



PSECCO
Polar Science Early
Career Community Office

Beyond Gloom and Doom: Teaching & Learning about Climate Change as Polar Scientists

April 22, 2026



PSECCO

Polar Science Early
Career Community Office

In this space, we agree to...

- Be curious and listen to understand
- Show respect and suspend judgement
- Strive to make space for others to speak, especially the quieter voices and those with different viewpoints from our own
- Consider how our social and institutional positionality may affect the impact of what we say and our awareness of what the potential impact may be
- Look for opportunities to build/expand on ideas with others; acknowledge common ground as well as differences
- Be purposeful and to the point
- Advocate if we feel like an unsafe space has been created



PSECCO

Polar Science Early
Career Community Office

Overview of call

- PSECCO Welcome & Community Guidelines
- Speaker Introduction
- Alicia Christensen presents on climate mental health strategies and activities
- Q&A
- Wrap-up

Land acknowledgement





Center for Education,
Engagement and
Evaluation



PSECCO
Polar Science Early
Career Community Office

Meet our speaker!



Alicia Christensen is the Associate Director for Workforce, Career Development and Student Research Experiences at CIRES Center for Education, Engagement and Evaluation. She currently manages the Research Experience for Community College Students (RECCS) program as well as several other research experience programs. She supports the team's programming for life-long learners and the Climate Literacy and Energy Awareness Network (CLEAN), where she coordinates educator professional development and resources, including around climate mental health. Alicia holds a M.S. in Marine Resource Management, focused on marine education, and spent seven years before and during her M.S. teaching in informal learning environments, including two aquariums.



Zoom Poll:

- How do you feel about climate change?
- How do you think your students/ children/ youth/ peers feel about climate change?
- Have you asked or opened up space to talk about how your peers, students, or children feel about climate change?

The Climate Emotions Wheel is a circular diagram with 24 segments. The outer ring contains 24 specific emotions, and the inner ring contains four broader categories: Anger, Positivity, Fear, and Sadness. The segments are color-coded and arranged as follows:

Outer Ring Emotion	Inner Ring Category
Interest	Positivity
Empowerment	Positivity
Inspiration	Positivity
Empathy	Positivity
Gratitude	Positivity
Hope	Positivity
Overwhelm	Fear
Panic	Fear
Powerlessness	Fear
Anxiety	Fear
Worry	Fear
Guilt	Sadness
Shame	Sadness
Grief	Sadness
Depression	Sadness
Loss	Sadness
Loneliness	Sadness
Despair	Sadness
Disappointment	Anger
Betrayal	Anger
Frustration	Anger
Outrage	Anger
Indignation	Anger

DOWNLOAD

in English & en Español

Climate Mental Health Network

Climate Emotions Wheel © 2023 by R licensed under CC BY-SA 4.0

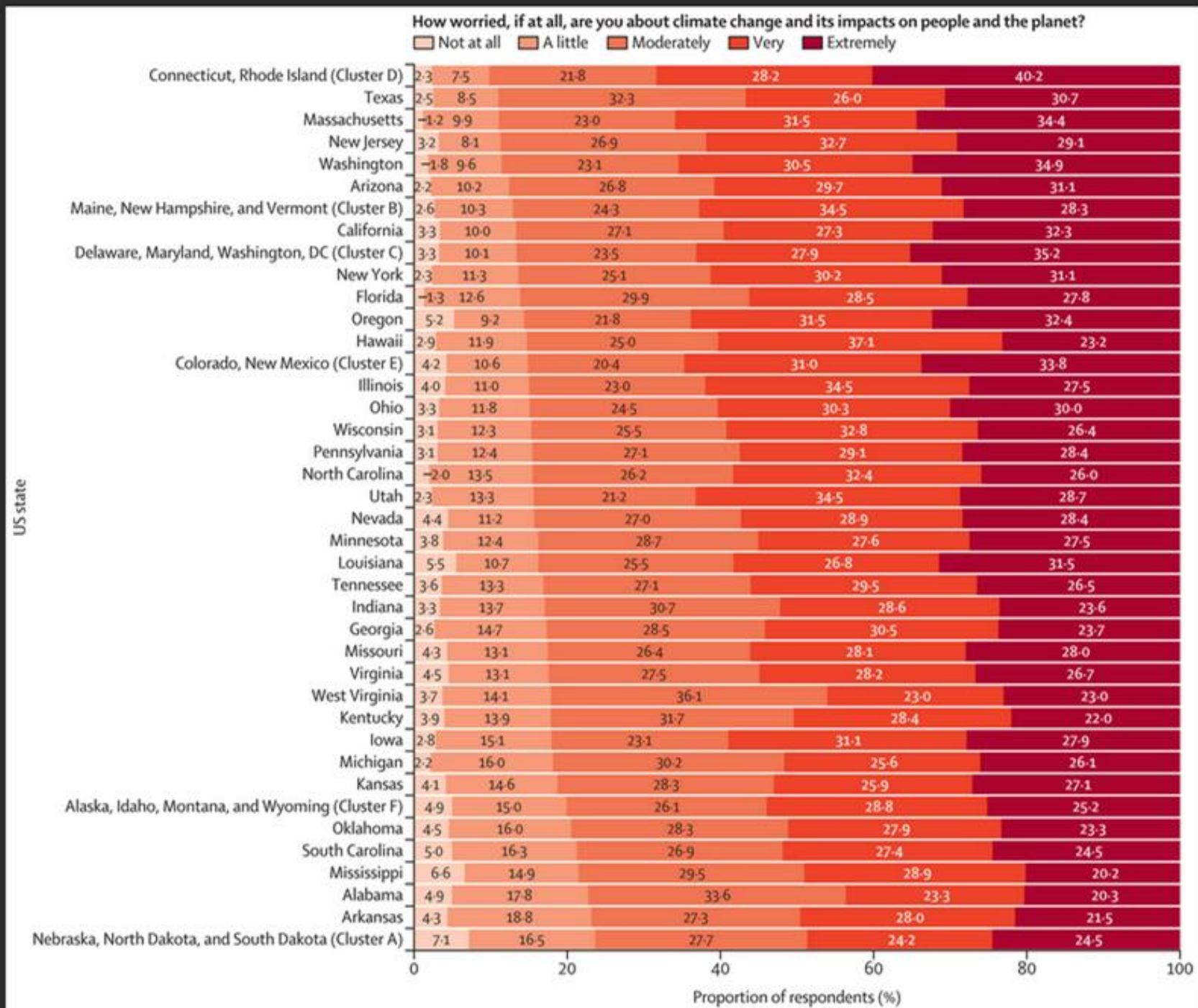
ClimateMentalHealth.Net
based on research by Panu Pihkala: bit.ly/3Ky4k6G



Center for Education, Engagement and Evaluation

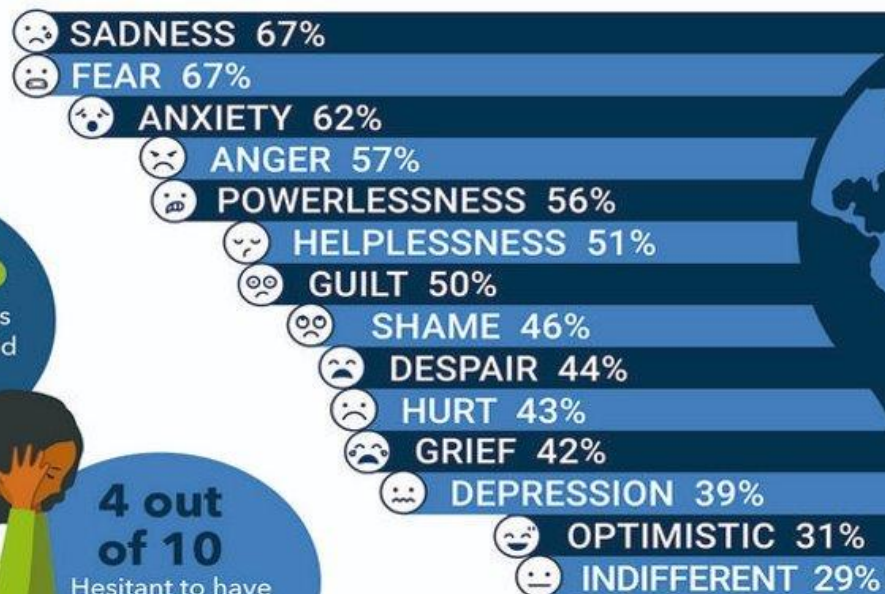
Climate change is causing widespread distress among adolescents and young adults in the USA, across the political spectrum, and is affecting multiple aspects of their planning for the future.

- Lewandowski et al. 2024



EMOTIONS YOUTH FEEL ABOUT CLIMATE CHANGE

10000 young adults across the world
Ages: 18-25



45%
Said their feelings negatively affected their daily life



4 out of 10
Hesitant to have children because of climate change

56%
Think that humanity is doomed

8 out of 10
Think that people have failed to take care of the planet



60%
Youth are very or extremely worried about climate change

75%
Think that the future is frightening

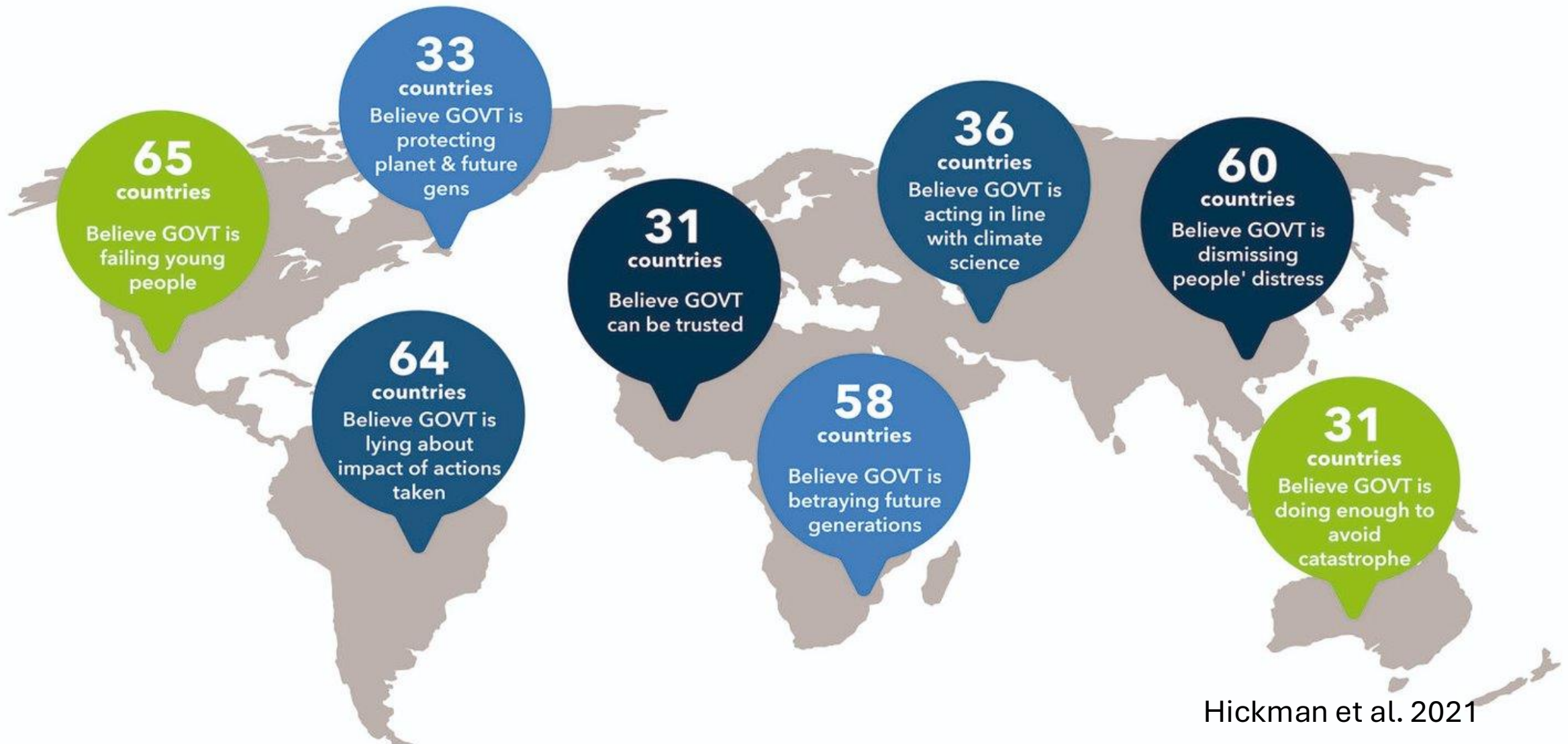


55%
Think that things they most value will be destroyed

52%
Think their family's security will be threatened

GOVERNMENTAL RELATED BELIEFS

Thoughts about Government Response



In the U.S.....

Climate change impacts mental health in 2 out of 3 youth

68%

say they experienced a **negative mental health-related issue**, such as **anxiety, stress**, and/or feeling **overwhelmed** in response to experiencing or hearing about **climate change**

↓ Down from 75% in **2022**



71%

vs.



64%

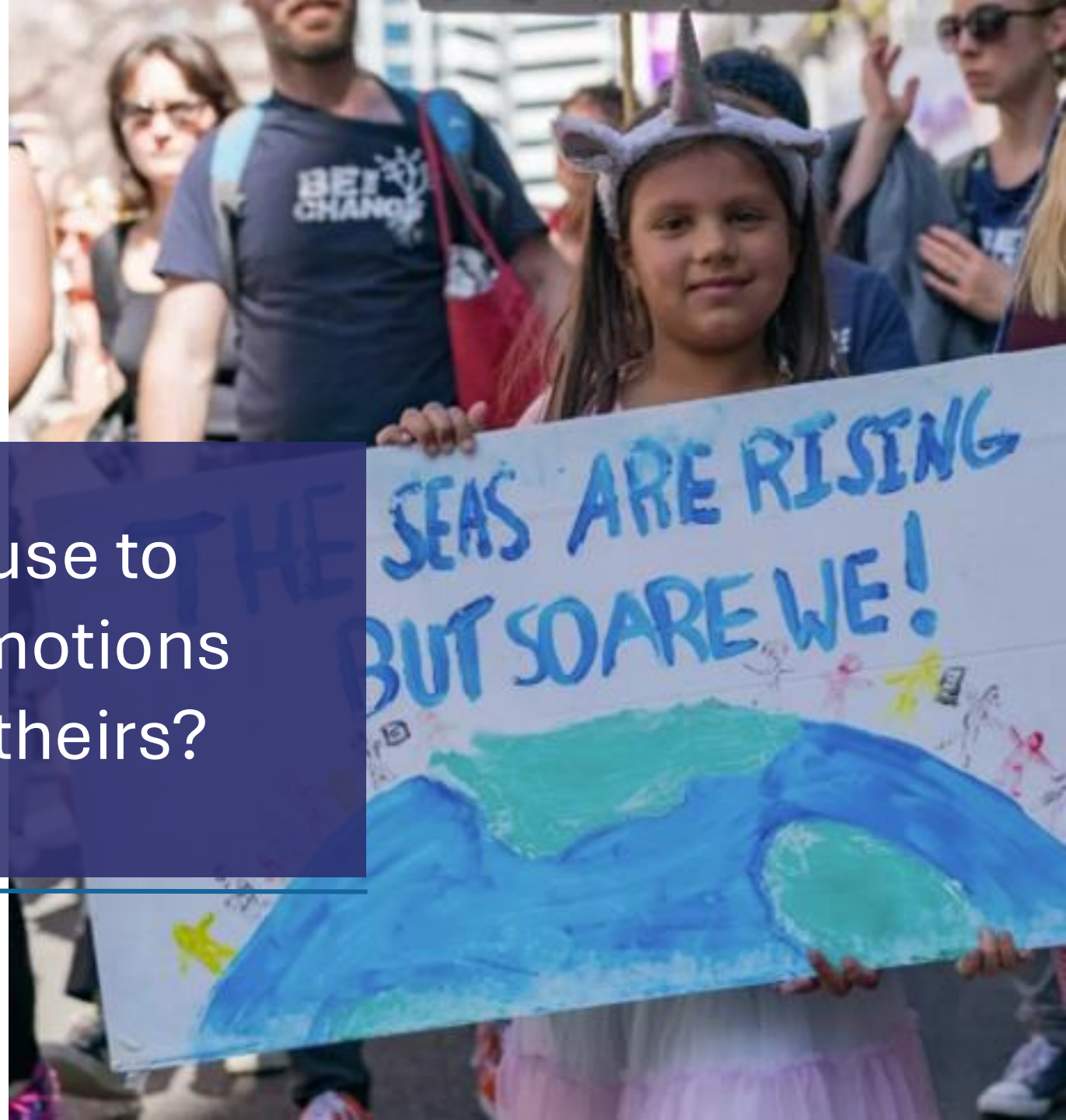
Youth of color are more likely than white youth to say they have **experienced a negative health impact** related to climate change or an environmental event

BlueSky Youth Mental Health Survey

BASE: ALL QUALIFIED RESPONDENTS Q2. Have you felt any of the following in response to experiencing or hearing about climate change or the state of the environment? Please select all that apply. / Q5. Have you ever experienced any of the following related to climate change or an environmental event, such as from a wildfire, flooding, extremely hot or cold days, hurricane, etc.? Please select all that apply.



Center for Education,
Engagement and
Evaluation



What strategies do you use to work through your own emotions and support others with theirs?

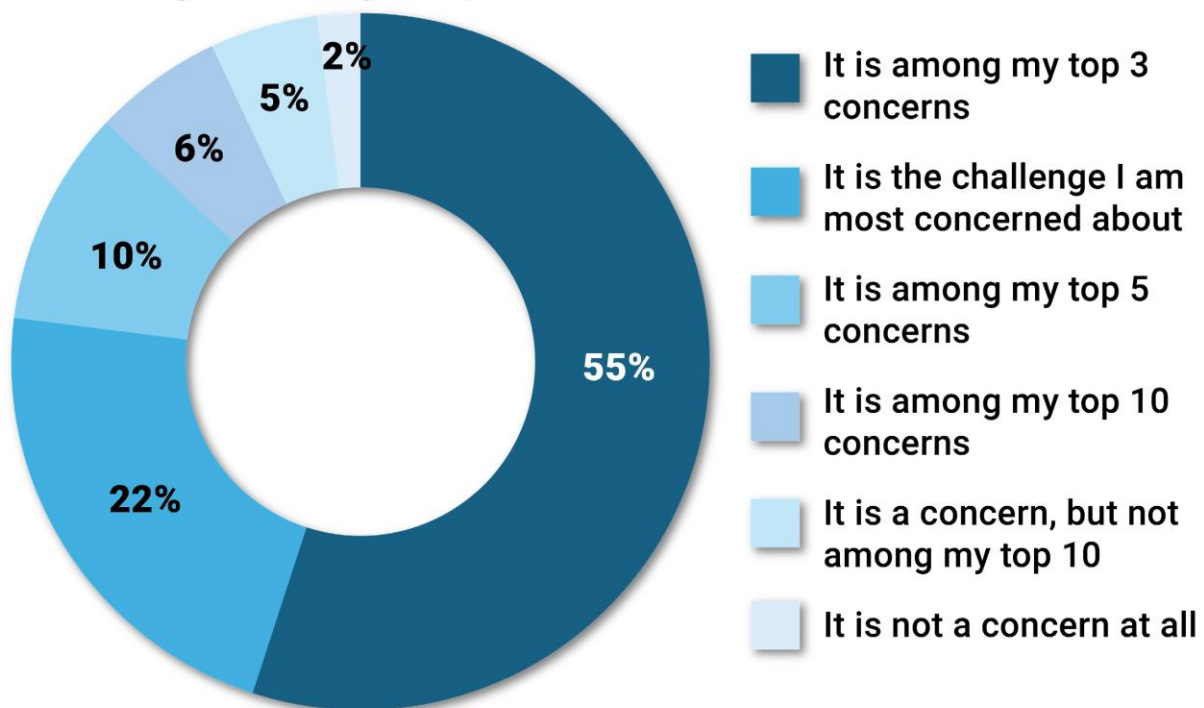


Center for Education, Engagement and Evaluation

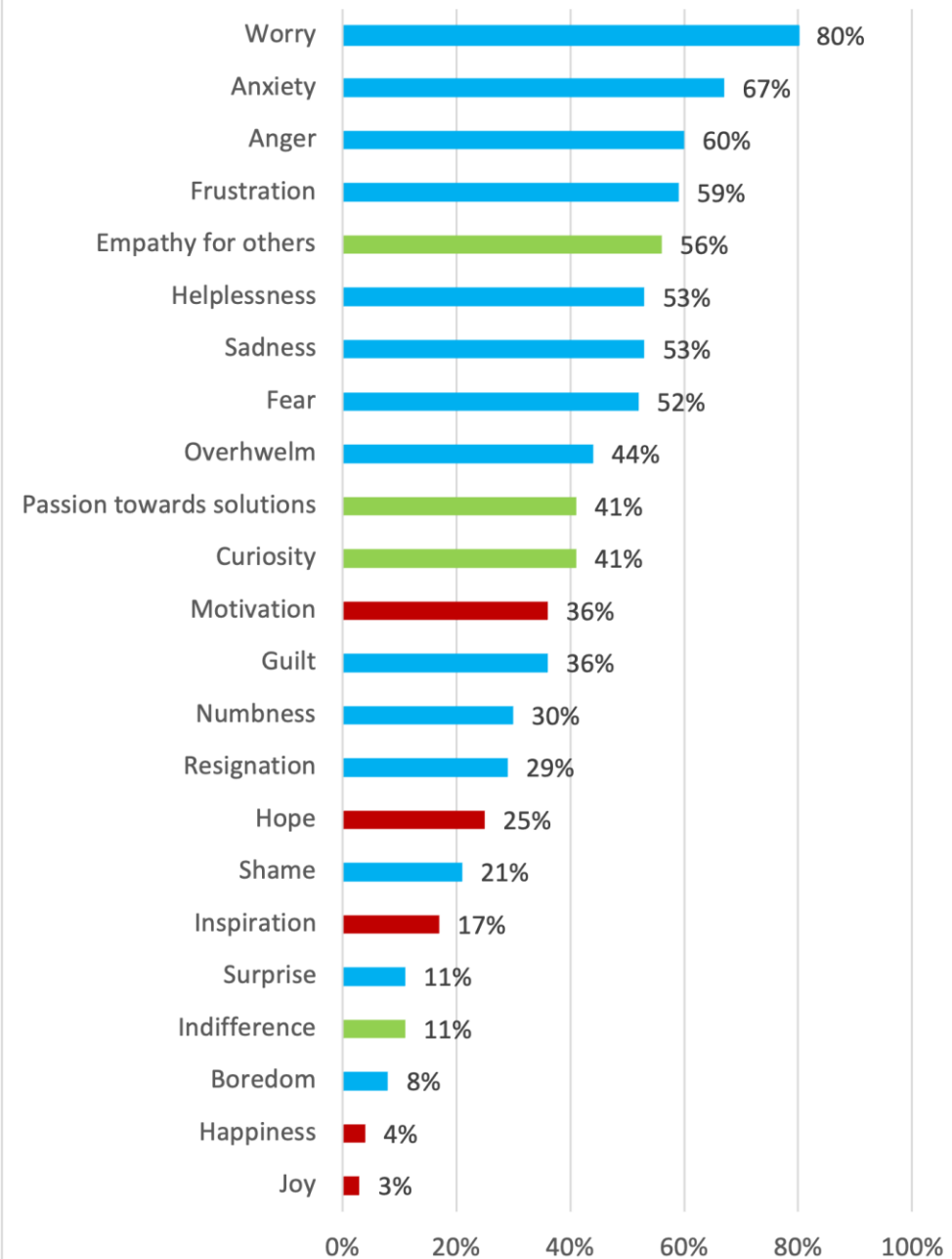
2025 CEEE study of 228 climate researchers (faculty, staff, graduate students, postdocs)

Gold, A., Christensen, A., McConnell, A., Dooley, L., Gwyszcz, J, J.
Manuscript in Preparation

Concerns about climate change among respondents

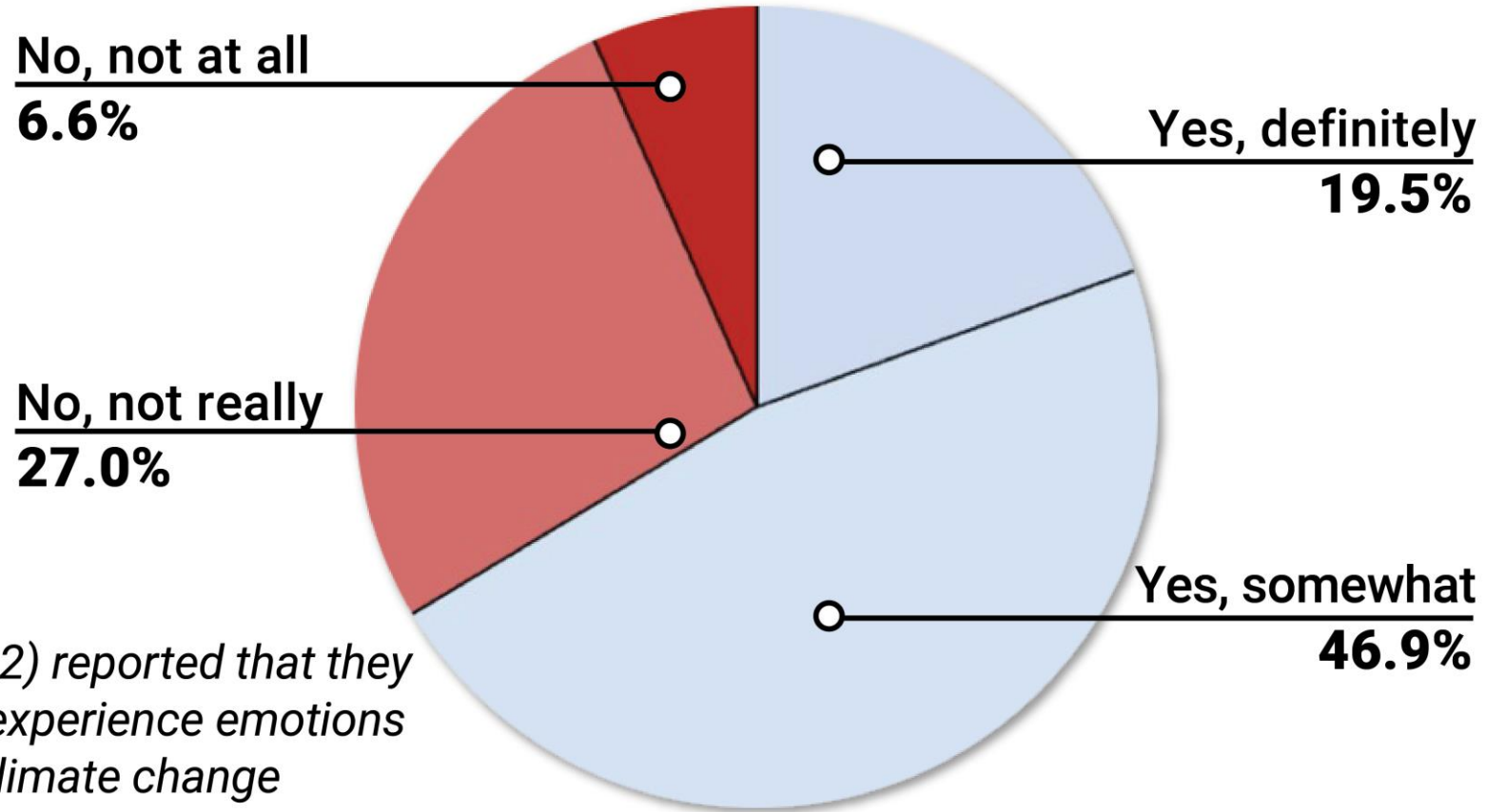


What emotions I personally experience





Researchers feelings if they have the resources and support they need to cope with **their own emotions** about climate change





What would be useful as you navigate your own emotions about climate change?

Open-ended Responses:

- Connecting with others through support groups (e.g., group therapy and grief support), professional working groups, and action-oriented community engagement & climate solutions groups
- Training to support climate communication efforts with the public, climate skeptics, and policy makers, and to support their students with climate emotions
- Tools to support students emotionally and inspire hope and action

Respondents reported:



58%

**Community
and peer
support**



53%

**University-wide
initiatives and
programs**



49%

**Mental health
and well-being
resources**



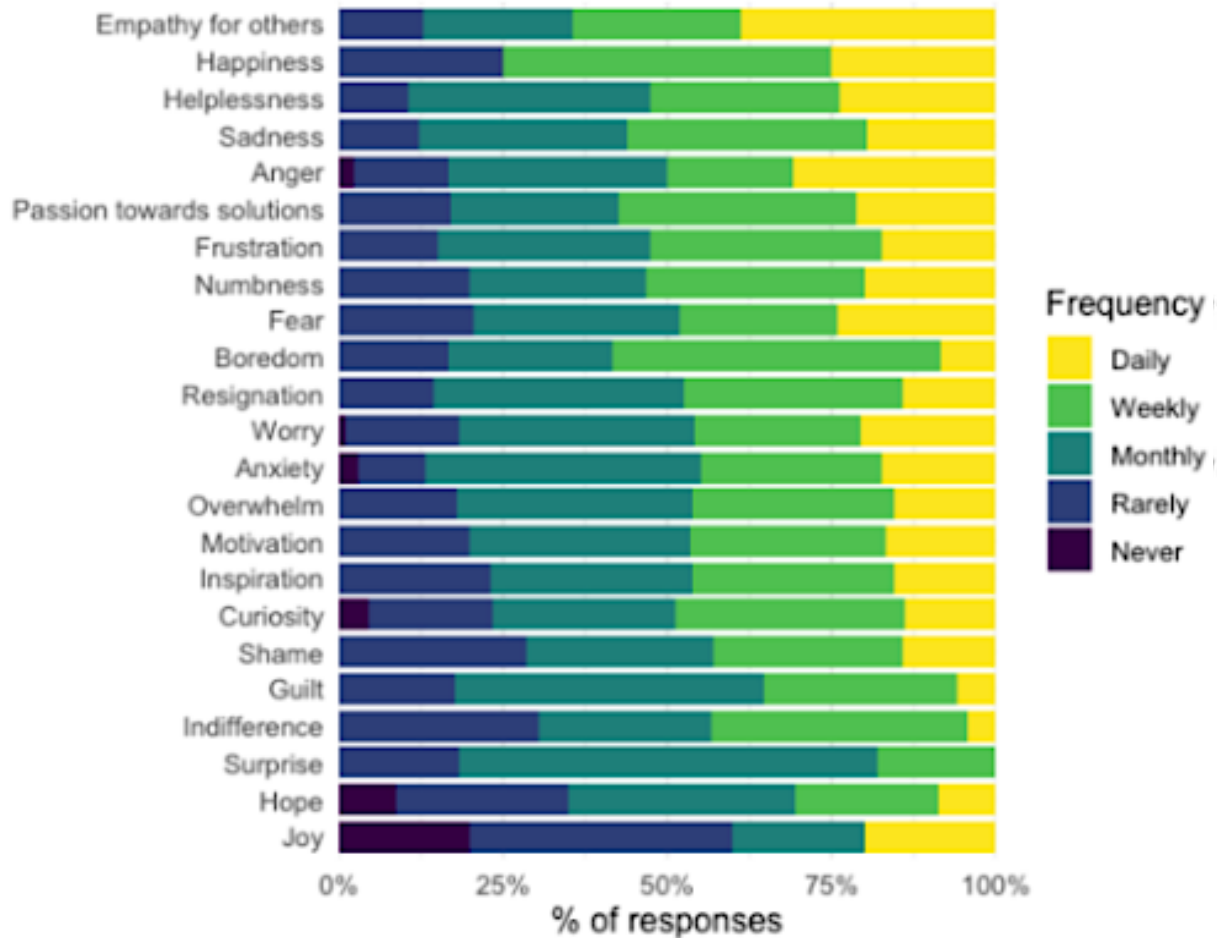
58%

**Support for climate
communication
efforts**

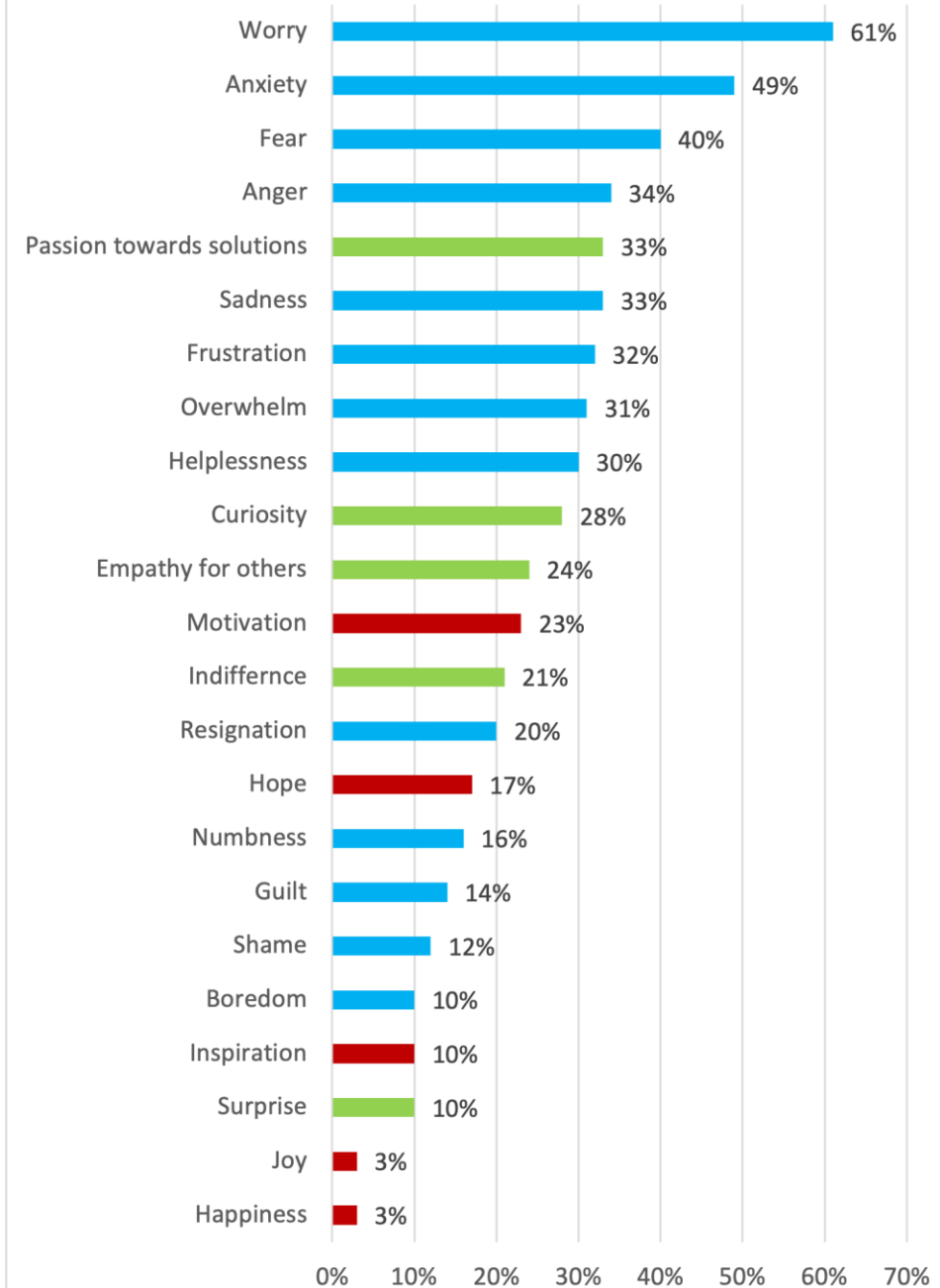


Center for Education, Engagement and Evaluation

How often STUDENTS express each emotion
(ordered by weighted frequency)

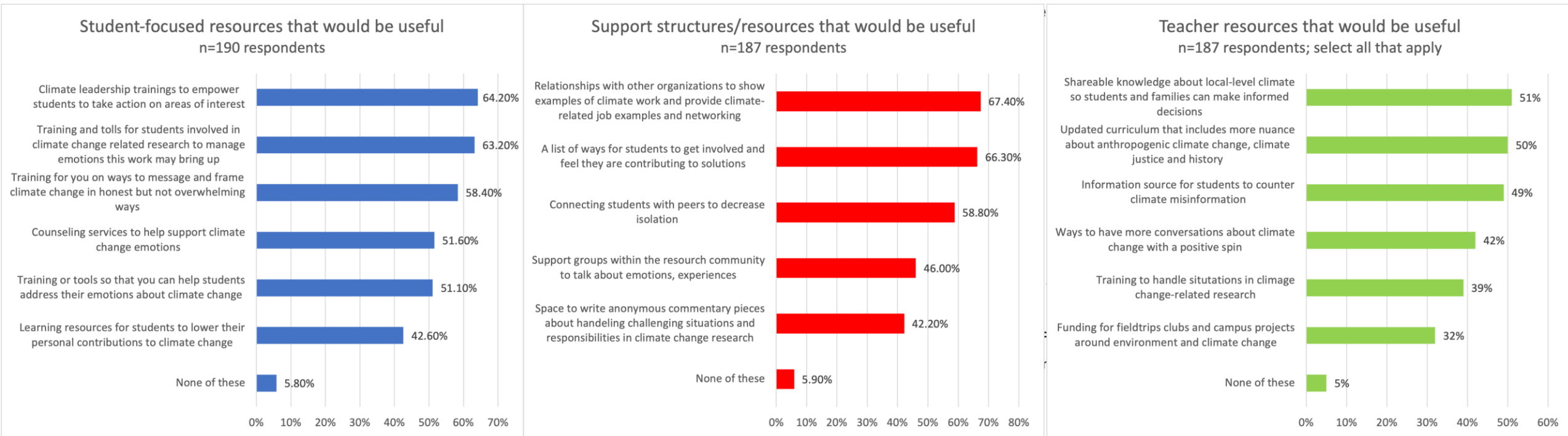


What emotions students express





What would be helpful when teaching/supporting students:



*Themes based on focus groups which informed survey choices



Center for Education,
Engagement and
Evaluation

Recommendations

Connect People to Existing Resources

Many quality resources already exist; focus on curation and expanded access to high-quality materials rather than creating new ones.

Foster Community & Peer Support

Expand opportunities for connection, discussion groups, peer networks, and community spaces.

Build Communication Capacity

Empower researchers and educators to communicate hope, agency, and solutions in their public engagement through structured trainings or a series of shorter sessions coupled with institutional support:

- Climate communication.
- Trauma-informed pedagogy.
- Mindfulness & self-care.
- Emotion-to-action tools.

Support Collective Action

Encourage departments to integrate collective action into teaching and research.

Provide structured opportunities for collaborative projects and partnerships.

Invest in Well-Being Infrastructure

Access to and awareness of counseling and self-care programs.

Train instructors and advisors to recognize and support climate emotions.

Normalize Climate Emotions

Acknowledge a spectrum of emotions such as worry, grief, and hope as integral to climate work. Embed emotional literacy across curricula, mentoring, and research practices.



Center for Education,
Engagement and
Evaluation

GEN Z MENTAL HEALTH: CLIMATE STORIES

Climate Mental Health Network



GEN Z MENTAL HEALTH:

CLIMATE STORIES





Center for Education, Engagement and Evaluation

These pages are a collection of resources to support educators and parents with strategies for supporting youth in experiencing climate emotions.



Incorporate a Trauma-informed approach

Reduce potential for harm and increase effectiveness of learning



Join and Create Community and Connection

Connection with others helps to mitigate stress and is strongly linked to health



Encourage and Take Action

Support youth in moving through anxiety and grief by encouraging action and social connection

Talk about CLIMATE CHANGE

Listen and Validate Feelings

Create a safe space for youth to share and be heard



Climate Justice

People from under-resourced communities often disproportionately feel the impacts of climate change



Cultivating Hope and Resilience

Hope is a teachable skill and is the foundation for resilience



Move Through Grief

Understanding grief can help us empathize with others



Self-Care

Self-Care, Staff Wellbeing, and Role Modeling



Use Social, Emotional, Self-regulation, and Positive Coping Skills

Social, emotional, and positive coping practices to help effectively manage emotions





Self Care

Compassion fatigue and burnout are common. Pause, reset, nourish yourself, ask for help

Climate Justice

Include diverse sets of voices in all conversations about solutions.

Encourage & Take Action

Collective, local, place-based, personally relevant, personal agency, care of the environment, one small part of the problem



1868



Take care of the earth
should be our goal
renewables now
no more coal!

YES
FOR REAL
CLIMATE ACTION

consume less
eat local
support local

Ride a bike
take the tram
Leave the car
at home

HONK
FOR
CLIMATE ACTION

Climate Action MORELAND
hand up for a safe climate

mechanics INSTITUTE
Performing Arts Centre





Listen & Validate Feelings

Listen, provide compassion, remind youth they are not alone, create a safe environment.

Join & Create Community & Connection

Develop shared solidarity through climate cafes, support connection with family/friends, join pro-environmental groups

Incorporate a Trauma-Informed Approach

Recognize trauma, create trusting environments, encourage youth choice, acknowledge oppression





Common Signs of Distress

Emotional & Mental Symptoms

Feelings of fear, anger, sadness, worry, numbness, frustration, irritability

Difficulty concentrating and making decisions

Fear of event happening again or talking about the event often

Physical Symptoms

Physical reactions such as headaches, body pains, stomach problems, and skin rashes

Changes in appetite, energy, and activity levels

Changes or disturbances to sleep patterns

Behavioral Symptoms

Attention and academic difficulties

Difficulties with self-regulation

Problems relating to others or forming attachments

Regression or loss of skills





Example of trauma-informed practices in curriculum:



Trauma-Informed Introduction to this Lesson:

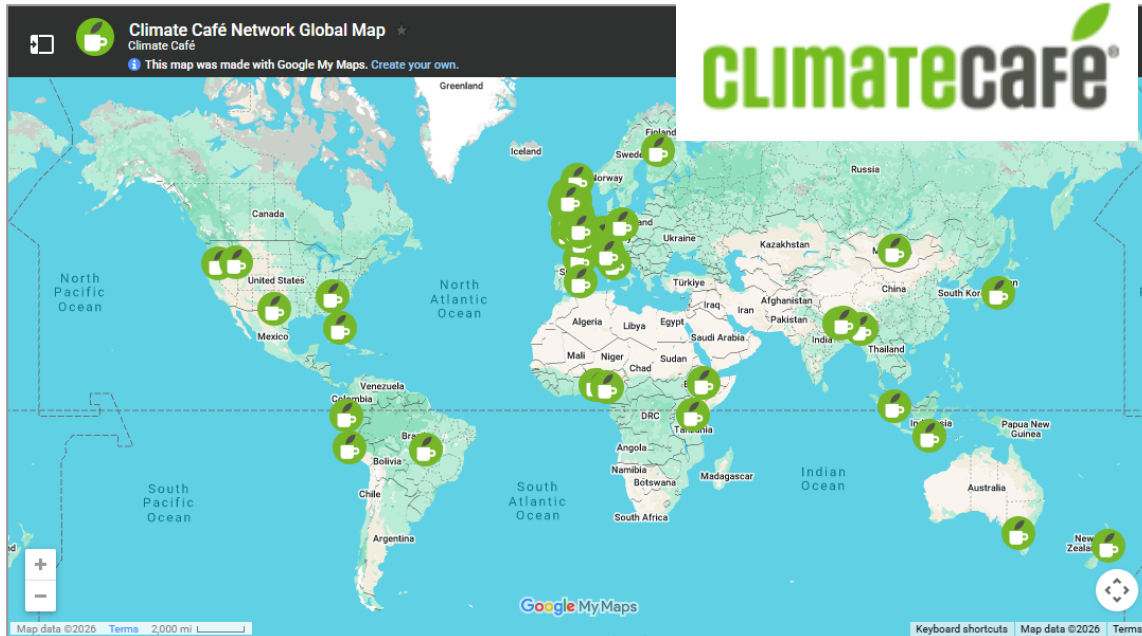
A week before this lesson, and the day of the lesson, provide students with a heads-up to let them know what this lesson will be about. You can find a teacher script [here](#). Also, consider adapting some of this language to share with parents ahead of the lesson.



Consider [facilitating a discussion](#) about student emotions and strategies for coping if students have recently been through a traumatic natural disaster event. This Facilitating Discussions lesson takes between 20-45 minutes. Optional slides are available in the slide deck.

Join & Create Community

- Worldwide climate cafes
- Good Grief Network
- Climate Psychology Alliance
- Climate Outreach



Attend a climate cafe

Looking for a space to share emotions around climate? Check out our upcoming climate cafes.



Attend an climate cafe →

The #TalkingClimate Handbook

HOW TO HAVE CONVERSATIONS ABOUT CLIMATE CHANGE IN YOUR DAILY LIFE



You are not alone.

Building emotional resilience one step at a time.

LEARN MORE →





Develop Social, Emotional & Positive Coping Skills

Support youth to identify and express their feelings, have empathy for others, practice gratitude, get out in nature, and build resilience.

Move through Grief

Allow and be aware of feelings, focus on what we can do, be aware of distortions in thinking, take a break, look for beauty and meaning

Cultivate Hope & Resilience

Teach hopefulness, use nature to develop agency, reframe negative thoughts to be more objective, and share examples of hope.

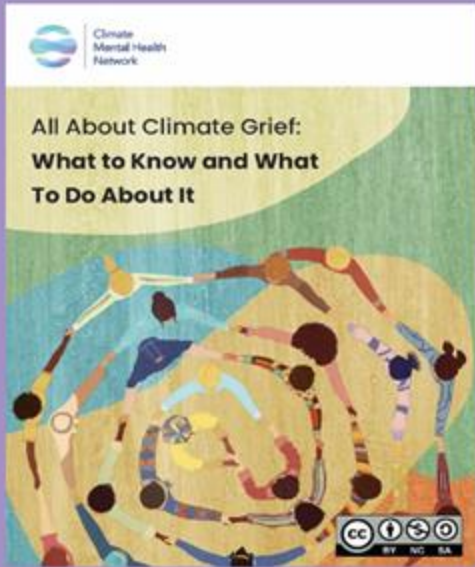




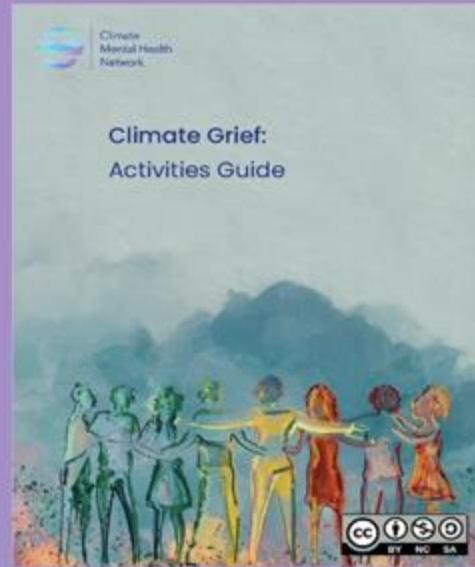
Center for Education,
Engagement and
Evaluation

Climate Mental Health Network's Grief Resources

Resources and Activities Guide



Download



Download



Climate Grief Circles: A Model of Climate Grief




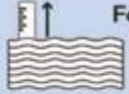



















FRAMING ENVIRONMENTAL ISSUES

Ten thinking rules that implement sustainable wellbeing

Do this...

Instead of ...

1 Focus on behavior Use public transportation! 	Focusing on situations Climate change 
2 Focus on solutions Walk to reduce my carbon footprint! 	Focusing on problems Sea level is rising due to climate change 
3 Be flexible with multiple options What are the ways I can reduce my carbon footprint? 	Focusing on one solution Drive less 
4 Think and direct behavior to the future How can we reduce carbon emissions 	Dwelling on the past What are all the causes of climate change? 
5 Act in small steps Bike to school on certain days 	Focusing on general large solutions Lower carbon footprint 
6 Think about positive outcomes of environmental behavior Biking to school is healthy, and reduces my carbon footprint 	Focusing on negative consequences Biking to school will take more time 
7 Identify and use individual strengths Work with lunch staff to purchase local food or plant a garden 	Following standard route Save energy by turning off lights 
8 Acting together and integrative Reach out to a nursery and community to plant trees after a fire 	Acting Alone Planting a single tree in my yard 
9 Use all resources Parents own a paint company & paint the school's roof white to reduce energy usage  	Giving up We don't have enough budget to purchase solar panels for the school 
10 Look at policy and policymakers Work with policymaker to get the banning of plastic bags on ballot 	Ending at my behavior Using my own re-usable bags 





Center for Education,
Engagement and
Evaluation

Climate Mental Health Activities Guide



Climate Mental Health



Facilitating Discussions and Creating Solidarity

Middle School, High School,
University/College
Climate Change, Climate Mental
Health



Visioning Possibility

Elementary School, Middle School,
High School, University/College, Out-
of-school/Non-formal



Mindfulness Practices & Guided Meditation

Elementary School, Middle School,
High School, University/College
Climate Change, Climate Mental
Health



Connecting with Special Places in Nature

Elementary School, Middle School,
High School, University/College, Out-
of-school/Non-formal
Climate Change, Climate Mental
Health



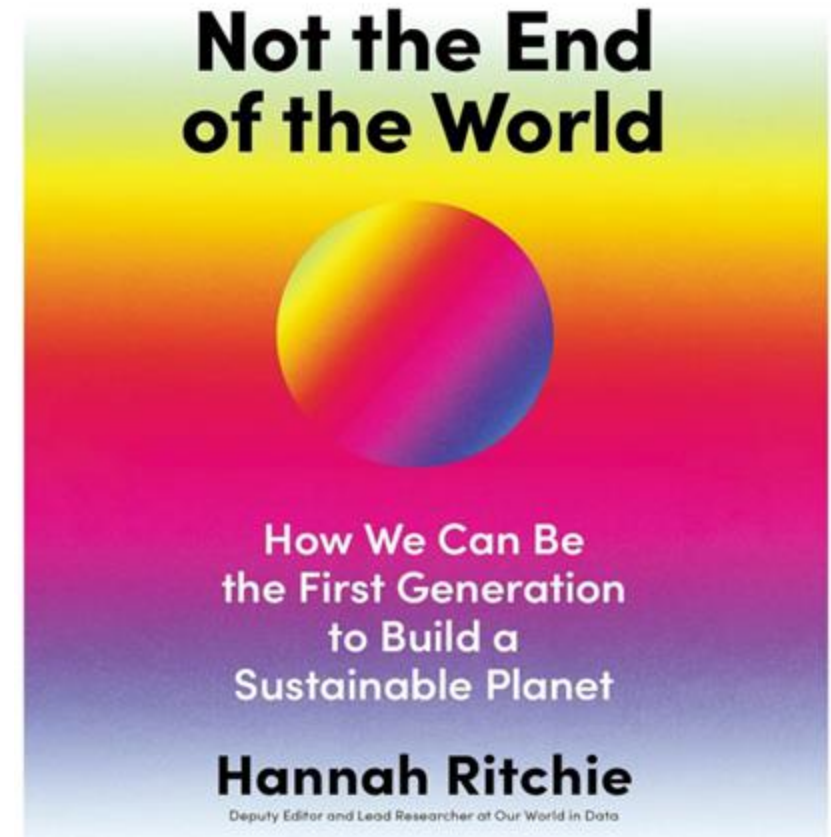
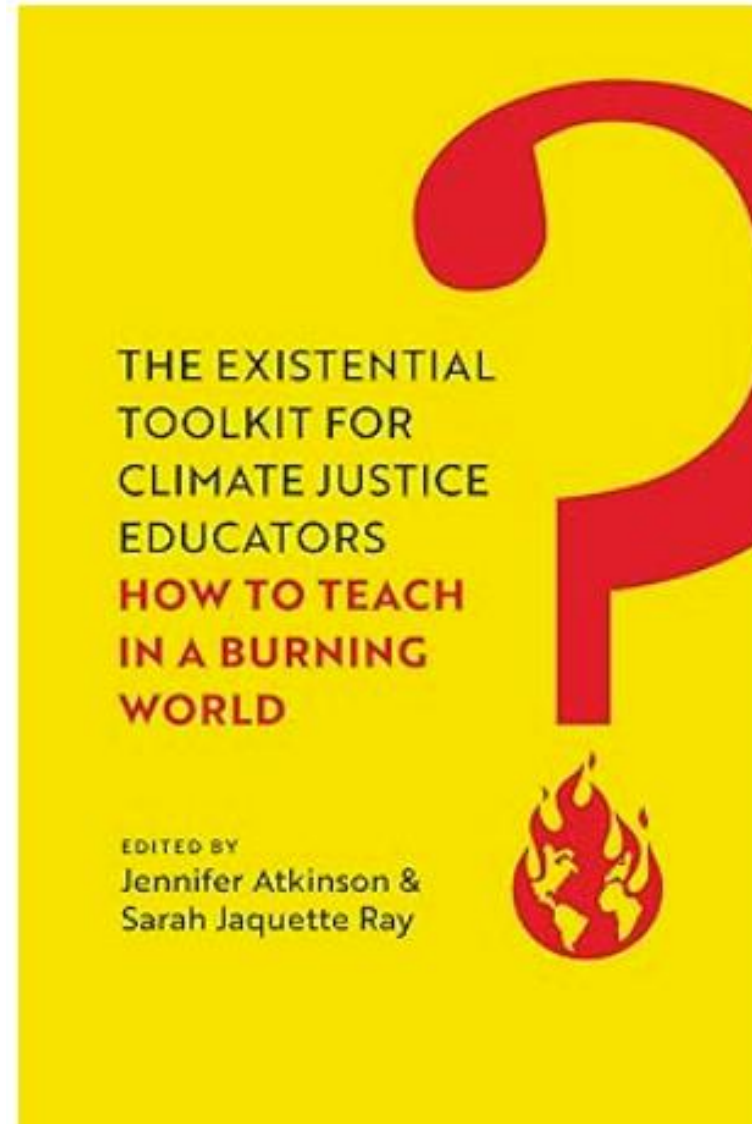
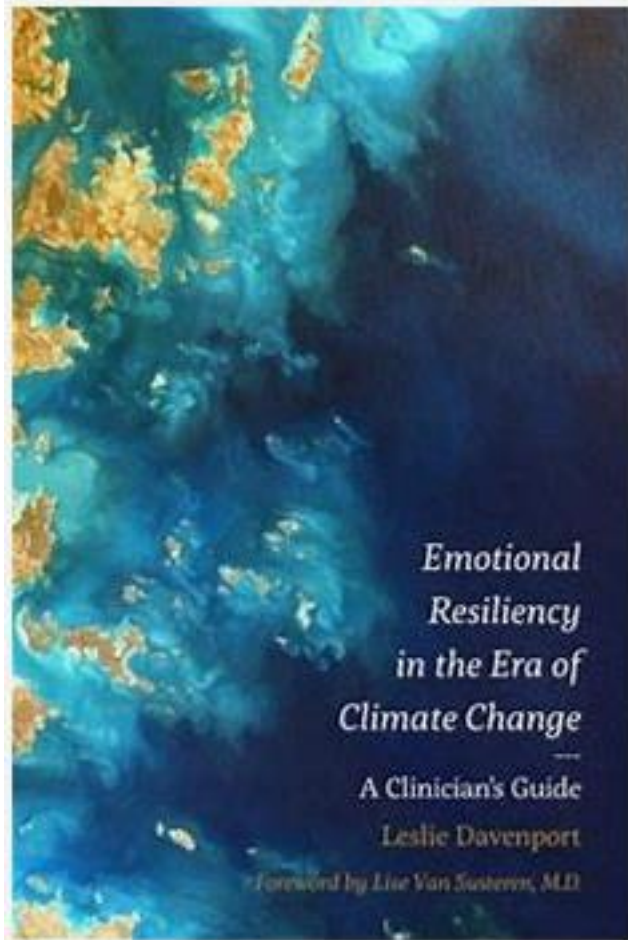
The Emotions Wheel

Elementary School, Middle School,
High School, University/College, Out-
of-school/Non-formal
Climate Change, Climate Mental
Health



Center for Education,
Engagement and
Evaluation

Books for You!



Climate Mental Health Network



Climate Emotions Toolkit for Educators

Information and guidance to help teachers support students through the emotional challenges of climate change



Climate Mental Health Network

Lesson Plan: Writing About Eco/Climate Emotions and Concerns

by Bonita Eloise Ford, M.A., B.Sc.



Climate Mental Health Network

High School Teachers Lesson Plan: Writing About Eco/Climate Emotions and Concerns

Written by Bonita Ford



SCAN ME





What is one strategy you plan to use to help you move towards resiliency and hope?

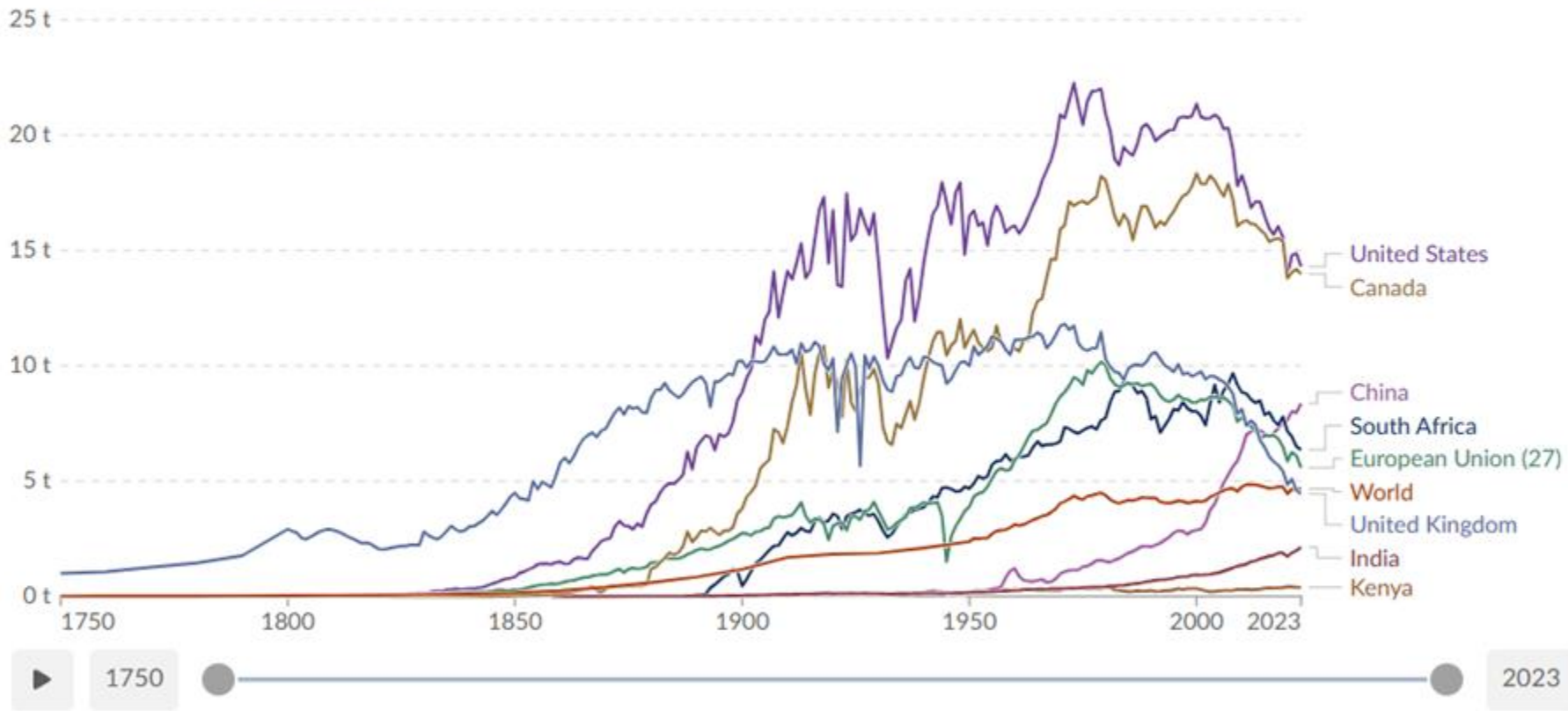
CO₂ emissions per capita

Carbon dioxide (CO₂) emissions from burning fossil fuels and industrial processes. This includes emissions from transport, electricity generation, and heating, but not land-use change.



Table | Map | Line | Slope

Edit countries and regions | Settings



Data source: Global Carbon Budget (2024); Population based on various sources (2024) - [Learn more about this data](#)
OurWorldinData.org/co2-and-greenhouse-gas-emissions | CC BY



Related: [CO₂ data sources, methods and FAQs](#)



PSECCO

Polar Science Early
Career Community Office

Stay involved with PSECCO!

- May 5 – International Policy Engagement Training for Polar Early Career Scientists
- Connect with us via:
 - Email: psecco@colorado.edu
 - Newsletter: <https://psecco.org/join-psecco-community>
 - Social media (BlueSky, Instagram, LinkedIn, Facebook): @polarsecco

Post-Event
Survey Link:



SCAN ME!