

**Planning for Tomorrow: A Mixed Methods Study of Undergraduate Climate Anxiety**

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## Abstract

Climate anxiety, characterized by distress related to climate change, is increasingly prevalent among younger generations, with significant implications for mental health and daily functioning (Hickman et al., 2021; Ogunbode, 2021). However, little is known about how it affects long-term planning, including decisions about housing, career, education, and family. This study investigates that relationship among undergraduate students in British Columbia using a mixed-methods approach. The Climate Change Anxiety Scale (CCAS) (Clayton & Karazsia, 2020) quantified levels of climate anxiety, while semi-structured interviews explored its impact on future planning.

Survey data ( $N = 36$ ) revealed that women and non-binary participants reported significantly higher climate anxiety than men, and South Asian and Latino students reported lower anxiety than white students. Qualitative data from five interviews were analyzed using grounded theory, revealing three main themes: the individualization of climate responsibility, uncertainty and paralysis in future planning, and anticipatory grief around environmental and lifestyle loss. Many participants struggled to envision stable futures, especially regarding housing and family, and expressed moral conflict over reproducing in a climate-changing world. Findings offer insight into how climate anxiety shapes young people's decision-making and highlight the need for structural supports and mental health resources to address these challenges.

Keywords: Climate Change, Climate Anxiety, Students

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## Introduction

The prevalence of climate anxiety is significantly growing among younger generations, negatively impacting their quality of life and daily functioning (Hickman et al., 2021; Mateer, 2024). Climate anxiety, often used interchangeably with eco-anxiety, is defined by feelings of fear, helplessness, grief, and anger related to current and anticipated climate impacts on humanity and non-human species (Doherty & Clayton, 2011). Climate anxiety affects individuals not only through direct experiences with environmental disasters but also through indirect exposure via media, social discourse, and education (Clayton, 2020). As younger generations navigate a climate changing world, future uncertainties surrounding the impacts of climate change may impact their plans and goals for the future (Daeninck et al., 2021). Undergraduate students, many of whom are in the process of making decisions about careers, education, family planning, and housing, are at a uniquely vulnerable developmental stage. Despite its growing significance, existing research on climate anxiety lacks a qualitative lens, which fails to capture the complexity and nuance of its effects (Coffey et al., 2021). The present study aims to understand how feelings of climate anxiety interact with current undergraduate students' plans and goals for the future across 4 dimensions: career, education, housing, and family planning.

Existing climate anxiety literature tends to focus on general prevalence rates, often overlooking how intersecting factors such as race, income, gender, and field of study shape experiences of climate anxiety. For example, recent studies have critiqued the framing of climate anxiety as a predominantly white, middle-class phenomenon, arguing that it can obscure ongoing, present-tense climate harm disproportionately affecting marginalized communities

(Ray, 2024; Verlie, 2024). These critiques emphasize the need for research that situates climate anxiety within broader systems of inequality, colonialism, and privilege.

To address these gaps, the present study employs a mixed methods approach to examine how climate anxiety shapes the lives of undergraduate students in British Columbia. Specifically, it investigates how climate-related worry influences future planning across four domains: career, education, housing, and family planning. A quantitative survey using the Climate Change Anxiety Scale (CCAS) assesses the prevalence and demographic predictors of climate anxiety, while semi-structured qualitative interviews provide insight into the complexities students face as they imagine and navigate their futures in a climate changing world. This approach allows for both breadth and depth, identifying who is most affected, and how they experience and respond to climate distress.

## **Background**

### **Who Experiences Climate Anxiety?**

Climate anxiety is more prevalent among younger generations, specifically those under 35 (Reinhart, 2018). Younger generations are more likely to experience climate anxiety due to the perception, and reality, that they will live through the intensifying consequences of climate change (Reinhart, 2018; Swim et al., 2022). However, many variables beyond age can influence the prevalence of climate anxiety. While recent research has not consistently identified income as a significant predictor of climate anxiety, income alone does not fully capture a person's access to resources or structural privilege. Other indicators, such as education level and geographic location, may play a more substantial role. For instance, in a large global survey of 10,000 young people across ten countries, climate anxiety was most pronounced in the Global South. In the Philippines, 84% of youth reported being extremely or very worried about climate change,

compared to 68% in India and 67% in Brazil. This contrasts with lower levels of extreme concern in wealthier countries such as Finland (44%), the United Kingdom (49%), and the United States (46%) (Hickman et al., 2021). These findings suggest that education and proximity to climate-related harms may influence anxiety more than income alone. However, existing research often fails to distinguish between race and class or to explore how intersecting identities shape experiences of climate anxiety. Without a qualitative lens, the complexity of who experiences climate anxiety, and why, can be flattened into overly simplistic demographic categories.

The impacts of climate change are unevenly distributed, with racially and socioeconomically marginalized communities being disproportionately vulnerable to changing climate conditions and have access to the least resources to recover from devastating climate events (Berberian et al., 2022). However, despite marginalized communities being more at risk for direct harm from a changing climate, white people are increasingly feeling climate anxiety as an existential threat (Verlie, 2024). Conversations of climate anxiety are increasingly happening in white environmentalist circles, which has been critiqued as white people holding on to the comforts of their privilege, while marginalized communities feel the impact (Ray, 2024). Climate anxiety has been discussed as a form of privilege, to be able to worry about the future, while not actively fearing for the present (Stivers 2016; Wray, 2022). The present study aimed to deepen existing understandings of how climate anxiety is experienced by collecting participant demographics including age, gender, race, income, and program of study, to explore how these variables may shape students' future-oriented responses to the climate crisis.

## **Future Planning**



Evidence exists of the link between uncertainty of the future and climate anxiety; however, there is insufficient literature regarding how climate anxiety impacts an individual's future planning behaviors (Daeninck et al., 2023). In a global study comprised of 10,000 youth participants, 75% said they think the future is frightening (Hickman et al., 2021). This was assessed by asking participants to agree/disagree with the statement “The future is frightening.” This survey response option does not account for non-climate change-related confounding variables, such as the respondents' political, economic, and social status which significantly affect both their perception and exposure to climate change (Ray, 2024).

It is unsurprising that individuals have difficulty imagining the future of a climate-changed world. Perhaps because over 80% of climate-related media is framed in negative terms (Ray, 2020), and the reality of the future is too difficult to bear. Or perhaps because devastating climate events are occurring with increasing frequency (Diffenbaugh et al., 2018). In addition to exploring the prevalence of climate anxiety, this study aims to expand upon existing literature investigating individuals' perceptions of the future in a climate-changing world.

## **Methods**

### **Recruitment and Sample**

Participants were recruited using a combination of convenience and snowball sampling methods. Recruitment efforts were primarily conducted through the principal investigator's social media channels and within Capilano University classrooms. Additionally, physical recruitment posters (see Appendix D) were displayed around the Capilano University campus and in cafés throughout the Greater Vancouver Area. Participants were eligible if they were current or recently graduated undergraduate students (within the past year), aged 19 or older, and residing in British Columbia. There were no exclusions based on program or institution, as long as the

institution was located within British Columbia. The QR code on the recruitment poster led directly to the survey hosted on Qualtrics. The recruitment poster also included the principal investigator's email address, allowing interested individuals to request additional information or arrange an interview directly. Those who completed the survey were invited to provide their email address if they wished to participate in a follow-up interview.

Due to the study's timeline and available resources, convenience sampling was used to identify potential participants. Snowball sampling was also employed, where interview participants were asked to share the study recruitment poster with others who might meet the eligibility criteria. Snowball sampling was utilized as a purposeful form of recruitment, to gather individuals who would be willing to be interviewed (Kite & Whitley, 2018).

A total of 47 survey responses were collected; however, 36 responses were retained for analysis after excluding incomplete surveys and those that were completed in under one minute. Additionally, five participants completed interviews

## **Survey**

The survey used in this study was an adapted version of the Climate Change Anxiety Scale (CCAS; Clayton & Karazsia, 2020), a widely utilized measure in climate anxiety research. While climate anxiety measures vary across studies, the CCAS has demonstrated strong internal consistency and concurrent validity, making it an appropriate tool for the present study. The original CCAS does not specifically assess participants' views of the future, an area that was explored in the qualitative interviews. Therefore, modifications were made to the CCAS, including the exclusion of items related to participants' direct exposure to climate events and their pro-environmental behaviors (see Appendix C for survey instrument). These items were

deemed unnecessary for this study as the interviews subsequently addressed participants' personal experiences with climate change.

The survey also included demographic questions asking participants to report their age, race, gender, income, and program of study. No other identifying information was collected to maintain participant anonymity. The inclusion of demographic questions was intended to explore the variation in climate anxiety across different subgroups within the undergraduate population, as previous research has shown significant differences in climate anxiety prevalence based on demographic factors (Reinhart, 2018; Teyton & Abramson, 2021). The goal of the present study is not to medicalize or pathologize responses to the climate crisis, nor to make deductive conclusions about who is most concerned for the planet. Instead, the focus is on identifying those who view climate change as an existential threat.

The final survey consisted of 18 questions and an informed consent form and was distributed via Qualtrics. The informed consent form (see Appendix B) outlined the study procedure, motivations and purposes of the research, benefits and risks of participating, and use of the information collected. It was clearly communicated that participation is voluntary, and there are no consequences for withdrawing from the study. On average, participants took approximately 5 minutes to complete the survey. Surveys that were incomplete or took less than 1 minute to complete ( $N = 11$ ) were excluded from the analysis. After completing the survey, participants were invited to provide their email address if they wished to participate in a follow-up interview that further explored their perceptions of the future.

## **Qualitative Interviews**

Participants in the interview portion of the study were invited to take part in a semi-structured, in-person interview designed to explore how their perceptions of climate change influence their views on and plans for the future. During the interviews, participants were asked to address questions related to four key domains of future planning: career, education, housing, and family planning. The interviews, which lasted approximately 30 minutes on average, were recorded using the principal investigator's laptop. These interviews were conducted between January and March 2024. Following the interviews, the principal investigator transcribed the recordings verbatim using Turboscribe and manually edited them for accuracy. The resulting transcripts were then analyzed using grounded theory to identify patterns and themes.

Grounded theory was selected to analyze the interview transcripts due to its ability capture the nuanced perspectives of the participants. Given the complex and personal nature of how climate change influences students plans and future perceptions, grounded theory allows for an inductive and flexible approach that enables themes and patterns to emerge directly from the data (Adu, 2019). The use of grounded theory ensures that the findings are rooted in the participants' experiences and perspectives.

Following the approach outlined by Adu (2019), the principal investigator began the data analysis process by conducting line-by-line coding. Descriptive labels, or "codes," were assigned to each segment of the data. These initial codes were then reviewed and refined to generate preliminary themes. To ensure the accuracy of these interpretations, participants were sent the preliminary themes related to their transcripts, along with direct quotes from their interviews, and asked for permission to use the material. This step was crucial for accurately capturing the participants' intended meanings and experiences. Participants were encouraged to suggest revisions or changes to any part of their interview data. After receiving approval from all

participants, the data underwent further refinement through an iterative process to ensure the themes were both accurate and reflective of participants' perspectives. This analysis, using grounded theory, identified three main themes and two subthemes.

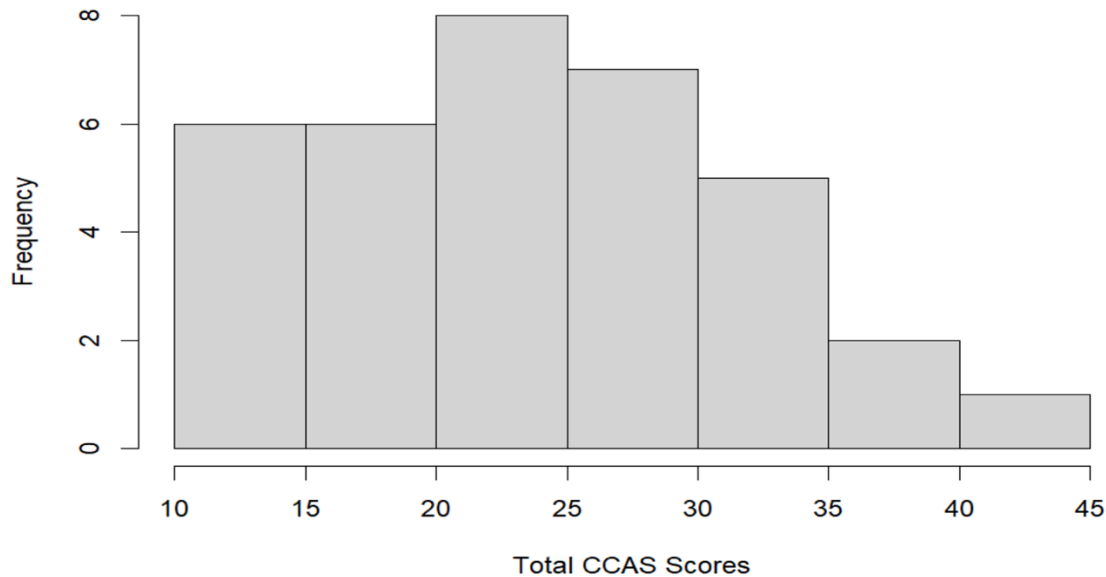
## Results

### Climate Change Anxiety Scale

The distribution of total climate change anxiety scores (CCAS) was first examined using a histogram (Fig. 1). The histogram indicated a rough symmetrical distribution, which means the scores were fairly evenly spread out. To confirm this, the skewness and kurtosis of the distribution was assessed. Skewness is a measure of whether the data tilts more to the right or left, in this case, the skewness of total CCAS scores was found to be .33, indicating a small right skew. This suggests that participants had lower levels of climate anxiety, but the difference is minimal.

Kurtosis tells us about the shape of the data, whether it is more peaked or flat than normal distribution. The kurtosis of total CCAS scores was found to be 2.37, indicating that the distribution of scores was slightly flatter than normal distribution, however, both values were within acceptable ranges for normality.

Additionally, a Shapiro-Wilk test was conducted to formally check whether the data followed normal distribution. The test was non-significant,  $W = 0.96$ ,  $p = .20$ , suggesting that total CCAS scores did not significantly violate the assumption of normality. Normality is an important assumption when conducting a linear regression, as violations can impact the accuracy and reliability of the regression model (Llaudet & Imai, 2022). Given these results, the assumption of normality was considered satisfied, allowing for reliable interpretation of a regression analysis.

**Figure 1***Frequency Distribution of Total CCAS Scores*

A linear regression was conducted to assess demographic predictors of climate anxiety, as measured by the total CCAS score. Linear regression helps us understand the relationship between one variable (in this case, total climate anxiety score) and several others (demographic factors like age, gender, and race). Since there were no reverse scored items in the CCAS implemented, a higher CCAS score represents a higher level of climate change anxiety. The predictors included gender (coded as woman and non-binary, with man as the reference group), age (coded as 18-24, and 25-34, with 35-44 as the reference category), race (coded as South Asian, Latino, Indigenous, East Asian, Middle Eastern, with White as the reference group), annual income (coded as \$10,000-\$30,000, \$31,000-\$50,000, \$51,000-\$70,000, prefer not to say, with below \$10,000 as the reference category), and program of study (coded as arts, social sciences, education, business, health, with science as the reference category). Respondents who

selected multiple race categories were excluded from the regression model due to perfect collinearity.

The linear regression model was statistically significant,  $F(20, 14) = 3.60$ ,  $p = 0.0088$ , indicating that the predictors together accounted for a significant proportion of the variance in total CCAS score. The adjusted  $R^2$  value was 0.60, which suggests that approximately 60% of the variability in CCAS scores was explained by the predictors.

The linear regression results (Table 2) can be interpreted primarily through the value of  $\beta$  and  $p$ . A regression coefficient (often represented as  $\beta$ ) indicates how much the dependent variable (in this case, total climate anxiety score) changes when one of the predictor variables (like gender, age, or race) changes by one unit. The  $p$  value indicates whether the result observed in  $\beta$  is due to chance, or a statistically significant effect.  $P$  values that are statistically significant are in bold in Table 2.

**Table 1**

*Regression Coefficient for Predictors of Climate Anxiety*

Predictor	Estimate	SE	t	<i>p</i>
Intercept	21.97	5.31	4.14	<b>0.001</b>
Gender (Ref: Man)				
Woman	11.01	3.42	3.22	<b>0.006</b>
Non-Binary	14.04	5.98	2.35	<b>0.034</b>
Age Group (Ref: 35-44)				
18-24	-6.00	3.80	-1.58	0.163
25-34	-13.25	3.84	-3.45	<b>0.004</b>
Race (Ref: White)				
South Asian	-13.23	4.00	-3.30	<b>0.005</b>
Latino	-11.46	5.21	-2.20	<b>0.045</b>
Indigenous	-6.80	6.97	-0.98	0.346
East Asian	-4.24	5.83	-0.73	0.478
Middle Eastern	-5.47	4.26	-1.29	0.219
Annual Income (Ref: Below \$10,000)				
\$10,000 - \$30,000	3.26	3.30	0.99	0.339

\$31,000 - \$50,000	0.19	6.07	0.03	0.975
\$51,000 - \$70,000	-3.14	4.07	-0.77	0.452
Prefer Not to Say	-8.36	7.27	-1.15	0.270
Program of Study (Ref: Science)				
Arts	6.91	6.26	1.10	0.288
Social Sciences	-0.75	3.20	-0.23	0.819
Education	8.01	4.74	1.69	0.113
Business	2.67	5.61	0.48	0.642
Health	8.42	7.28	1.16	0.267

Gender was found to be a significant predictor of climate anxiety, with women ( $\beta = 11.01, p = 0.006$ ) and non-binary individuals ( $\beta = 14.04, p = 0.034$ ) experiencing higher climate anxiety scores than men. The 25-34 age group reported significantly lower climate anxiety compared to the 35-44 age group ( $\beta = -13.25, p = 0.0039$ ). The 18-24 group shows a downward trend but is not statistically significant.

For race predictors, a significant difference was only established between Latino and South Asian respondents. Latino respondents reported significantly lower climate anxiety compared to White respondents ( $\beta = -11.46, p = 0.045$ ). South Asian respondents also reported a significantly lower level of climate anxiety compared to White respondents ( $\beta = -13.25, p = 0.005$ ). Income level and program of study were not found to be a significant predictor in climate anxiety scores.

## Qualitative Interviews

The qualitative portion of the study examined the perceptions of climate change among participants ( $N = 5$ ) and how these perceptions shaped their plans for the future, specifically regarding four dimensions: career, education, housing, and family planning (see Appendix E for



interview guide). Analysis of the interview transcripts through grounded theory revealed 3 themes, and 2 subthemes (Table 2).

**Table 2**

*Themes and Subthemes*

Theme	Subtheme
Individualization of Climate Responsibility	Colonialism and Climate (in)Justice
<i>“Do I really want to bring them into this?”</i>	
I don’t know what to plan for	Anticipatory Grief

**Theme 1: Individualization of Climate Responsibility**

*“I recycle, I shop at the thrift store, make my own clothes. Like, to some degree, there's only so much I feel like I can do with the current amount of money that I have.” Anna, 25.<sup>1</sup>*

Many participants expressed a deep sense of personal responsibility for addressing the climate crisis, often focusing on individual actions such as composting, recycling, and buying second-hand. Despite recognizing that systemic issues, particularly corporate greed, are the primary drivers of climate change, participants still felt compelled to make personal changes, frequently without engaging in collective or activist efforts. This resulted in a sense of isolation and added pressure in their daily lives.

The narrative of individual responsibility was shaped in part by campaigns like British Petroleum's (BP) promotion of the "carbon footprint," which effectively shifted blame from Big Oil to ordinary people and their personal emissions (Kaufman, 2020). Participants described feeling the weight of their "climate shadow", a heightened awareness of their consumption,

<sup>1</sup> Participants' names have been changed to protect their identities.

actions, and attention to the crisis. Many shared feelings of guilt, overwhelm, or helplessness, with some expressing a desire to live more sustainably but feeling emotionally or financially unable to do so. Anna shared that she feels compelled to live more sustainably, *“but there's only so much I feel like I can do with the current amount of money that I have.”* Sustainable alternatives to fossil fuel consumption such as purchasing an electric vehicle (EV) or installing solar panels are not a realistic solution for low-income households, creating barriers to a sustainable lifestyle.

Although participants acknowledged that corporations are driving the crisis, they did not name specific companies. As Nicole bleakly stated, *“I also know there's a lot of corporate greed and companies that prioritize making money. And I think that will always come first.”* This absence reflects the scale and invisibility of the systems involved, which seem too large to challenge. As a result, the responsibility continues to fall disproportionately on individuals, who are feeling the emotional burden of planetary responsibility.

### ***Subtheme 1: Colonialism and Climate (In)Justice***

*“They care so much about indigenous knowledge and indigenous systems until it disrupts the status quo. And I don't think that our system, our huge transnational system is ready to disrupt the status quo.”* Lynn, 28.

This theme highlights the ways participants connected climate change to colonial histories and expressed skepticism about the current system's willingness to challenge the status quo. Participants highlighted the intergenerational grief caused by colonialism's impact on both the environment and its people, coupled with a pessimism about humanity's ability to move beyond colonialism and capitalism to challenge existing structures, or create sustainable alternatives. Lynn reflected on how conversations around climate change are gaining urgency, not because of a moral reckoning or solidarity with those most affected, but because its

consequences are beginning to touch the lives and assets of those in power. They pointed out that the issue is becoming harder to ignore as climate disasters no longer remain confined to historically marginalized communities but increasingly disrupt the lives of privileged populations who have long been insulated from such harm (Otto, 2025). They stated, “[*Climate change*] has been hugely impacting those who have power and those whose voices matter in the sense of the world, and so that’s why I think it’s going to keep coming up for people, because the people who have a voice in the world are now being impacted, and so they’re like, wow, we should put our millions of dollars towards this so that we can keep our fucking California beach house and it doesn’t get washed away by the oceans.”

## **Theme 2: “Do I really want to bring them into this?”**

“One thing that also makes me consider whether or not I want to have kids is how would they be affected by the future environment? Do I really want to bring them into this?” Emilie, 25.

Participants experience internal conflict and moral deliberation around the decision to have children in the context of climate change. Participants express a sense of responsibility for the world they might pass on, struggling with the ethics of bringing new life into a future marked by environmental uncertainty and potential suffering. As Madison emotionally stated, “*They’ll have to live through this. They’ll have to live through this.*” While some hold onto hope in humanity’s capacity for innovation and adaptation, others express deep pessimism about systemic inaction and ecological collapse. While discussing the systems that have historically contributed to climate change such as capitalism and colonialism, participants like Lynn were pessimistic about humanity’s ability to address the root causes of climate change. They stated that “*I don’t think that adaptability will try to change anything or solve anything.*”

Participants display hope for humanity's ability to adapt in the face of climate change, and some participants note the need for human ingenuity in the future instead of a pressing issue. They believe that humanity will effectively adapt to a climate-changing world, but they're not sure how. Madison shared a quote by Plato that captures her feelings towards human ingenuity, she stated “*Necessity is the mother of invention. So, someone will come up with something.*” This tension is often framed around fears that future children may not enjoy the stability or privilege the participants themselves have known. Both Anna and Nicole discussed enjoying swimming in the ocean where they grew up in coastal Vancouver, but now they think twice because of the ever-present chemical tankers. Many describe a disconnection from older generations, who never faced this specific moral burden when making reproductive choices.

### **Theme 3: I don't know what to plan for**

*“I don't know. Everything is just so uncertain.” Anna, 25.*

Participants shared that the uncertainty of the impacts of climate change significantly affected their plans for the future, and their ability to make plans. Participants shared feelings of hesitancy or paralysis, with a focus on short-term goals and survival over long-term plans. When asked if their climate anxiety was motivating, Lynn stated “*It is not a driving force ever.*” Participants cannot imagine what the world will look like in the future, therefore they are unable to plan for it. Instead, they focus on what tomorrow looks like.

### ***Subtheme 2: Anticipatory Grief***

*“I would love to live [on Bowen Island]. But every summer, as much as I want to live there, I do think about that in the back of my head. What if I can't come back here one day?” Emilie, 25.*

Participants are mourning the loss of things that still exist, such as nature and their hobbies and daily practices. They note the inevitability of losing certain things, and struggle to see what the environment will look like altered by climate change. Anticipatory grief also manifested in a loss of sense of safety, as Anna discussed a refusal to move back to Northern BC out of fear of inevitable forest fires, *“but I don't think I would ever go back and live up North because of all of the fires.”*

### Survey Limitations

While the quantitative survey revealed statistically significant differences in climate anxiety across gender, race, and age, the reliability and generalizability of these findings are limited by the small sample size ( $N = 36$ ) and uneven group distribution. For instance, although women ( $\beta = 11.01, p = 0.006$ ) and non-binary individuals ( $\beta = 14.04, p = 0.034$ ) reported significantly higher levels of climate anxiety compared to men, the gender breakdown was skewed: only 5 participants identified as men, 3 as non-binary, and 28 as women. This skewed distribution reduces the statistical power of the regression model and increase the likelihood that significant effects may be driven by sampling variation rather than group differences. While these findings align with existing literature suggesting that gender and identity-based factors influence emotional responses to climate change, they should be interpreted cautiously and seen as exploratory rather than conclusive (Wullenkord et al., 2021).

A similar pattern was observed when interpreting racial differences in climate anxiety. Although South Asian participants ( $\beta = -13.25, p = 0.005$ ) and Latino participants ( $\beta = -11.46, p = 0.045$ ) reported significantly lower levels of climate anxiety compared to white participants, the small sample sizes within these groups limit the reliability of these results. Only 2 participants identified as South Asian and 3 as Latino, compared to 24 who identified as White.

Age-related differences in climate anxiety were also observed, with participants aged 25–34 reporting significantly lower levels of anxiety compared to those aged 35–44 ( $\beta = -13.25, p = 0.004$ ). While this result contradicts existing literature, given that younger individuals are often portrayed as most affected by climate-related distress, it is important to consider the distribution of responses across age groups. Only 6 participants were in the 35–44 age category (used as the reference group), while 7 were aged 25–34, and 23 fell within the 18–24 group. As with gender and race, these age-related findings should be viewed as preliminary and exploratory, pointing to potential trends that require further investigation with a larger and more evenly distributed sample.

## **Discussion**

### **Responsibility and Hope**

This study sought to explore how climate anxiety influences undergraduate students' perceptions and planning for the future. Using a mixed methods approach, both the prevalence and demographic predictors of climate anxiety were assessed, alongside an in-depth qualitative exploration of how these anxieties manifest across domains such as career, education, housing, and family planning. Together, the findings offer a more nuanced understanding of how climate anxiety intersects with identity and decision-making.

The qualitative findings emphasize the importance of context-rich, narrative-based research in understanding the lived experience of climate anxiety. While large-scale quantitative studies, such as Hickman et al. (2021), are essential for identifying prevalence, they miss the emotionality behind the numbers. In this study, qualitative interviews revealed complex moral tensions, such as anticipatory grief and uncertainty around family planning, that would have remained obscured by survey data alone.

One of the most prominent themes to emerge from the grounded theory analysis, *Individualization of Climate Responsibility*, reflects participants' deep internalization of blame for their personal contributions to climate change. Many expressed a strong desire to live more sustainably, through practices like recycling, composting, and reducing consumption, but also acknowledged feeling powerless in the face of systemic barriers. Despite their efforts, they struggled to reduce their most significant emissions due to structural limitations. As Nicole put it, *"Is it realistic for every person to own their own vehicle? Probably not. But if we had a better transit system or something, that could be avoided."* Participants frequently described the emotional weight of trying to solve a global crisis through individual action, what Renato Redentor Constantino, former head of the Institute for Climate and Sustainable Cities, has aptly compared to an ant trying to move an elephant (Constantino, 2023).

These feelings of futility and guilt are not accidental. Oil and gas companies, most notably BP, have played a key role in shaping public discourse to emphasize individual responsibility. In 2004, BP popularized the term *"carbon footprint"* as part of a marketing strategy designed to shift attention away from corporate emissions and onto consumer behavior (Kaufman, 2020). This rhetorical shift has allowed fossil fuel companies to appear supportive of climate action while continuing to extract and emit at massive scales (Hartmann et al., 2022). Specifically, through BP's "carbon footprint" campaign, the company removed itself from the fight towards climate action (Kaufman, 2020). This framing offers individual consumers a seemingly tangible outlet for climate action, small tasks like composting and recycling become strategies for coping with an otherwise overwhelming crisis. While these actions provide a sense of agency, they also reinforce the belief that the burden of change lies with individuals rather

than systems (Cook, 2020). As a result, participants in this study expressed feelings of personal failure and guilt in the face of a crisis that is largely outside their control.

Participants in this study recognize the contributions of capitalism and corporate greed to anthropogenic climate change, yet no specific contributors were named. Corporations appeared in participants transcripts as a faceless villain, with participants like Anna sharing *“The economy, all the systems, everything that could maybe prevent and limit climate change is all run by (...) people who don't care that climate change is a thing, because they're gonna be dead by the time it really matters (...) Or they just don't care, because they want money.”*

Still, despite the overwhelming scale of systemic forces, participants expressed resilience through a belief in human ingenuity and the potential for collective action. Madison shared her coping mindset: *“You can't live with just saying you're screwed. Like, you have to have the hope that someone's going to do something.”* While participants often struggled to articulate a concrete vision for change, they held onto the idea that solutions, however uncertain, might still emerge in the future. This quiet optimism, even in the absence of clear direction, reflects a deeper refusal to give in to despair. As Renato Redentor Constantino reminds us, *“sometimes the ant's best defense against an elephant is firm resolve and a clever strategy.”* (Constantino, 2023, p. 79).

## **Uncertainty and Grief**

The themes *“Do I really want to bring them into this?”*, *I don't know what to plan for*, and the subtheme *Anticipatory Grief* are all closely connected by participants' uncertainty about the future and skepticism toward humanity's ability to address climate change in meaningful ways. Participants struggled to make long-term plans, particularly around family formation, housing, and career, because they could not clearly imagine what kind of world they would be



building those futures within. When Nicole was asked if and how she predicts climate change to impact her long-term goals, her answer was: *“Yes. I don't know how yet.”* Lynn echoed this sentiment, emphasizing that climate anxiety *“is not a driving force ever,”* suggesting a kind of paralysis rather than motivation.

The subtheme *Anticipatory Grief* captures the participants mourning of things that still exist, both tangible and intangible. Madison discussed her changing travel plans due to this expected loss: *“Because there's a lot of like little islands that I would have wanted to see since childhood that we might have to hurry up and do.”* Anna reflected on the gradual disappearance of once-routine activities, an intangible loss, like swimming in Vancouver's coastal waters, due to growing environmental and health concerns.

In a study strikingly titled “One thousand ways to experience loss” Tschakert and colleagues (2019) explore how losses related to climate damage impact people's daily lives. This includes both tangible losses such as property, and intangible losses such as culture and identity. The authors state that simply feeling at risk, even if no actual harm happens, can weaken a person's sense of safety about the future. This can, in turn, reduce their ability to plan, prepare, and protect themselves, potentially worsening their overall well-being (Tschakert et al., 2019). In the context of this study, participants may have a difficulty planning for the future in the context of climate change because they view their future safety as unstable. Madison's loss of sense of safety was captured in this statement: *“Where deciding where me and my partner might settle down in the future, thinking about like, places that will be affected by natural disasters, flooding, overheating, like stuff like that is something that we've taken into a lot of consideration. (...) Also trying to see which places we want to see before they go under.”* Tschakert et al. (2019), building on Potawatomi scholar Kyle Whyte's (2016) work, advocate for the concept of collective

continuance, the idea that adaptation and healing must be rooted in relationality, memory, and mutual responsibility. From this perspective, maintaining hope and coherence in the face of climate distress is a shared process, not an individual burden. While the present study found that participants often felt isolated or powerless, existing literature suggests that collective approaches to knowledge-sharing and adaptation may help mediate the emotional toll and physical losses of climate change (Kelsey, 2016; Whyte, 2016).

### **Conclusion**

This study sought to understand how climate anxiety influences undergraduate students' perceptions and plans for the future across four key domains: career, education, housing, and family planning. Using a mixed-methods approach both the prevalence of climate anxiety among students in British Columbia and the nuanced ways it shapes their decision-making was explored.

The quantitative survey results indicate that climate anxiety is experienced unevenly among the undergraduate sample. Statistically significant relationships revealed that women and non-binary individuals reported significantly higher levels of climate anxiety compared to men, while South Asian and Latino respondents reported significantly lower levels of climate anxiety than white individuals. However, the small sample size ( $N=36$ ) limits the reliability of these findings. As such, these results should be considered exploratory, though they provide a foundation for potential future research in this area.

Participants expressed feelings of powerlessness in the face of an overwhelming and seemingly insurmountable task of combating climate change, making it difficult to plan for an uncertain future. While climate anxiety represents a legitimate grief for what lies ahead, it also highlights the urgent need for systemic change. This anxiety calls for a transformation of

inequities and the cultivation of collective hope, not as passive optimism, but as a resolute drive to act and create a more sustainable and just future.

## References

- Adu, P. (2019). *A step-by-step guide to qualitative data coding*. Routledge.
- Berberian, A. G., Gonzalez, D. J. X., & Cushing, L. J. (2022). Racial disparities in Climate Change-Related Health Effects in the United States. *Current Environmental Health Reports*, 9(3), 451–464. <https://doi.org/10.1007/s40572-022-00360-w>
- Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*, 74, 102263. <https://doi.org/10.1016/j.janxdis.2020.10226>
- Clayton, S., & Karazsia, B. T. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*, 69, 101434. <https://doi.org/10.1016/j.jenvp.2020.101434>
- Cook, J. (2020). Deconstructing Climate Science Denial. In Holmes, D. & Richardson, L. M. (Eds.) *Edward Elgar Research Handbook in Communicating Climate Change*. Cheltenham: Edward Elgar.
- Constantino, R. (2023). *Not Too Late*. Haymarket Books.
- Daeninck, C., Kioupi, V., & Vercammen, A. (2023). Climate anxiety, coping strategies and planning for the future in environmental degree students in the UK. *Frontiers in psychology*, 14, 1126031. <https://doi.org/10.3389/fpsyg.2023.1126031>
- Diffenbaugh, N. S., Singh, D., & Mankin, J. S. (2018). Unprecedented climate events: Historical changes, aspirational targets, and national commitments. *Science Advances*, 4(2). <https://doi.org/10.1126/sciadv.aao3354>

- Doherty, T. J., & Clayton, S. (2011). The psychological impacts of global climate change. *American Psychologist*, 66(4), 265–276. <https://doi.org/10.1037/a0023141>
- Hartmann, P., Marcos, A., Castro, J., & Apaolaza, V. (2022). Perspectives: Advertising and climate change – Part of the problem or part of the solution? *International Journal of Advertising*, 42(2), 430–457. <https://doi.org/10.1080/02650487.2022.2140963>
- Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., Wray, B., Mellor, C., & van Susteren, L. (2021). Climate anxiety in children and young people and their beliefs about government responses to climate change: A global survey. *The Lancet Planetary Health*, 5(12). [https://doi.org/10.1016/s2542-5196\(21\)00278-3](https://doi.org/10.1016/s2542-5196(21)00278-3)
- Kaufman, M. (2020). *The carbon footprint sham*. Mashable. <https://mashable.com/feature/carbon-footprint-pr-campaign-sham>
- Kelsey, E. (2016). Propagating collective hope in the midst of environmental doom and gloom. *Canadian Journal of Environmental Education*, 21, 23–40. <https://files.eric.ed.gov/fulltext/EJ1151861.pdf>
- Kite, M. E., & Whitley, B. E. (2018). *Principles of research in behavioral science*.
- Llaudet, E., & Imai, K. (2022). *Data analysis for social science: A Friendly and Practical Introduction*. Princeton University Press.
- Mateer, T. J. (2024). A call for intergenerational solidarity in climate change education: Outlining a strategy to manage climate anxiety and facilitate action. *European Journal of Education*, 59(3). <https://doi.org/10.1111/ejed.12659>

- Otto, F. (2025). *Climate injustice: Why We Need to Fight Global Inequality to Combat Climate Change*. Greystone Books.
- Ray, S. J. (2020). *A field guide to climate anxiety: How to keep your cool on a warming planet*. University of California Press.
- Ray, S. J. (2024). Climate anxiety is an overwhelmingly white phenomenon. *Scientific American*.  
<https://www.scientificamerican.com/article/the-unbearable-whiteness-of-climate-anxiety/>
- Reinhart, R.J. (2018) Global Warming Age Gap: Younger Americans Most Worried, Gallup.com. Available at: <https://news.gallup.com/poll/234314/global-warming-age-gap-younger-americans-worried.aspx>
- Swim, J. K., Aviste, R., Lengieza, M. L., & Fasano, C. J. (2022). OK boomer: A decade of generational differences in feelings about climate change. *Global Environmental Change*, 73, 102479. <https://doi.org/10.1016/j.gloenvcha.2022.102479>
- Stivers, L. (2016). Climate change, smart growth, racial oppression, and white privilege. *Journal of Graduate Liberal Studies*, 256.  
<https://scholar.dominican.edu/cgi/viewcontent.cgi?article=1258&context=all-faculty>
- Tschakert, P., Ellis, N., Anderson, C., Kelly, A., & Obeng, J. (2019). One thousand ways to experience loss: A systematic analysis of climate-related intangible harm from around the world. *Global Environmental Change*, 55, 58–72.  
<https://doi.org/10.1016/j.gloenvcha.2018.11.006>

- Teyton, A., & Abramson, D. M. (2021). The Formation of Belief: An Examination of Factors That Influence Climate Change Belief Among Hurricane Katrina Survivors. *Environmental justice (Print)*, 14(3), 169–177. <https://doi.org/10.1089/env.2020.0041>
- Verlie, B. (2024). Feeling climate injustice: Affective climate violence, greenhouse gaslighting and the whiteness of climate anxiety. *Environment and Planning E Nature and Space*, 7(4), 1601–1619. <https://doi.org/10.1177/25148486241252734>
- Whyte, K.P., 2016. Indigenous Peoples, Climate Change Loss and Damage, and the Responsibility of Settler States. SSRN <https://doi.org/10.2139/ssrn.2770085>.
- Wray, B. (2022). *Generation Dread: Finding Purpose in an Age of Climate Crisis*. Knopf Canada.
- Wullenkord, M. C., Tröger, J., Hamann, K. R., Loy, L. S., & Reese, G. (2021). Anxiety and climate change: a validation of the Climate Anxiety Scale in a German-speaking quota sample and an investigation of psychological correlates. *Climatic Change*, 168(3), 20.

**Appendix A**  
**Interview Consent Form**



***Facing the Future: A Climate Anxiety Study***

<b>Principal Investigator</b>	<b>Supervising Faculty</b>
<b>Everan Horwood</b> <b>Bachelor of Psychology with Honours</b> <b>Capilano University</b> <b>everanhorwood@capilanou.ca</b>	<b>Sarah Yercich</b> <b>Sociology and Criminology</b> <b>Capilano University</b> <b>sarahyercich@capilanou.ca</b>

***Study Purpose***

I am a student in the Bachelor of Psychology Honours program at Capilano University. My research, entitled “*The Effects of Climate Anxiety on Future Planning*,” aims to understand the prevalence of climate anxiety in an undergraduate population and its effects on how individuals plan for the future. My hope is that this research will contribute to a better understanding of climate anxiety and inform future research and therapeutic techniques to help individuals who experience climate anxiety.

***Description***

I would like to ask if you would be willing to participate in an online or in-person interview. If you agree, you will be asked questions regarding your personal experiences with climate anxiety and how it impacts your plans for the future. The interview would be audio recorded. Your participation in the interview would require approximately 1 hour of your time.

***Risks and Risk Management***

Depending on the information you provide, including if you choose to disclose your identity, there may be a risk that the information you provide might cause loss of social status and/or embarrassment. To mitigate this risk, your personal identity will not be revealed in any research products. Instead, your name will be replaced with a pseudonym and directly identifiable information about you will be removed from the final thesis and presentation materials. There is a low risk that you may experience emotional or mental distress when discussing your personal opinions and experiences with climate anxiety and future planning. Questions utilized in the interview purposefully use a neutral tone surrounding climate change so as not to further evoke fear and anxiety. Information regarding mental health support services such as hotlines and counselling services will be provided to you at the end of the interview. The interview will be audio recorded, and transcribed into text, and you will be sent the transcription and given the opportunity to make changes to/remove any responses you provided during the interview. The transcription will be sent to your email approximately one month following the interview, and you will have 2 weeks to make changes and email them back to the interviewer.

***Storage of Your Information and Data***

All data and information derived from the interview will be stored on the principal investigator’s password-protected computer for 3 years. All the materials involved in the study including consent forms, audio recordings, and transcripts will be destroyed 3 years after the study has ended (March 2028). The transcription of the interview audio will be done using the program TurboScribe. TurboScribe ensures that all files and transcripts are stored encrypted, guaranteeing user privacy and data security. The



encrypted data is stored on a server in the United States. If you wish to review more information on Turboscibe's privacy policies, they are listed here: <https://turboscribe.ai/blog/security-and-privacy-faq>

### ***Use of Your Information***

The results of this study will be presented in a thesis required for my (Everan's) degree, and may also be used for conference publications, presentations, and publications in academic journals.

### ***Participation and Withdrawal***

Your participation is completely voluntary. If you choose to withdraw from the study, all the information you provided during the interview will be deleted and destroyed. If you want to review/make changes to your interview transcript, you will have 2 weeks to do so once the principal investigator emails it to you. You may skip any questions during the interview, with no explanation necessary. You may choose to withdraw from the study without explanation or consequences up until the final submission of the written thesis in March 2025. If you would like to withdraw from the study, email Everan ([everanhorwood@capilanou.ca](mailto:everanhorwood@capilanou.ca)).

### ***Consent and Conditions of Consent***

I have read and understand the information provided above, and hereby consent to participate in this research under the following conditions:

*I consent to the interview being audio recorded.*

☐

*Yes*

☐

*No*

*I consent to having my personal identity disguised using a pseudonym in the products of the research.*

☐

*Yes*

☐

*No*

*I consent to being quoted in the products of the research.*

☐

*Yes*

☐

*No*

Participant Name \_\_\_\_\_ Participant Signature \_\_\_\_\_

### ***Commitment of Principal Investigator***

I, Everan Horwood, promise to adhere to the procedures described in this consent form.

Principal Investigator Signature \_\_\_\_\_ Date \_\_\_\_\_

I would like to receive a copy of the results after the study has been completed:

☐

*Yes*

☐

*No*

If yes, please provide an email address where you would like the results to be sent to:

\_\_\_\_\_

If you have any concerns about your treatment as a research participant in this study, please contact the Capilano University Research Ethics Board at [reb@capilanou.ca](mailto:reb@capilanou.ca).

## **Appendix B**

### **Survey Consent Form**

#### ***Study Purpose***

I am a student in the Bachelor of Psychology Honours program at Capilano University. My research, entitled “*Facing the Future: A Climate Anxiety Study*” aims to understand the prevalence of climate anxiety in an undergraduate population and its effects on how individuals plan for the future. My hope is that this research will contribute to a better understanding of climate anxiety and inform future research and therapeutic techniques to help individuals who experience climate anxiety.

#### **Description**

Thank you for your interest in participating in this study. This survey will take approximately 10 minutes to complete and will ask you to respond on a scale to statements about your own experiences with climate anxiety. Future planning will be investigated in a separate interview process, which you may volunteer to participate in by providing your email at the end of the survey. Participation in the interview process is optional, and not required for participation in this survey. If you are interested in participating in an interview investigating future planning and climate anxiety more information will be provided at the end of the survey, and you may provide your email address for the principal investigator to contact. Alternatively, you may email the principal investigator at [everanhorwood@capilanou.ca](mailto:everanhorwood@capilanou.ca) to arrange an interview or request more information.

#### ***Participation and Withdrawal***

Participation is completely voluntary. Participants can decline participation in this survey at any time by exiting the webpage. There are no consequences of declining participation or not completing the survey. Survey responses will only be collected when participants click ‘submit’ at the end of the survey, and participants will be given the opportunity to review their responses. Once the survey is completed, participant responses cannot be removed or edited as it is anonymous. Withdrawing after the survey is submitted is not possible.

#### ***Risks and Risk Management***

There are minimal foreseeable risks associated with participating in this study. Due to the study's nature, psychological distress may present as the survey questions provoke self-reflection on experiences of anxiety and discomfort related to climate change. If you require additional support after the study, I recommend visiting [helpguide.org/find-help](https://helpguide.org/find-help) to find mental health support accessible in your country.

#### ***Your Information***

Confidentiality will be provided by ensuring no personal identifiers are stored with the data you submit. If you choose to submit your email to participate in the interview portion of the study, your email address will not be associated with your survey responses, ensuring anonymity. Your email address will only be accessible to the principal investigator and stored on a password-protected laptop. A Capilano University Qualtrics account will be used to collect your survey responses. Survey data will be stored on Qualtrics' servers, which are located in Canada. The results of this study will be presented in a thesis required for my (Everan's) degree, and may also be used for conference publications, presentations, and publications in academic journals. All survey data will be deleted 3 years after the study's completion (March 2028).

#### ***Contact Information***

If you would like to learn more about the results, would like to participate in the interview portion of the study, or if you have any questions, please contact Everan Horwood at ([everanhorwood@capilanou.ca](mailto:everanhorwood@capilanou.ca)) or her supervisor, Dr. Sarah Yercich at ([sarahyercich@capilanou.ca](mailto:sarahyercich@capilanou.ca)).

You may screenshot the study information/consent form now if you wish to keep it for your records. Alternatively, a copy of this study information/consent can be requested via e-mail ([everanhorwood@capilanou.ca](mailto:everanhorwood@capilanou.ca)).

If you have any concerns about your treatment as a research participant in this study, please contact the Capilano University Research Ethics Board at [reb@capilanou.ca](mailto:reb@capilanou.ca).

## Appendix C

### Survey Instrument

1. I am...
  - ☐ Currently enrolled in an undergraduate program
  - ☐ Recently graduated from an undergraduate program (within 1 year)
  - ☐ Not enrolled in an undergraduate program
- i. If participants select the last option, they are not eligible to participate and will be sent to the end of the survey.
  
2. I am over the age of 19
  - ☐ Yes
  - ☐ No
- i. If participants select the last option, they are not eligible to participate and will be sent to the end of the survey.

#### Demographics

Gender: How do you identify?

- ☐ Man
- ☐ Woman
- ☐ Non-binary/non-conforming
- ☐ Transgender
- ☐ Other: please specify \_\_\_\_\_
- ☐ Prefer not to say

What is your age?

- ☐ 19-24
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ Over 55
- ☐ Prefer not to say

How do you identify your race? Please select all that apply.

- ☐ White (European descent)
- ☐ Black (African, Afro-Caribbean descent)
- ☐ Indigenous (Inuit, Métis and First Nations)
- ☐ South East Asian (Filipino, Vietnamese, Cambodian, Thai etc.)
- ☐ East Asian (Chinese, Korean, Japanese, Taiwanese etc.)
- ☐ South Asian (Indian, Pakistani, Sri Lankan etc.)
- ☐ Latino (Latin American, Hispanic descent)
- ☐ Middle Eastern (Arab, Persian, Egyptian, Iranian etc.)
- ☐ Other: please specify \_\_\_\_\_
- ☐ Prefer not to say

What is your total annual income?

- ☐ Below \$10,000
- ☐ \$10,000 - \$30,000
- ☐ \$31,000 - \$50,000
- ☐ \$51,000 - \$70,000

- \$71,000 - \$100,000
- \$100,000 +
- Prefer not to say

What is your program of study?

- Social Sciences (sociology, criminology, psychology etc.)
- Business
- Science (chemistry, biology, engineering etc.)
- Arts (fine arts, music, performance art, acting, etc.)
- Health (nursing, dentistry etc.)
- Other: please specify \_\_\_\_\_
- Prefer not to say

Please rate how often the following statements are true of you.				
1	2	3	4	5
Never	Rarely	Sometimes	Often	Almost Always

1. Thinking about climate change makes it difficult for me to concentrate.
2. Thinking about climate change makes it difficult for me to sleep.
3. I have nightmares about climate change
4. I find myself crying because of climate change
5. I think, "why can't I handle climate change better?"
6. I go away by myself and think about why I feel this way about climate change
7. I write down my thoughts about climate change and analyze them
8. I think, "why do I react to climate change this way?"
9. My concerns about climate change make it hard for me to have fun with my family or friends.
10. I have problems balancing my concerns about sustainability with the needs of my family.
11. My concerns about climate change interfere with my ability to get work or school assignments done.
12. My concerns about climate change undermine my ability to work to my potential.
13. My friends say I think about climate change too much.

### End of Survey Message

Thank you for your responses. If you would like to review your responses, please do so now. After clicking "next page" you will no longer be able to make changes to/remove your responses.

[the survey will then automatically direct to the link provided below]

- i. The use of a second survey ensures that participants' responses will not be associated with their email addresses if they choose to provide one.

"If you are interested in participating in a 1 hour-long interview investigating your personal experiences with climate anxiety and planning for the future, please provide your email address below. Everan will contact you with more information and the opportunity to schedule an interview. Providing your email is completely optional, and if you do not wish to volunteer this information, simply click "next page" and your responses will be recorded.

If you choose to provide an email address, it will not be associated with responses ensuring they are kept anonymous."

Appendix D  
Recruitment Poster

# FACING THE FUTURE: A CLIMATE ANXIETY STUDY

## STUDY INFORMATION

I am a student in the Bachelor of Psychology Honours program at Capilano University. My research aims to understand the prevalence of climate anxiety in students and its effects on how students plan for the future. My hope is that this research will contribute to a better understanding of climate anxiety and inform future research and therapeutic techniques to help individuals who experience climate anxiety.

## ARE YOU ELIGIBLE?

- Current undergraduate student in British Columbia
- Recently graduated from an undergraduate program in BC (1 year)
- Over 19 years old

## WHAT TO EXPECT

- Scan the QR code to participate in an anonymous online survey that will take ~10 minutes
- If you would like to participate in an hour-long interview, provide your email at the end of the survey and Everan will contact you to schedule an interview.
- Your email address will be kept confidential, and will not be associated with your survey responses.
- Participation in the survey and/or interview is completely voluntary.

## HOW TO PARTICIPATE

1. Scan the QR code
2. Review study information
3. Read consent form
4. Complete survey
5. (optional) provide your email address at the end to schedule an interview.



Do you have any questions? Would you like to participate in an interview without completing the survey? Email Everan at [everanhorwood@capilanou.ca](mailto:everanhorwood@capilanou.ca)



## Appendix E

### Interview Guide

#### Introduction

Hi, my name is Everan. Thank you for agreeing to participate in this research interview about climate anxiety and future planning. This interview is being conducted as a part of my honours thesis at Capilano University. The research supervisor is Dr. Sarah Yercich.

At the end of the interview, you will be asked to share the recruitment poster with individuals you feel will be suitable and interested to participate in this study. Sharing the recruitment poster is completely voluntary and will not affect your position in the study.

#### Consent Form Review

**[provide the individual with consent form]**

If you have not had a chance to review the consent form sent to your email, please do so now.

- Do you have any questions regarding the study information/consent form?
- Do I have your permission to begin audio recording and begin the interview?

#### Demographics

I am now going to ask you some demographic questions that will help me understand a bit more about you. These questions I am about to ask you are for background purposes only and will not be reported with your identity in any products of the research. I will follow your level of anonymity choice regarding what information you choose to share/not share.

You can choose not to answer any question that makes you feel uncomfortable.

- **What ethnic/cultural group(s) do you identify with?**
- **What is your age?**
- **What gender do you identify with?**

What pronouns do you use?

- **Which geographic area do you live?**
  - Burnaby
  - Vancouver
  - Richmond
  - Surrey
  - Langley
  - North Vancouver
  - West Vancouver
  - Vancouver Island
  - Abbotsford/Chilliwack
  - Northern BC
  - Eastern BC
- **What is your program of study?**

- **What is your total annual income?**

**[Interview Begins]**

I would like to hear about your thoughts surrounding climate change and your visions of the future. I will now ask you some open-ended questions, feel free to respond with as little or as much detail as you would like. If you would like to skip a question, please do not hesitate to say so, and we will move on.

1. How do you envision your personal future, particularly in 10, 20, or 30 years?
  - Has climate change influenced your vision of your future?
2. Has concern over climate change affected your long-term plans, such as career choices, housing location, or family planning?
  - In what specific ways?
3. How do you approach major life decisions (e.g., buying a house, starting a family, changing careers, pursuing higher education) in the context of climate change?
  - Has your approach shifted over time due to climate change?
4. Do you believe climate anxiety affects your decision making in the long run?
  - Would you consider this a positive or negative influence?
5. How optimistic (or pessimistic) are you about humanities ability to effectively address climate change?
  - How does this perspective impact your own long-term planning?
6. Has your concern about climate change influenced your career path or educational choices?
  - How did climate anxiety play a role in your decision-making?
7. Do you feel climate change will impact the field you work in or aspire to work in?
  - Has this influenced your long-term career plans?
8. Has climate change anxiety influenced where you plan to live in the future (e.g., choosing locations with less risk of natural disasters)?
9. Has climate anxiety impacted your views on having children or expanding your family?
10. Do you consider how climate change might affect your children or future generations when making long-term decisions?
11. Do you anticipate needing to adjust your long-term goals to account for climate-related changes?
  - How do you plan to adapt if these changes occur?
12. Do you anticipate that climate change will impact your health or well-being in the future, and has this influenced your long-term planning?
  - Have you made any changes in health-related behaviors (e.g., lifestyle choices, mental health care) because of these concerns?

**[End of Interview]**



We are now at the end of the interview. Thank you for your time today. I will send a copy of the interview transcript to your email within 3 weeks, and you will have 2 weeks to confirm or make changes to the information you provided.

**[provide the individual with debriefing materials]**

If this interview left you feeling uneasy or distressed, I recommend you connect with the support provided on this sheet