Addendum II: Climate Anxiety Addendum

The Climate Anxiety Addendum is a resource and knowledge base for all Emory students, faculty, staff, and community members who may be experiencing negative psychological effects due to global climate change. Using this tool will allow Emory community members to find both internal and external support to help ease these difficult emotions and thought patterns. In this era of rapid change and planetary uncertainty, we hope that this addendum will better support the general well-being and happiness of the Emory community at large.

It's important to note that the mental health effects of climate change can vary depending on an individual's resilience, coping mechanisms, social support networks, and access to mental health services. However, the overall impact of climate change on mental health is a growing concern, and addressing these issues requires a comprehensive approach that combines climate action, social support systems, and mental health services.

The Climate Anxiety Addendum was written by Emory's Office of Sustainability (OSI) and Center for Contemplative Science and Compassion-Based Ethics to accompany Emory's 2023 Climate Action Plan. It is meant to serve as a tool for students, faculty, staff, and community members who are curious about the impacts of climate change on their holistic wellbeing. Section I of this addendum, created by the Center for Contemplative Science and Compassion-Based Ethics, describes compassion-based mental health resources and interventions. Section II, created by OSI, outlines the link between climate change and mental health and identifies internal and external support resources. These are included for informational purposes only and are neither endorsements nor replacements for professional or medical advice.

Section I. Slow-Burning Stress: The pervasive threat of climate change and the role of compassion-in-action to cool the burn

Author: Dr. Tyralynn Frazier, Center for Contemplative Science & Compassion-Based Ethics

Introduction

Maya Angelou once wrote of vulgarity:

> *If the emperor is standing in my living room stripped to the buff, nothing should prevent me from saying that since he has no clothes on, he is not ready for public congress. At any rate, not lounging on my sofa and munching on my trail mix.*

The vulgarity of climate change is that solutions are self-evident, opportunities for change within our systems, countries, and institutions have been clearly defined, and yet we stand before these naked emperors with impotence. This inability to change what is right in front of us coupled with the catastrophic outcomes that are here and that are to come is what drives climate anxiety. This is a relatively new term that has emerged in response to the growing awareness of the climate crisis and its impacts. Climate anxiety is becoming increasingly prevalent among adolescents, who are more likely to be aware of and concerned about climate change than previous generations.

What Does Climate Anxiety Look Like?

Adolescents' climate anxiety is often described as a "simmering" or underlying cause of poor mental health. This is because climate anxiety may not be the primary cause of mental health issues, but rather a contributing factor that intensifies or exacerbates existing symptoms.

For example, studies have described climate anxiety as a "slow-burn" stressor that can accumulate over time and increase the risk of mental health problems such as anxiety and depression (Thoma et al., 2021; Ojala et al., 2021; Soutar & Wand, 2022). Similarly, a systematic review by Martin et al. (2022) noted that climate anxiety may interact with other stressors and amplify their negative effects on mental health.

Climate anxiety may also be described as a "hidden" or "silent" stressor, as it is often not recognized or acknowledged by healthcare providers or society at large. This can lead to a lack of appropriate support and resources for individuals experiencing climate anxiety, which can further exacerbate their distress.

Overall, describing adolescents' climate anxiety as a simmering cause of poor mental health highlights the importance of addressing climate change not only as an environmental issue but also as a mental health issue. It also emphasizes the need for comprehensive and integrated approaches to mental health that consider the complex interplay between environmental, social, and individual factors.

In a study conducted by Hickman et al. (2021) the researchers investigated the prevalence of climate anxiety among adolescents around the world and its potential impact on mental health. The study found that climate anxiety was a common experience among the surveyed adolescents, with the majority reporting feeling very or extremely worried about the impact of climate change on their future.

Moreover, further studies have found a significant association between climate anxiety and poor mental health outcomes, including symptoms of depression and anxiety (Barkin et al., 2021). Adolescents with high levels of climate anxiety were more likely to report poor mental health compared to those with lower levels of climate anxiety.

Dr. Barkin is a pediatrician and public health researcher with expertise in the intersection of climate change and mental health. Her research focuses on understanding the impact of climate change on the health and well-being of vulnerable populations, particularly children and adolescents.

Dr. Barkin's research highlights the potential long-term effects of climate anxiety on mental health. Adolescents who experience high levels of climate anxiety may be at risk of developing anxiety and depressive disorders in adulthood, as well as other negative health outcomes such as substance abuse and chronic stress-related conditions.

It is important to note that the long-term effects of climate anxiety may also have broader societal impacts. For example, individuals who experience climate anxiety may be less likely to engage in pro-environmental behaviors, as they may feel overwhelmed and hopeless in the face of climate change. This, in turn, can further exacerbate feelings of anxiety and helplessness, creating a vicious cycle that perpetuates poor mental health outcomes.

Overall, this research highlights the urgent need to address climate anxiety as a mental health issue and underscores the importance of developing interventions and strategies to support individuals who are experiencing climate anxiety.

How Is Climate Anxiety Addressed?

Compassion training can be a useful tool for individuals with climate anxiety, as it helps individuals to develop a more positive and supportive relationship with themselves and others. Through cultivating a sense of self-compassion and empathy for others, individuals may be better equipped to cope with the overwhelming emotions and distress associated with climate anxiety.

Research has shown that compassion-based interventions can be effective in reducing anxiety and depression symptoms, increasing positive emotions, and improving overall mental health outcomes. In the context of climate anxiety, compassion training may help individuals to feel less isolated and overwhelmed by creating a sense of shared concern and connectedness with others.

There are several examples of compassion-based interventions that have been developed specifically for adolescents with climate anxiety. For example, one intervention involves group-based mindfulness and compassion training, which combines mindfulness practices with compassion-focused exercises to help adolescents develop a more compassionate and supportive relationship with themselves and others.

Another example is the "Eco-Compassion" intervention, which emphasizes the importance of compassion for the natural world and uses mindfulness practices to help adolescents connect with nature and develop a deeper sense of empathy and care for the environment.

Climate anxiety can be exacerbated by a feeling of helplessness and hopelessness. Climate change is a complex and multifaceted issue that can feel overwhelming, and adolescents may feel powerless to make meaningful changes in the face of such a massive global problem. Additionally, the slow pace of action on climate change by governments and other institutions can contribute to a sense of hopelessness about the future.

Compassion training directly impacts this sense of helpless and hopelessness by orienting one's attention towards what they can do and how they can make an impact. Within the Center for Contemplative Science and Compassion-Based ethics, at Emory University, there are a number of domains of development that can have a direct and lasting effect on climate anxiety. For example:

Tenderheartedness: This refers to the ability to be kind and gentle with oneself and others. Practicing tenderheartedness can help individuals develop self-compassion and reduce self-criticism, which can be especially important when dealing with the overwhelming and potentially distressing emotions that can come with climate anxiety. By cultivating a sense of kindness and compassion towards oneself, individuals may be better equipped to handle difficult emotions and take positive action towards addressing climate change.

Wisdom: This involves developing an understanding of the causes and conditions that give rise to suffering, and the ability to respond skillfully to difficult situations. Practicing wisdom can help individuals gain perspective on the complex and interconnected issues that contribute to climate change and develop more effective strategies for addressing these issues. By developing wisdom, individuals may be better able to see the bigger picture of climate change and take a more balanced and informed approach to their actions.

Common Humanity: This involves recognizing that suffering and struggle are universal experiences, and that we are all interconnected. Practicing common humanity can help individuals feel less isolated and alone in their experiences of climate anxiety and develop a sense of shared responsibility for addressing climate change. By recognizing our common humanity, individuals may be more motivated to act towards addressing climate change and may feel more supported in their efforts.

Interdependence: This refers to the recognition that all beings are interconnected and interdependent. Practicing interdependence can help individuals develop a sense of connection and responsibility towards the natural world and recognize the ways in which our actions impact the planet and all living beings. By cultivating a sense of interdependence, individuals may be more motivated to take actions towards reducing their carbon footprint and protecting the environment.

Compassionate Engagement: This involves actively working towards reducing suffering in oneself and others. Practicing compassionate engagement can help individuals develop a sense of agency and efficacy in addressing climate change and develop a deeper commitment to making positive change. By engaging in compassionate action, individuals may feel more empowered and effective in their efforts to address climate change, which can in turn reduce feelings of helplessness and hopelessness.

Feelings of helplessness and hopelessness are common among individuals experiencing climate anxiety and can contribute to negative mental health outcomes such as depression and anxiety. Therefore, it is important to address these feelings and provide adolescents with tools and resources to feel empowered and act on climate change. This can include interventions that promote community engagement and social support, as well as education and advocacy initiatives that help individuals feel informed and equipped to act on climate change.

These are just a few examples of the many resources available for addressing climate anxiety in college-age and youth populations. It's important to find the resources that work best for you and your community. The goal is to learn strategies of compassionate engagement that empowers action while supporting well-being when dealing with climate-related stress and anxiety.

Resources

Compassion-Based Resources:

Compassion-Based Cognitive Training

There are a number of compassion-based resources that address climate anxiety. One specific approach to compassion training that has been used in the context of climate anxiety is Cognitive-Based Compassion Training (CBCT). CBCT is a secular and evidence-based program developed at Emory University. CBCT has been shown to have positive effects on reducing symptoms of anxiety, depression, and stress. Additionally, some studies suggest that CBCT may increase prosocial behavior and emotional regulation, both of which can be helpful in coping with climate anxiety.

Additional Resources

The American Psychological Association's "Mental Health and Our Changing Climate,": This report explores how climate change can impact mental health and provides guidance to engage the public.

The Climate Reality Project: The Climate Reality Project offers a range of resources and training programs for young people interested in acting on climate change. Their Youth Corps program provides training and support for young people looking to become climate leaders in their communities.

The Good Grief Network: The Good Grief Network offers programs for individuals and communities looking to process their emotions around difficult topics, such as the unpredictability caused by climate change, and take positive action towards addressing it. They offer online and in-person workshops and support groups.

The Sierra Club's Youth Programs: The Sierra Club offers a range of programs and resources for young people interested in environmental activism and climate action. They have youth leadership programs, advocacy campaigns, and educational resources available.

The Climate Education Initiative: The Climate Education Initiative provides educational resources and tools for teachers and educators looking to incorporate climate change education into their classrooms. They offer lesson plans, curriculum guides, and professional development workshops.

For additional background, please consult the bibliography at the end of this document.

Section II. Addressing Climate Anxiety

Author: Lucia Buscemi (24C) Emory's Office of Sustainability Initiatives, Intern

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Background Information on Climate Anxiety

Scientists and environmental activists have warned the world about the impending disastrous effects of global climate change since the 1800s. In the 2020s, climate change is no longer an abstract problem for future generations—most of the planet's population has already been impacted by human-driven climate change (Callaghan et al., 2021). Wildfires, flooding, extreme natural disasters, water shortages, deforestation, and species extinction have become increasingly common in the lived experiences of generations of humans around the world. Climate change is not only threatening the geophysical conditions that make the planet livable for humans and non-human species; it is also directly and currently degrading the mental health and emotional wellbeing of people around the world. Psychological responses to climate change identified in humans include conflict avoidance, fatalism, fear, helplessness, and resignation (Clayton et al., 2017). Climate change impacts and threat of future climate changes will continue to alter how humans act, think, and feel until we transform the way that we interact with our planet and environment.

The impacts of climate change on mental health can be classified as acute, such as distress felt during or after floods or heatwaves, or chronic, such as distress due to permanent landscape changes after tornadoes or mountains' loss of snow cover (Comtesse et al., 2021). The mental health effects of climate change can be felt at a community level (Bourque & Cunsolo, 2014) as ecological disasters sometimes threaten an entire region or culture's way of life. Groups that already face marginalization, such as Indigenous Peoples, senior citizens, children, people experiencing poverty, and those with pre-existing health conditions, are particularly vulnerable to the effects of climate change due to greater exposure, lack of political or socio-economic power, or physiological factors (Ramadan & Ataallah, 2021). These groups may also lack proper access to resources to deal with mental health issues, such as affordable medicine and well-trained therapists.

There are many different manifestations of mental health struggles due to the effects of global climate change—anxiety depression, grief, substance abuse, occupational and economic stress, loss of sense of place and identity, increased social and community tension, and trauma or post-traumatic stress disorder after an extreme weather event. These psychological effects vary greatly based on an individual's resilience abilities, coping mechanisms, social support networks, and access to mental health services.

Outlined below are some of the possible forms of mental health impacts associated with a changing global climate.

Climate Anxiety or eco-anxiety: Climate change can lead to increased feelings of anxiety, fear, and distress. This emotional response is often referred to as "eco-anxiety" or "climate anxiety". The American Psychological Association defines anxiety as "an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure... [it] is considered a future-oriented, long-acting response broadly focused on a diffuse threat..." As there is a growing global awareness of the severity and long-term consequences of climate change, many may feel a sense of helplessness and uncertainty about the future. This impending precarious and unpredictable future can cause much stress on individuals and communities. Anxiety can stem from grappling with normal, daily stresses while also anticipating the seemingly inexorable impacts of climate change (Dodds, 2021). There are several types of anxiety disorders—generalized anxiety disorder, panic disorder, social anxiety disorder, and various phobia-related disorders (NIMH, 2023). Some of the symptoms of these anxiety disorders include feeling restless, wound-up, or on-edge; being easily fatigued; having difficulty concentrating; being irritable; having headaches, muscle aches, stomachaches, or unexplained pains; difficulty controlling feelings of worry; and having sleep problems, such as difficulty falling or staying asleep.

Trauma and post-traumatic stress disorder (PTSD): According to the United States Geological Survey, rising global temperatures have increased the possibility of more droughts and more intense storms. In 2021, the World Meteorological Organization and the UN Office for Disaster Risk Reduction published a report supporting this claim. They found that climate change and increasingly extreme weather events have caused a surge in natural disasters over the past 50 years, disproportionately impacting poorer countries (UN News, 2021). These extreme weather events—such as hurricanes, floods, wildfires, and droughts—can result in physical injuries, loss of property, displacement,

and even loss of life. During these disasters, as part the body's "fight-or-flight" response, feelings of fear are produced that help us avoid or respond to potential danger. After the traumatic event, people may experience a range of reactions, including feeling anxious, sad, or angry; trouble concentrating and sleeping; and dwelling on the traumatic event. Many people will recover from these symptoms, and their reactions will become easier to control over time. Those who continue to experience symptoms may be diagnosed with post-traumatic stress disorder, or PTSD (NIMS, 2023).

Depression and mood disorders: The burdens of the changing global climate can contribute to a sense of despair and hopelessness, leading to an increased risk of depression and mood disorders. The destruction of natural environments, loss of biodiversity, and the perceived lack of action to address climate change can exacerbate feelings of sadness and grief, especially in those whose way of life and homes are threatened. This sense of despair and mourning is felt not only for individuals themselves, but also their friends, family, and the generations to come. Ecological grief, also known as eco-grief, is defined in the article "Ecological Grief as a Mental Health Response to Climate Change-Related Loss" as "the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change" (Cunsolo & Ellis, 2018).

According to the National Institute on Mental Health, some of the symptoms of depression may include a persistent sad, anxious, or "empty" mood; feelings of hopelessness or pessimism; feelings of irritability, frustration, or restlessness; feelings of guilt, worthlessness, or helplessness; loss of interest or pleasure in hobbies and activities; decreased energy, fatigue, or feeling slowed down; difficulty concentrating, remembering, or making decisions; difficulty sleeping, waking early in the morning, or oversleeping; changes in appetite or unplanned weight changes; and physical aches or pains, headaches, cramps, or digestive problems. However, not everyone experiences the same risk level for developing depression—studies have shown higher rates of depression and an increased risk for the disorder among members of the LGBTQIA+ community (NIMH, 2023).

Increased social and community tension: Climate change can exacerbate existing social inequalities and lead to conflicts, displacement, and increased competition for resources. These socio-environmental stressors can strain community relationships, increase social tension, and contribute to mental health problems such as aggression,

violence, and substance abuse. According to the World Bank, "Climate change is more than an environmental crisis – it is a social crisis and compels us to address issues of inequality on many levels: between wealthy and poor countries; between rich and poor within countries; between men and women, and between generations" (World Bank, n.d.). Changing weather patterns and global warming put further pressures on the already limited (and exponentially depleting) supply of resources that people, communities, and nations depend on for survival, security, and prosperity—particularly food and water. Examples of climate change contributing to increased state fragility and security problems can already be seen around the world: conflict in the Middle East and Africa, tensions over fisheries in the South China Sea, and a new political and economic battleground in a melting Arctic Ocean (Werrell & Femia, 2018). Increased tension between individuals, families, communities, and nations may lead to deteriorating personal relationships, weak support systems, and feelings of loneliness or lack of control.

Loss of sense of place and identity: Climate change impacts, such as rising sea levels or the loss of ecosystems, can result in the displacement and relocation of communities—the International Think Tank (IEP) predicts that 1.2 billion people could be displaced globally by 2050 because of climate change and natural disasters (IEP, 2020). This forced migration can disrupt social networks, cultural practices, and an individual's sense of belonging, leading to a loss of identity and an increased risk of mental health problems. Not only can the extreme weather events that force people to move from their homes cause PTSD, but they can also diminish someone's sense of belonging to a specific geographical place and/or identity. Specific regions face this threat of necessary migration more than others—Latin America, South Asia, and sub-Saharan Africa are among the regions most vulnerable to the effects of climate change and could see large increases in both internal and cross-border migration as a result (World Bank, 2018).

Occupational and economic stress: Certain industries, such as agriculture, fisheries, and tourism, are particularly vulnerable to the impacts of climate change. Changes in weather patterns, natural disasters, and environmental degradation can lead to job losses, financial stress, and economic insecurity, which can adversely affect mental well-being. Additionally, people who work outside—like farmworkers, landscapers, and construction workers—are at extra risk of exposure to increasingly harsh weather conditions. A literature review conducted on articles from the years 2010 to 2022 found

that actual productivity losses at the global level from increased heat exposure are about 10% and are expected to increase up to 30–40% under the worst climate change scenario by the end of the century (De Sario, 2023).

Emory-based Resources for Climate Anxiety

Atlanta Campus Resources

Emory has many offices, programs, and contacts to support students, faculty, and staff who may be experiencing anxiety or climate anxiety and seeking mental health resources. The following list compiles offices and resources that are internal to Emory University that may be of help to students, faculty, and staff searching for assistance:

- Center for Contemplative Science and Compassion-Based Ethics
    - https://www.compassion.emory.edu/
    - The Center for Contemplative Science and Compassion-Based Ethics focuses on educating both heart and mind through a research-based approach. Its programs include Social, Emotional, and Ethical (SEE) learning, Cognitively Based Compassion Training (CBCT), and the Emory-Tibet Science Initiative.

- Faculty & Staff Assistance Programs (FSAP)
    - https://www.fsap.emory.edu/
    - Emory FSAP helps university faculty and staff enhance their personal and professional well-being through a variety of programs and services designed to promote emotional, behavioral, and occupational health. Services offered include short-term counseling and referral services, coaching and consultation services, and educational workshops.

- Office of Health Promotion (OHP)
    - https://healthpromotion.emory.edu/
    - The OHP provides resources to the Emory community regarding alcohol and other drug education, healthy sexuality, mental well-being, and student engagement. Their Anytime Student Health Services program provides access for all students to TimelyCare, a service available even for those outside Georgia.

- Student Counseling and Psychological Services (CAPS)
    - https://counseling.emory.edu/
    - Emory CAPS works to support the academic mission of the university by fostering the intellectual, emotional, social, spiritual, and psychological well-being of Emory students through the provision of various clinical services, community-level interventions, consultation, collaboration with campus partners, advising of student groups, and clinical training.

- Student Health Services
    - https://studenthealth.emory.edu/
    - The mission of Emory University Student Health Services is to empower students to take responsibility for their health and to complement the academic mission of the university by providing collaborative medical, counseling, and health promotion services that result in a healthy campus culture.

Oxford Campus Resources

- Oxford Center for Healthful Living
    - https://oxford.emory.edu/life/campus_life/healthful-living.html
    - The Center for Healthful Living promotes health and well-being through educational programs that encourage frequent physical activity and informed lifestyle choices. With a staff of teachers, coaches, health educators, and fitness instructors, the Center oversees a broad range of activities that affect Oxford's entire community of students, faculty, and staff.

- Oxford College Chaplain
    - https://app.oxford.emory.edu/WebApps/Directory/index.cfm/view/747
    - Lyn Pace, the Oxford College Chaplain, facilitates the work of the eleven religious and spiritual life clubs at Oxford College, assists with leadership programs, offers care and counsel for the college community, and teaches courses on understanding community as well as contemplative practices and social justice. Dr. Pace offered to be added to this addendum as a resource for members of the Emory community who may be experiencing climate anxiety.
- Oxford Counseling and Career Services
    - https://oxford.emory.edu/life/campus_life/counseling_career.html
    - CCS provides services to support students facing the developmentally expected challenges of young adulthood, including impairments in their mental health. These services include consultation for students, faculty, staff, and parents on students of concern or common mental health challenges; individual counseling services for mental health concerns; online telehealth psychiatry services for students wanting to start or continue medication management; referrals to local or Atlanta area providers for students needing specialized or extensive services.
- Oxford Residential Education and Services (RES)
    - https://oxford.emory.edu/life/campus_life/housing-dining/housing.html
    - Residential Education and Services employs both professional and student staff who live and work in the Oxford residence halls and who help ease the transition from high school to college life. Their staff coordinates across multiple areas on campus to integrate student services related to dining, physical resources, advising, crisis management, health services, and counseling.

Additional Climate Anxiety Resources

In addition to internal offices, programs, and contacts, many resources exist outside of Emory to support those experiencing climate anxiety. The following chart lists climate change-related mental health resources that are both internal and external to Emory University. This list compiles articles, journals, books, and community resources that have the potential to help alleviate some of the negative psychological effects of global climate change. There are a few resources specific to Emory University, but the majority are external to Emory and available within the wider Atlanta, nationwide, and even global community. Many of these resources were featured in a library exhibit, Fostering Climate Hope, in Emory's Robert W. Woodruff library, in November of 2023. These are included for informational purposes only and are not endorsements nor replacements for professional or medical advice.

Type of Resource	Name of Resource	Link	Emory or External
Article/Journal	Deep Times: A Journal of the Work that Reconnects (Evolving Edge Section)	https://journal.workthatreconnects.org/evolving-edges/	External
Article/Journal	The Process of Eco-Anxiety and Ecological Grief: A Narrative Review and a New Proposal	https://www.mdpi.com/2071-1050/14/24/16628	External
Article/Journal	Understanding Eco-Anxiety	https://www.nature.com/articles/s41558-022-01497-0	External
Article/Journal	Children and Climate Anxiety: An Ecofeminist Practical Theological Perspective	https://www.mdpi.com/2077-1444/13/4/302/htm	External
Article/Journal	Climate anxiety: What predicts it and how is it related to climate action?	https://doi.org/10.1016/j.jenvp.2022.101866	External

Article/Journal	The Anatomy of Inaction – Climate Complexity Change	https://thomashuebl.com/the-anatomy-of-inaction-climate-complexity-change/	External
Article/Journal	Toward a Taxonomy of Climate Emotions	https://www.frontiersin.org/articles/10.3389/fclim.2021.738154/full	External
Article/Journal	Social Media May Contribute to Eco-Distress: The Role of Nature Relatedness as Both Causal Mechanism and Protective Factor	https://www.liebertpub.com/doi/10.1089/eco.2021.0020	External
Book	All We Can Save: Truth, Courage, and Solutions for the Climate Crisis (by Ayana Johnson & Katharine Wilkinson)	https://search.libraries.emory.edu/catalog/993776698880248	External
Book	Facing the Climate Emergency: How to Transform Yourself with Climate Truth (by Margaret Salamon)	https://climateawakening.org/facing-the-climate-emergency-second-edition/	External (Available at Emory)
Book	Eco-Anxiety and Pandemic Distress: Psychological Perspectives on Resilience and Interconnectedness (by Douglas Vakoch & Sam Mickey)	https://global.oup.com/academic/product/eco-anxiety-and-pandemic-distress-9780197622674?cc=us&lang=en&	External (Available at Emory)

Book	One Green Thing: Discover Your Hidden Power to Help Save the Planet (by Heather White)	https://www.onegreenthing.org/	External
Book	Grounded: A Guided Journal to Help You Reconnect with the Power of Nature- and Yourself (by Patricia Hasbach)	https://www.simonandschuster.com/books/Grounded/Patricia-H-Hasbach/9781507218105	External
Book	Generation Dread: Finding Purpose in an Age of Climate Crisis (by Britt Wray)	https://www.cbc.ca/books/generation-dread-by-britt-wray-1.6613335	External
Book	Climate change and health: improving resilience and reducing risks (by Walter Leal Filho, Ulisses M. Azeiteiro, Fátima Alves)	https://search.libraries.emory.edu/catalog/9936637014202486	External (Available at Emory)
Book	Exploring Climate Change and Mental Health: An Educational Toolkit (by Natania Abebe)	https://pressbooks.bccampus.ca/eccmh/	External
Book	Active Hope: How to Face the Mess We're in Without Going Crazy (by Joanna Macy & Chris Johnstone)	https://www.activehope.info/the-book	External (Available at Emory)

Book	Warmth: Coming of Age at the End of Our World (by Daniel Sherrell)	https://search.libraries.emory.edu/catalog/9937360722702486	External (Available at Emory)
Book	World as Lover, World as Self: Courage for Global Justice and Ecological Renewal (by Joanna Macy)	https://search.libraries.emory.edu/catalog/990034794170302486	External (Available at Emory)
Book	A Field Guide to Climate Anxiety: How to Keep Your Cool on a Warming Planet (by Sarah Jaquette Ray)	https://search.libraries.emory.edu/catalog/9937203198702486	External (Available at Emory)
Book	Words for a Dying World: Stories of Grief and Courage from the Global Church	https://search.libraries.emory.edu/catalog/9937361368002486	External (Available at Emory)
Book	Climate Psychology: On Indifference to Disaster	https://search.libraries.emory.edu/catalog/9936921115902486	External (Available at Emory)
Book	Green Exercise: Linking Nature, Health and Well-being	https://search.libraries.emory.edu/catalog/9936601885902486	External (Available at Emory)
Book	Emotional Resiliency in the Era of Climate Change: A Clinician's Guide (by Leslie Davenport)	https://search.libraries.emory.edu/catalog/9936948593902486	External (Available at Emory)

Book	The Wild Edge of Sorrow: Rituals of Renewal and the Sacred Work of Grief (by Francis Weller)	https://search.libraries.emory.edu/catalog/9937444795302486	External (Available at Emory)
Book	Despair and Personal Power in the Nuclear Age (by Joanna Macy)	https://search.libraries.emory.edu/catalog/990020425050302486	External (Available at Emory)
Community Group	All We Can Save Circles	https://www.allwecansave.earth/circles	External
Community Group	Climate Emotions Conversation	https://climateawakening.org/	External
Community Group	10-Steps to Resilience and Empowerment in a Chaotic Climate Group	https://www.goodgriefnetwork.org/10steps/	External
Community Group	Climate Cafe Online (UK-based, but online)	https://www.eventbrite.co.uk/e/climate-cafe-online-tickets-139821103685	External
Community Group	Work On Climate	https://workonclimate.org/	External
Community Group	Climate and Mind: Climate Cafe (template for facilitating a discussion group)	https://www.climateandmind.org/climate-cafe	External
Film/Video	Gen Z Mental Health: Climate Stories	https://www.climatementalhealth.net/genzfilm	External
Film/Video	Experts and parents weigh in on living sustainably and managing 'climate anxiety'	https://www.youtube.com/watch?v=syAd3XDlYTc	External

Film/Video	Climate Crisis: What Is Eco-Anxiety And How To Deal With It?	https://www.youtube.com/watch?v=CU3ElG48fm8	External
Film/Video	Greta Thunberg on how to tackle climate anxiety	https://www.youtube.com/watch?v=pK_nBKtWyvk	External
Film/Video	How To Manage Climate Anxiety	https://www.youtube.com/watch?v=GGb14Y6atT4	External
Film/Video	Dealing with Eco-Anxiety	https://www.youtube.com/watch?v=0R9aHi2Ffn8	External
Film/Video	Turning Eco-Anxiety into Eco-Action	https://www.youtube.com/live/wd0DoqSDDEw?feature=shared	External
Film/Video	How to Turn Climate Anxiety into Action	https://www.ted.com/talks/renee_lertzman_how_to_turn_climate_anxiety_into_action?language=en	External
Individual Support	Climate-Aware Therapist Directory	https://www.climatepsychology.us/climate-therapists	External
Organization	Climate Psychology Alliance	https://www.climatepsychologyalliance.org/	External
Organization	Climate Mental Health Network	https://www.climatementalhealth.net/	External
Organization	Climate Psychiatry Alliance	https://www.climatepsychiatry.org/	External
Organization	Psychologists / Psychotherapists for the Future	https://english.psychologistsforfuture.org/	External
Organization	Good Grief Network	https://www.goodgriefnetwork.org/	External

Organization	Work that Reconnects Network	https://workthatreconnects.org/	External
Organization	Generative Somatics: Somatic Transformation & Social Justice	https://generativesomatics.org/	External
Organization	Georgia Interfaith Power and Light	https://gipl.org/	External
Podcast	"Eco-Anxiety, Eco-Despair, Eco-Depression, Eco-Grief? Or Maybe... Eco-Empathy?	https://www.climatepsychologyalliance.org/index.php/component/content/article/podcasts?catid=15&Itemid=101	External
Podcast	No Place Like Home	https://www.noplacelikehomepodcast.com/about	External
Podcast	Facing It: A Podcast about Love, Loss, and the Natural World (Jennifer Atkinson)	https://www.drjenniferatkinson.com/facing-it	External
Website / Toolkit	Coping with Climate Stress Toolkit (Climate Psychiatry Alliance)	https://www.climatepsychiatry.org/climate-distress-coping-toolkit	External
Website / Toolkit	Eco-Anxious Stories	https://ecoanxious.ca/	External
Website / Toolkit	Hold This Space	https://holdthis.space/survey-panel/introduction/	External
Website / Toolkit	Climate Wellbeing Resource Kit	https://ubcclimatehub.ca/wp-content/uploads/2021/11/Climate-Hub-Climate-Wellbeing-Resource-Kit.pdf	External
Website / Toolkit	The Climate Change Empowerment Handbook	https://psychology.org.au/getmedia/88ee1716-2604-44ce-b87a-ca0408dfaa12/climate-change-empowerment-handbook.pdf	External

Bibliography (Section I)

American Psychological Association. "Anxiety." https://www.apa.org/topics/anxiety

Bourque, François & Cunsolo, Ashlee Willox (2014) Climate change: The next challenge for public mental health?, International Review of Psychiatry, 26:4, 415-422, DOI: 10.3109/09540261.2014.925851

Callaghan, M., Schleussner, CF., Nath, S. et al. Machine-learning-based evidence and attribution mapping of 100,000 climate impact studies. Nat. Clim. Chang. 11, 966–972 (2021). https://doi.org/10.1038/s41558-021-01168-6

Clayton, S., Manning, C. M., Krygsman, K., & Speiser, M. (2017). Mental Health and Our Changing Climate: Impacts, Implications, and Guidance. Washington, D.C.: American Psychological Association, and ecoAmerica.

Comtesse, H., Ertl, V., Hengst, S. M., Rosner, R., & Smid, G. E. (2021). Ecological Grief as a Response to Environmental Change: A Mental Health Risk or Functional Response? International Journal of Environmental Research and Public Health, 18(2), 734. https://doi.org/10.3390/ijerph18020734

Cunsolo, A.; Ellis, N.R. Ecological grief as a mental health response to climate change-related loss. Nat. Clim. Chang. 2018, 8, 275–281.

De Sario, Manuela et al. 2 August 2023. "Occupational heat stress, heat-related effects and the related social and economic loss: a scoping literature review." Frontiers in Public Health. Volume 11 - 2023 | https://doi.org/10.3389/fpubh.2023.1173553.

Dodds, Joseph. "The psychology of climate anxiety." BJPsych bulletin vol. 45,4 (2021): 222-226. doi:10.1192/bjb.2021.18

Institute for Economics & Peace. 9 September 2020. "Ecological Threat Register Press Release."https://www.economicsandpeace.org/wp-content/uploads/2020/09/Ecological-Threat-Register-Press-Release-27.08-FINAL.pdf

Clayton, S., Manning, C. M., Speiser, M., & Hill, A. N. (2021). Mental Health and Our Changing Climate: Impacts, Inequities, Responses. Washington, D.C.: American Psychological Association, and ecoAmerica.

National Institute of Mental Health (NIMH). April 2023. "Anxiety Disorders." https://www.nimh.nih.gov/health/topics/anxiety-disorders

National Institute of Mental Health (NIMH). May 2023. "Coping with Traumatic Events." https://www.nimh.nih.gov/health/topics/coping-with-traumatic-events

National Institute of Mental Health (NIMH). April 2023. "Depression." https://www.nimh.nih.gov/health/topics/depression

Ramadan, Abdullah Mohammed Hassan, and Ahmed G Ataallah. "Are climate change and mental health correlated?" General psychiatry vol. 34,6 e100648. 9 Nov. 2021, doi:10.1136/gpsych-2021-100648.

United Nations News. 1 September 2021. "Climate and weather-related disasters surge five-fold over 50 years, but early warnings save lives - WMO report." https://news.un.org/en/story/2021/09/1098662

United States Geological Survey. "How Can Climate Change Affect Natural Disasters." https://www.usgs.gov/faqs/how-can-climate-change-affect-natural-disasters#:~:text=With%20increasing%20global%20surface%20temperatures,more%20powerful%20storms%20to%20develop

Werrell, Caitlin E. and Femia, Francesco. February 2018. UNESCO. "Climate Change Raises Conflict Concerns." https://en.unesco.org/courier/2018-2/climate-change-raises-conflict-concerns

World Bank. 19 March 2018. "Groundswell: Preparing for Internal Climate Migration." https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration

World Bank. No Date. "Social Dimensions of Climate Change." https://www.worldbank.org/en/topic/social-dimensions-of-climate-change#1

Bibliography (Section II):

Angelou, M. (2008). Letter to My Daughter. Penguin Random House.

Barkin, J. L., Buoli, M., Curry, C. L., Von Esenwein, S. A., Upadhyay, S., Kearney, M. B., & Mach, K. (2021). Effects of extreme weather events on child mood and behavior. Developmental Medicine & Child Neurology, 63(7), 785-790.

Climate Clinic Podcast: Be Expert. (n.d.). Columbia University Mailman School of Public Health. Retrieved April 22, 2023, from https://www.publichealth.columbia.edu/research/centers/global-consortium-climate-health-education/about/climate-clinic-podcast/be-expert.

The Center for Contemplative Science and Compassion-Based Ethics. (n.d.). Compassion-based interventions. https://ccscec.org/compassion-based-interventions/

Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., ... & 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), e863-e873.

Martin, G., Reilly, K., Everitt, H., & Gilliland, J. A. (2022). The impact of climate change awareness on children's mental well-being and negative emotions–a scoping review. Child and Adolescent Mental Health, 27(1), 59-72.

Ojala, M., Cunsolo, A., Ogunbode, C. A., & Middleton, J. (2021). Anxiety, worry, and grief in a time of environmental and climate crisis: A narrative review. Annual Review of Environment and Resources, 46, 35-58.

Soutar, C., & Wand, A. P. (2022). Understanding the spectrum of anxiety responses to climate change: A systematic review of the qualitative literature. International Journal of Environmental Research and Public Health, 19(2), 990.

Thoma, M. V., Rohleder, N., & Rohner, S. L. (2021). Clinical ecopsychology: The mental health impacts and underlying pathways of the climate and environmental crisis. Frontiers in Psychiatry, 12, 675936.