (Dianna)

Andrew also noted that:

“The issue is that a lot of governments are so tied to oil. So many economies are tied to oil. It makes it difficult to make that shift. Look at Canada, we are so in love with the Alberta oil sands. For us to say ‘We don’t want the oil sands anymore...’ That’s going to mess everything up.”

When asked if governments are doing enough, participants often expressed that there were some things that they are doing well, but generally, it is not enough, as Fred noted:

“I think they’re going in the right direction. I mean, honestly, I think anything towards that direction is good. Do I think they’re doing all they can? Not necessarily. I think that there could be a lot more pressure applied. I think that there could be a lot more emphasis, a lot more prioritizing and outcry.”

Why climate change as an existential threat is not being ameliorated satisfactorily by governments, in addition to shareholder interest, is communication within and between governments. Governments must communicate their interests and work together to solve potential conflicts of interest. Most participants (Andrew, Brittany, Dianna, Elizabeth, Heather, Fred, Geoff) noted that governments need to come to a consensus. Coming to a consensus between nations, as Andrew noted, is extremely difficult in terms of development. The wealthy, industrialized nations have already profited greatly from carbon energy. Emerging nations such as China, Indonesia, and Brazil have profited to a much lesser extent than the industrialized ‘Global North’, which makes it extremely difficult to bar nations like China and Brazil to stagnate their economies for the ‘environmental good’. For decades now, the debate has been “we’re not going to reduce our emissions if China isn’t willing to reduce theirs.” China quite correctly responds by saying “you developed your economy by way of fossil fuels, it’s only fair that we are allowed to do the same.” There is this perception among world leaders that environmental stewardship is a zero-sum game; a belief that environmental policies take away

from economic growth. A notion that these two goals cannot be achieved in tandem, which makes it extremely difficult to achieve a global consensus (Hu & Guan, 2017).

Internationally, the prospects for cooperation seem grim. With every failed Paris climate agreement goal and every passing Intergovernmental Panel on Climate Change (IPCC) meeting, it feels as though we are at an impasse. What we do now, or rather, what we don't do, will have profound consequences for the future. Both Brittany and Dianna already feel as though we're at a crossroads, and that the next 10-20 years will be crucial in determining the planet's trajectory. Whether governments can solve the existential threats of the climate crisis and maintain ontological security is precarious at best; this is the primary source of eco-anxiety among participants. To further illustrate the participants' disbelief in governmental bodies, participants often alluded to other solutions that may prove fruitful, such as education, non-government organisations, technology, and reconfiguring—if not completely abolishing— social structures.

To combat the climate crisis, education is going to have to play a crucial role. As Chloe described, “we learned from the previous generations' mistakes, and future generations are going to have to learn from ours.” Andrew and Brittany also concurred that educating future generations is going to play a crucial role in finding solutions to the climate crisis. As Chloe interestingly said, “climate change is an exciting intellectual problem.” She believes that humans will eventually find solutions to climate change, and inherent to it being an intellectual challenge, the world will need intellectuals working on the climate crisis, which will come from education.

Participants believed that non-government organisations (NGOs) are going to be extremely important mechanisms of change as well. Diana saw NGOs as the most promising mechanisms of change:

“I think the solution to global climate change will honestly come from NGOs and community driven initiatives that are happening right now that seem to really prioritize the health of a community and the people who are in it as opposed to corporate interests. I think that that's going to be the area that we see the best action being taken, especially in Indigenous communities, but a lot of other NGOs as well are really taking action. I think those are the kind of community-led initiatives that will be able to affect the most change by fighting in the government and lobbying, as hard as they can, and doing what they can to disrupt the system as it exists.”

Isabelle also believed that existing systems had to be drastically changed or destroyed altogether. When she was asked where the solution to climate change might come from, she responded, “I think, just breaking down structures that are in place, ie. colonial structures and capitalist structures.” The implications of replacing capitalist and colonial structures implies a drastic overturn of the ‘business as usual’ approach. Governments, especially Euro-American ones, profit largely because of these systems. If governments and world leaders are unwilling to discontinue their ‘business as usual’ approach, other avenues must compensate. Participants’ potential solutions focused on education, NGOs, technology, and protests.

The climate crisis has and will affect people both physically and mentally. To mitigate both effects, government action is required, and an international agreement is needed. A disbelief in government action has led many participants to place their hope in other solutions such as education, NGOs, and technology. Ultimately, as most participants noted, solutions would eventually have to come from governments. As it is right now, this seems highly unlikely.

The unlikeliness of which poses an existential threat, disrupts ontological security, and manifests as eco-anxiety.

*Eco-Anxiety: What it looks like*

Of the nine participants, five said that they were generally anxious people (Brittany, Diana, Fred, Heather, Isabelle), while four said they did not consider themselves to be generally anxious (Andrew, Chloe, Elizabeth, Geoff). Each participant identified as being eco-anxious, albeit to varying degrees. Generally, participants defined eco-anxiety as a chronic stress, frustration, hopelessness, restlessness, uselessness, and dreadfulness about climate change.

For participants who identified as being both generally anxious and eco-anxious, there were both similarities and differences between anxieties. Similarities often pertained to impending feelings of doom and despair, and as a hopelessness and restlessness that not enough is being done. As Heather explained:

“I would say that one of the similarities is it always feels like there’s this impending doom. I often think that I’m not doing enough, and a lot of self-blame happens. [some similarities are] getting stressed and [the feeling of] impending deadlines. The climate crisis kind of feels like that too: Impending deadlines and targets that we’re not meeting. I’d say that those are some similarities.”

Moreover, Fred also explained that:

“It’s similar in that it’s a feeling of restlessness. ‘Oh, I want to do something so bad and I really want to just fix it.’ But at the same time, it’s a restlessness and... a helplessness. Because again, what can I really do? I can’t write up to the government and shake everybody. But yeah, it’s like a buzz in the background constantly.”

Similarities between the two anxieties were the general feelings of it. A feeling of a hand that’s always on one’s shoulder, as Heather described, or the feeling that there’s a shadow looming wherever one goes (Fred). The main differences between general anxiety and eco-

anxiety are timescales and individual agency—agency insofar as general anxiety can be remediated by the individual, eco-anxiety cannot:

“The difference with climate change is that the deadlines are so stretched out, they almost feel unrealistic to hit. It feels like there’s a lot of displacement of putting targets further and further into the future.” (Heather)

“With regular anxiety, this is something that you can talk yourself out of because you know that it's just a mental process. With eco-anxiety, I don't know what to do. It's not like I can just ignore it and it'll go away once I leave the situation. Because everything around you is the situation. The situation is not just me. Being anxious in a restaurant when I see people that I know, I can tell myself, 'Oh, I'm anxious that the land below me is going to collapse.' Eco-anxiety is a much heavier sense of dread, and it's one that's based on logic and emotion. And that's the problem.” (Fred)

General anxiety was perceived to be somewhat irrational and could be recognized as an irrational response to rational phenomena. Alternatively, eco-anxiety was perceived to be a rational response to a rational phenomenon. Having spent so many hours and years studying climates and environments, the participants understood their feelings to be rational reactions. Moreover, general anxiety, as Isabelle noted, “is focused inward, but eco-anxiety is focused outward.” In other words, general anxiety was perceived to be an individual phenomenon, but eco-anxiety was perceived to be a rational response to a social phenomenon.

#### *Eco-Anxiety: Effects on daily behaviour*

Being students who are either enrolled in environmental studies or who have a keen interest in environmental issues, it is unsurprising that participants thought about the environment frequently. Not only did they think about environmental issues when they attended lectures, worked on assignments, and studied for exams, but they also thought about these issues in their everyday life. There was no dichotomy between studying and personal life. There was no on and off switch.

Participants thought about environmental issues in many different aspects of their everyday lives. Often, they thought about climate change when in the grocery store reflecting on the life cycle of products. Chloe often thought about what other uses products could have after consumption, such as reusing bottles or plastic bags. If there was relatively little potential, she would be dissuaded from purchasing it. Isabelle often held on to beverage containers knowing that many corporations do not recycle properly, and she would bring them home to recycle there. Heather paid close attention to the labels in grocery stores:

“I think about who I’m buying from and if they’re a high emitter. I think about if it’s an animal or plant product. Am I buying from an unsustainable system? or a system that overharvests? Like fish, for example. I like to buy smoked salmon, but I always try to buy from someone who has a clear, identifiable label that means they’re a sustainable harvester.”

Both Diana and Heather tried to buy locally, and Andrew and Geoff tried to reduce overall consumption. Brittany became a vegetarian for environmental reasons, and Chloe only ate meat socially. Other strategies for reducing consumption were things like turning off the lights when they weren’t being used, and thrifting for clothes. For all participants, eco-anxiety seemed to be a guiding principle to every decision. Daily decisions were often viewed through environmental lenses.

Participants thought about climate change in a myriad of ways which permeated both their academic and personal lives. Obviously, participants do not think about climate change every second of every day, but it is a daily occurrence. Primarily, this is because of the subjects they study and the interests they have, which trickle their way into daily life. For some participants, there were relatively few mental health effects; for others, there were many.

*Eco-Anxiety: Effects on mental health and well-being*

What participants thought about in terms of environmental issues pertained mostly to their studies and interests. For example, one participant is in law school and focuses on policies, constitutional law, and the various difficulties in implementing certain legislatures. In addition, she also completed a Bachelor of Science in Biology and discusses eco-systems with her friends who are now doing masters in various fields of Biology. Another participant is interested in systems management, while another is interested in flora and fauna and invasive species. Other participants thought about over-population, extreme weather events, rising sea levels, climate refugees, and geo-political violence. Participants thought about many different aspects and in general, they thought about what they were interested in. There was no single phenomenon that was hierarchically more important than another. All the participants can be characterized as having eco-anxiety and all participants chronically thought about the environment. The ways in which this affected mental health, however, very much depended on the individual.

The frequency in which participants felt emotionally or mentally distressed when thinking about climate change ranged from a couple of times per week to a couple of times per day, and for some, they rarely, if ever, felt emotionally or mentally distressed. Participants who did report feeling distressed, often felt so when they were studying. As Fred explained,

“It’s so depressing that sometimes I just don’t want to do an assignment. For example, we were doing a project for invasive species, and I was helping with the campaign. I was doing some art and research for them, just so people could identify the invasive species and I was just so depressed at how many things I had to draw for them. I thought, ‘holy cow, these are half the animals you see every day. I see more of these invasive animals than I do the native animals, this is insane.’ So that was really depressing because, how do you even begin to combat that? I find working in the environment fun and that’s why I love field work. But you know, when the pandemic hit, essentially all the labs and

everything were canceled, and everything was just online. That's what really started to get to me because, as I said, I love fieldwork, and I like lab work. The part that's not fun is just everyday sitting there and studying the death of everything and if you're a sensitive person to that, that kind of stuff really gets to you. It makes it tough to stay motivated. Also, when you have things like the government suspending environmental projects to pass a different project, it's like, 'why am I studying this then?'"

Often participants felt so overwhelmed when doing coursework that they had to step away and return to it later. But at the same time, participants who felt distressed often also found studying to be a motivating factor. It motivated them to study more and to try to be a part of the solution. Broadly put, studying climate change can be a depressing endeavour, but it also kindles a desire to do one's part to contribute to a solution. Paradoxically, studying climate change had both motivating and paralyzing effects. For participants who did not feel emotionally or mentally distressed when studying climate change, there was little to no effect on their mental health.

To further elucidate whether eco-anxiety influences mental health, participants were asked questions regarding impacts on sleeping, eating, and mood. In response, Heather said:

"I just find it's easy to worry about that stuff when I'm trying to sleep. There's nothing else to think about. Just laying there, and the thoughts get invasive. It's usually like, 'am I doing enough? Am I involved enough? Could I be doing more?' I'll put pressure on myself and sometimes it's very frustrating. Especially if that day I learned a piece of media about some corporation, or some government that's not doing enough. That frustration tends to keep me up, and sometimes I'll have to go grab my laptop and go down some rabbit hole, reading other professionals, or people who think about this."

Isabelle shared similar experiences:

"I used to have nightmares of natural disasters when I was a kid... Now, sometimes, I'm just up all night looking up things around the world that are really bad and things like that. Just a self-sabotage type of cycle."

Chloe, meanwhile, often has dreams about nuclear holocaust which she interprets as a metaphor for climate change in some dystopian future. For Fred, it was hard to distinguish insomnia as a symptom of eco-anxiety or general anxiety:

“It’s difficult to say, because I generally don't sleep very well to begin with. So, I don't know if eco-anxiety will impact my sleep specifically. A general feeling of anxiety impacts my sleep a lot, and this probably contributes to it.”

Eco-anxiety and its relationship to insomnia seems to be an individual phenomenon, but it is not insignificant. Insomnia was not universally experienced by the participants, and moreover, it was experienced differently by different participants. It largely depended on individual personalities. Two participants who considered themselves to be generally anxious did not experience insomnia. Moreover, five of nine total participants did not have their sleep affected by eco-anxiety.

Likewise, the participants’ eating habits were rarely affected by eco-anxiety. Brittany became a vegetarian because of environmental reasons, while Chloe and Elizabeth reduced meat consumption. Generally, participants also tried to buy more locally, and more sustainably. Diana made conscious efforts such as “using locally sourced food, cutting out meat, and cutting out other high consumption products. Trying to be more environmentally minded.” In terms of abstaining from eating, only three participants experienced these effects, and often described them as either resulting (Heather), or being indiscernible from (Fred/Isabelle), general anxiety. For example, Fred and Isabelle said:

“I feel like I am generally an anxious person. Yeah, there are times I do that [not eat], so I just don't know if it is specifically attributed to that [eco-anxiety] or if it's just general anxiety.” (Fred)

And,

“I think I have been known to not eat if I’m feeling really anxious, but again, it’s really hard to differentiate that from general anxiety.” (Isabelle)

Although some participants did experience periods of not eating because of anxiety, it was hard to discern whether this was because of eco-anxiety or general anxiety. Moreover, all the participants who were not generally anxious did not experience any periods of not eating, and of the five participants who did identify as being generally anxious, only two attributed this to being potentially derived from eco-anxiety, but they were unable to discern its exact origins.

### *Eco-Anxiety: Mitigating mental-health effects*

Although most participants did not experience the traditional symptoms of general anxiety, it is still nonetheless exhausting, depressing, and taxing to chronically think about climate change. To mitigate or otherwise alleviate some of the negative mental health effects of eco-anxiety, participants utilized three strategies: discussion, research, and avoidance.

Five participants (Brittany, Chloe, Diana, Elizabeth, Geoff, Heather, Isabelle) found it fruitful and therapeutic to talk about climate change with friends and peers. Heather, for example, stated:

“I find being a part of [Boycott, Divestment and Sanctions] groups [...] really helps because it feels like I’m finding people who are doing things about it. It’s nice to see more people who are doing long term actions about it. I’m aware of climate cafés where people come and talk about their grief with the climate crisis. I’ve never gone to them, but I’ve heard about people who have gone, and they say it’s really relieving to go and talk about it.” (Heather)

When components of climate change were beyond the control of the participant, usually the best strategy was to ignore it and move on. Participants did not dwell on their own inactions and recognized instead that this is a structural issue. As Diana noted: “I don't think it bugs me too much because it's not something that eats away at me. I know it's beyond my control. I can accept that.” Fred also explained:

“I think I just try and do my best to not think about it. With regular anxieties there are strategies that you can use. You know it's a mental process. You can rationalize it, and that takes you out of it. You can name it. You can identify what's bothering you. You can address that. You can acknowledge that. You can go to therapy, selfcare. You can do all of these things for anxiety. But for eco-anxiety, how do you fight the truth? It's just the state. I honestly just try not to think about it. I just try and enjoy what's there and for what it is. I feel like it would be a lot easier to enjoy the environment if I didn't know it was happening. I could enjoy the blooming of the flowers without wondering where all the bees are. I could enjoy the bliss and the ignorance.”

What participants did have within their control was their ability to study and research, which could eventually potentially affect society, government, and technology. Brittany noted, “I think it kind of motivates me to study more, I want to help the problem.” Generally speaking, any student who studies climate change wants to be a part of the solution. In addition to researching climate change, participants also found it fruitful to research pro-environmental action and organisations around the world (Heather/Isabelle). Heather explained:

“I get a better grasp on it and then by researching it I can learn about grassroots initiatives that are trying to address it, or people who reflect my worries and who have been vocal about it, and then the response that they've gotten. And then if it seems as though any progress is happening or not. Reading can also help me vocalize it better and discuss it with people as well.”

Studying climate change is an exhausting endeavour, and with it, often comes a heavy dose of eco-anxiety. As debilitating as it can be, participants employed several effective strategies to help mitigate the mental health effects of eco-anxiety. Participants employed

strategies such as discussing climate change with friends and peers, researching NGOs and climate change generally, and avoiding or ignoring the aspects that are beyond one's control.

## **Conclusion**

The main findings of this research were four-fold. Firstly, Giddens' conceptions of ontological security and existential anxiety were effective tools for understanding the underlying causes of eco-anxiety. Secondly, eco-anxiety was not perceived to be pathological. Thirdly, eco-anxiety did not produce new mental health effects, and lastly, participants used various strategies to mitigate the effects of eco-anxiety.

All the participants believed that governments were doing some things well to mitigate the existential threats of climate change, but they also believed that governments were not doing enough relative to the severity of the issue. Participants generally distrusted governmental action and policy, and sought solutions elsewhere, such as through education, NGOs, technology, and non-capitalist structures. Some participants also believed that they were given an unfair amount of the burden to find solutions to climate change, which further exacerbated their eco-anxiety. Existential anxiety and ontological security are valid theories of understanding the underlying causes of eco-anxiety and may help explain why some people are eco-anxious while others are not.

As many participants stated, eco-anxiety is not pathological. Although some scholars argue that psychiatrists should be trained and mental health infrastructure should be expanded, others- including the participants- perceive eco-anxiety to be a rational response to

climate change. As immersed in climate change as the participants are, they believed that their fear and anxiety of climate change are legitimate responses to the climate crisis. To not be worried about climate change seems to be an irrational response to the climate crisis.

Although eco-anxiety can be regarded as not pathological i.e., not a mental illness, it nonetheless did have mental health implications. For participants who did not experience mental health issues such as anxiety, insomnia, or eating disorders, they were unaffected in that regard by eco-anxiety. For participants who did identify as being generally anxious, being an insomniac, or having eating disorders; eco-anxiety was not the underlying reason for these effects, but it did contribute insofar as it was exacerbated by eco-anxiety.

Participants often found that talking about climate change was a constructive strategy. Whether participants casually talked about the climate crisis or talked to their friends immediately after reading something distressing, talking was a crucial mitigating strategy. Another important strategy was to research and learn about the climate crisis. Whether it was to articulate the climate crisis better, or to research some of the good things occurring around the world, researching proved to have a positive effect. Other solutions utilized by the participants were to ignore the things they cannot control, and to do their part by implementing pro-environmental behaviour. This study was successful in exploring inductively, the various ways in which participants experience eco-anxiety, and deductively, why participants are eco-anxious.

Most studies thus far have focused on understanding eco-anxiety quantitatively. Eco-anxiety as both a concept and a social phenomenon is relatively new, which may help explain

the disparity between quantitative and qualitative research. In either case, further understanding of eco-anxiety will prove to be extremely important. Not only are people going to be affected by climate change physically, but also mentally. Understanding the underlying causes of eco-anxiety, and thereafter how it manifests in society and among populations will prove to be a key line of inquiry for future research. In addition to both quantitative and qualitative research, further research explorations should also include Indigenous populations and populations in the 'Global South'. As a species, it is quite possible that we are at a crucial crossroads, and what we do, or do not do, could have profound effects for not only ourselves, but also future generations.

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## **Appendix A**

### *Pre-written Script for Posting on Brightspace and Facebook Pages*

If you are an undergraduate student in either Environmental Science or Sustainability or Biology, I invite you to participate in my honours research project.

I am studying Global Climate Change and the extent to which students may experience eco-anxiety. Participation would comprise one interview that would take 45-60 minutes.

If you're interested in participating in this research project, or if you have any questions, please contact me at [bn489072@dal.ca](mailto:bn489072@dal.ca). I'm excited to hear back from you!

## **Appendix B**

### *Consent Form*

Project Title: Eco-Anxiety: A Qualitative Approach

Lead Researcher: Ben Barnes, Dalhousie University, bn489072@dal.ca

Supervisor: Dr. Martha Radice, Dalhousie University, martha.radice@dal.ca

#### **Introduction**

I invite you to take part in a study being conducted by me, Ben Barnes, a fourth-year Social Anthropology honours student at Dalhousie University. Choosing whether to participate in this research is entirely your choice. The information below will tell you what is involved in the research, what you will be asked to do, and any benefits, risks, inconvenience, or discomfort you might experience.

If you have any questions about this study, you're welcome to discuss them with me using the email address provided above. Please ask as many questions as you like.

#### **Purpose of study**

In this study, I want to examine the relationship between Global Climate Change and students' experiences with eco-anxiety. More specifically, I want to explore the degree to which environmentally knowledgeable students experience eco-anxiety and the effects this has on their mental health and behaviour. For this study, I will be interviewing undergraduate students in either Environmental Science or Environment, Sustainability & Society (ESS). In these interviews, I want to explore the degree to which students may or may not experience eco-anxiety.

#### **Who can participate**

You may participate in this study if you are an undergraduate student at Dalhousie University studying a major or minor in Environmental Science (EnvSci) OR Environment, Sustainability & Society (ESS) OR Biology.

#### **What you will be asked to do**

If you decide to participate in this research, you will be asked to complete one interview that will take 45-60 minutes. If you are in Halifax and comfortable participating in person, interviews can take place in a public location such as a cafe. Alternatively, interviews can take place online over one of the video-calling platforms Zoom or Teams. During the interview, you will be asked a series of questions which you may answer or skip as you choose.

#### **Possible benefits, risks, and discomfort**

Participating in this study might not benefit you directly, but we might learn valuable information that could benefit others or inform policy. There may be risk or discomfort associated with participating in this study. The interview questions will ask about Global Climate Change, which may be sensitive or troubling to discuss. I will mitigate these risks by

encouraging you to only give as much information as you feel comfortable, including taking a break, skipping questions, or withdrawing from the study completely.

To help find other study participants, I will invite you to pass on the information about the study to other suitable people, such as friends and peers. You are welcome to choose not to pass on the information if you prefer.

Online interviews will be audio-recorded using a handheld recorder and/or the recording feature within Zoom or Teams.

### **Compensation**

There will be no compensation for participating in this study.

How your information will be protected

No one except me will know that you have participated in this study. If you choose to share my study with others for recruitment purposes, you may choose to disclose or not disclose whether you have personally participated - I will not share that information. If you choose to complete the interview at a cafe, there will likely be low privacy, but if you choose to complete the interview via video call, I will be alone in a room and wearing headphones so that nobody but me can hear your answers.

I will audio record the interviews using the audio-recording features of my cellphone and the internal recording features of Zoom or Teams.

During a live Teams/Zoom meeting, audio and video content is routed through the United States, and therefore may be subject to monitoring without notice, under the provisions of the US Patriot Act, while the meeting is in progress. The risk associated with using Teams/Zoom recording for this research is no greater than using Teams/Zoom recording for any other purpose. After the meeting is complete, meeting recordings are securely stored in Canada and are inaccessible to US authorities.

If using Zoom: I will save the meeting recording directly on my password-protected laptop. I will delete the video recording immediately, keeping only the audio recording of the meeting.

If using Teams: I will save the full (audio and video) recording of the meeting in my password-protected Dalhousie OneDrive account.

I will transcribe the interview, and then delete the recording of it. I will store the transcription on a password-protected, encrypted laptop, with a backup saved on OneDrive, a Canadian encrypted cloud storage service, as well as on an encrypted external hard drive.

Once transcribed, audio files will be deleted. I will change all names to pseudonyms and alter or leave out any identifiable details. I may share portions of this deidentified material with my research supervisor. Transcripts and the legend of pseudonyms will be kept in password-protected documents on my computer which only I have access to (and backed up to OneDrive and the external hard drive). In my thesis, any direct quotes I use will have identifying

information removed or altered to protect your privacy. Transcripts and the legend of pseudonyms will be destroyed five years after the study is completed (by April 1, 2027).

### **If you decide to stop participating**

You are free to stop participating in this study during the interview and afterwards at any time until March 15th, 2022. After March 15th, it will be impossible to withdraw you from the study because I will have incorporated your interview material into my analysis.

### **How to obtain results**

If you wish, I can email you a copy of your transcript and/or the final thesis when it is completed. You can request this by emailing me or telling me during your interview. My thesis will also be publicly available on the Dalhousie library website after April 15th, 2022.

### **Questions**

I am happy to talk with you about any questions or concerns you may have about participating in this study. You are welcome to contact myself, Ben Barnes, at bn489072@dal.ca, or my supervisor, Dr. Martha Radice, at martha.radice@dal.ca at any time.

If you have any ethical concerns about your participation in this research, you may also contact Research Ethics, Dalhousie University at (902) 494-3423, or email: ethics@dal.ca (REB file # 20XX-XXXX).

### **Signature Page**

Project title: Future ontologies and environmental beliefs, attitudes, and behaviors

Lead researcher: Ben Barnes, Dalhousie University, bn489072@dal.ca

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I understand that I have been asked to participate in one 45-60 minute interview, and that the interview will be audio recorded. I understand that direct quotes may be used from my interview without identifying me. I agree to take part in this study. My participation is voluntary, and I understand that I am free to withdraw from the study at any time until March 15th.

Name

Signature

Date

Please provide an email address below if you would like to be sent a copy of your transcript and/or a copy of my thesis, and indicate which:

Transcript yes/no

Thesis yes/no

Email Address: \_\_\_\_\_

## Appendix C

### *Interview Guide*

Consent form, any questions?

Open ended interview: No obligation to answer any questions you do not wish to answer.

Permission to record?

#### **GCC Beliefs:**

Tell me how you decided to study Env Sci / ESS.

What do you believe is the cause of GCC?

Using one word, how would you describe the future?

What do you believe the biggest challenge will be for the future of our planet?

What do you think the future will entail for future generations?

Do you feel that governments are doing all they can to mitigate GCC?

Do you feel you are doing everything you can to mitigate GCC? Why or why not?

Where do you think the solution to GCC will come from?

#### **Eco-Anxiety:**

Would you say that you are generally an anxious person? Would you say you have general anxiety?

How would you define eco-anxiety?

How often would you say you think about GCC and the environment?

What aspects do you think about?

Is there an aspect that you focus on more than another?

How often would you say you feel emotionally or mentally distressed when thinking about GCC?

Does this impact your sleep?

Does this impact your mood?

Does this impact your eating habits?

Does this impact your ability to work or study?

How would you describe your living situation? (ie. with family, alone, roommates, partner, etc.)

Would you say this (Living situation) has an influence on your behavior?

If you could describe your general attitude towards GCC with one emotion, what might that be?  
(Fearful, anxious, angry, hopeless, sad, optimistic, pessimistic, doomed, etc.)

How has GCC influenced your daily decisions/behavior?

Does this cause you anxiety? (Value Action Gap)

How has GCC influenced your future decisions/behavior?

What strategies do you have for dealing with eco-anxiety?

How would you describe the general mood in your respective program towards GCC?  
(Optimistic, Pessimistic, etc.)

In general, would you say that your classmates are more or less eco-anxious than you?

Are there any dimensions of GCC, or the fight against GCC, that feel less bleak to you?

**Conclusion:**

Is there anything else you'd like to share about how you feel about GCC?

May I ask how old you are?

May I ask which pronouns you prefer?

consent check-in, ask to share my info with anybody you think might like to participate.