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# Eco-Anxiety

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# Planetary Health Alliance (PHA)



**P L A N E T A R Y  
H E A L T H  
A L L I A N C E**

*“Our Health Depends on  
Our Environment.”*  
- [www.planetaryhealthalliance.org](http://www.planetaryhealthalliance.org)

- Consortium of >400 universities, non-governmental organizations, research institutes & government entities
- Committed to understanding and addressing
  - global environmental change &
  - How those changes impact health
- Based at Johns Hopkins University, USA

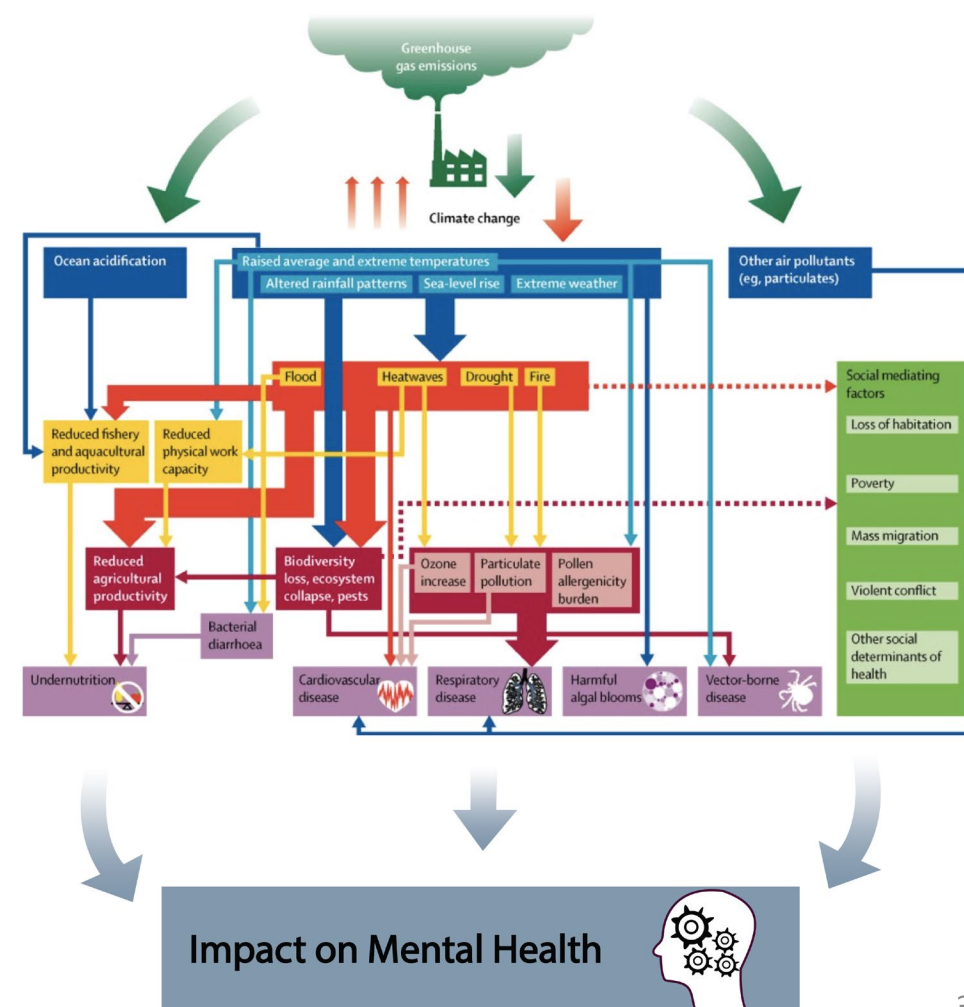


# Health Effects of Climate Change

Related to:

- Repercussions of food & water shortages
- Increased heat, allergy, vector-borne & air-pollution-related diseases
- (Mental) health effects of extreme weather, population displacement, conflict & climate/eco-anxiety

(Romanello et al., 2021; Watts et al., 2017)



# Eco-Anxiety

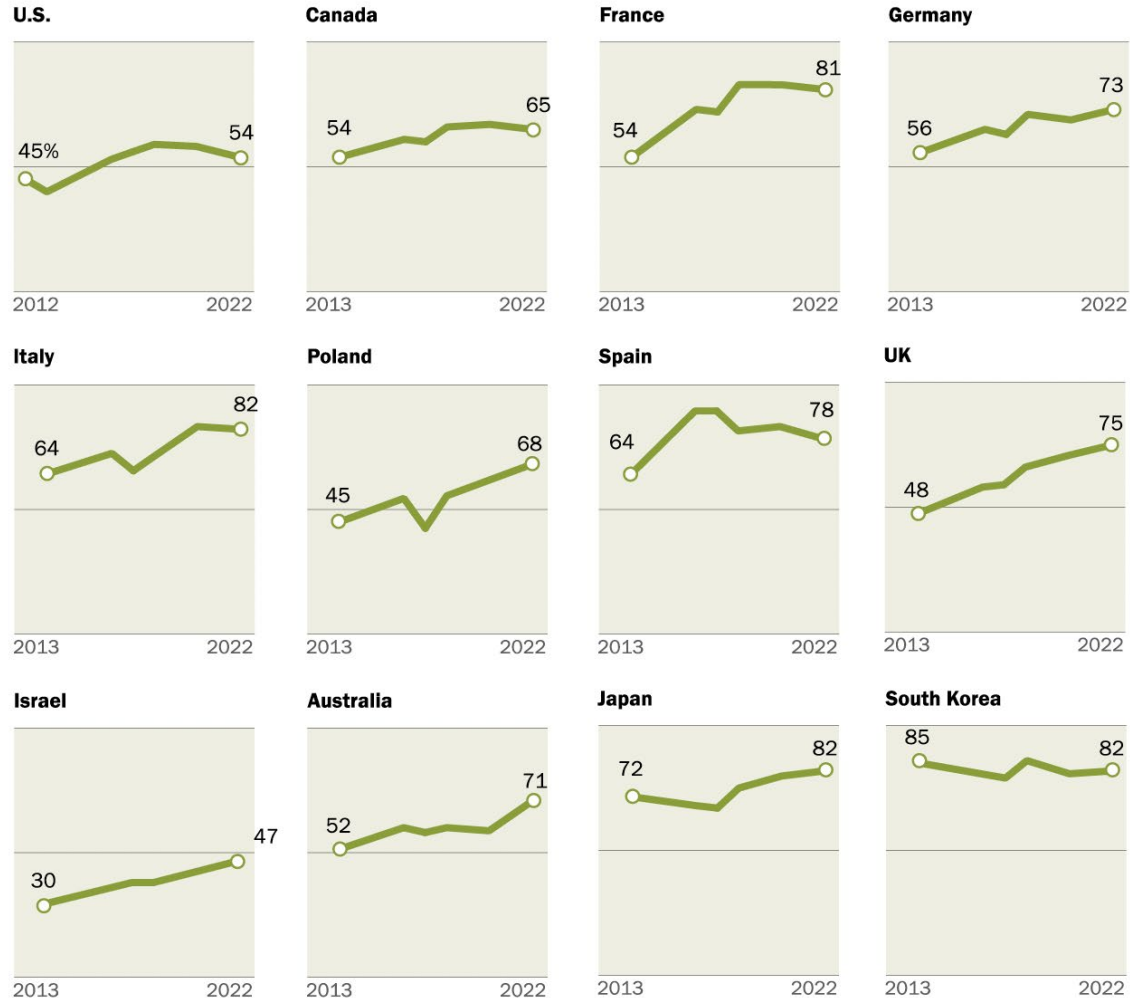
(Climate Anxiety)

- → “distress relating to the climate & ecological crises” (Hickman et al., 2021)
- Does not imply mental illness
- Gaining global attention
- Regarded by some as a human rights issue



## Concern about global climate change remains at all-time highs in many countries

% who say *global climate change* is a *major threat* to their country



Note: Not all countries in survey shown. Prior to 2020, U.S. and Australia surveys were conducted by phone. See topline for full results.

Source: Spring 2022 Global Attitudes Survey. Q10a.

"Climate Change Remains Top Global Threat Across 19-Country Survey"

PEW RESEARCH CENTER

# Concern about Climate Change

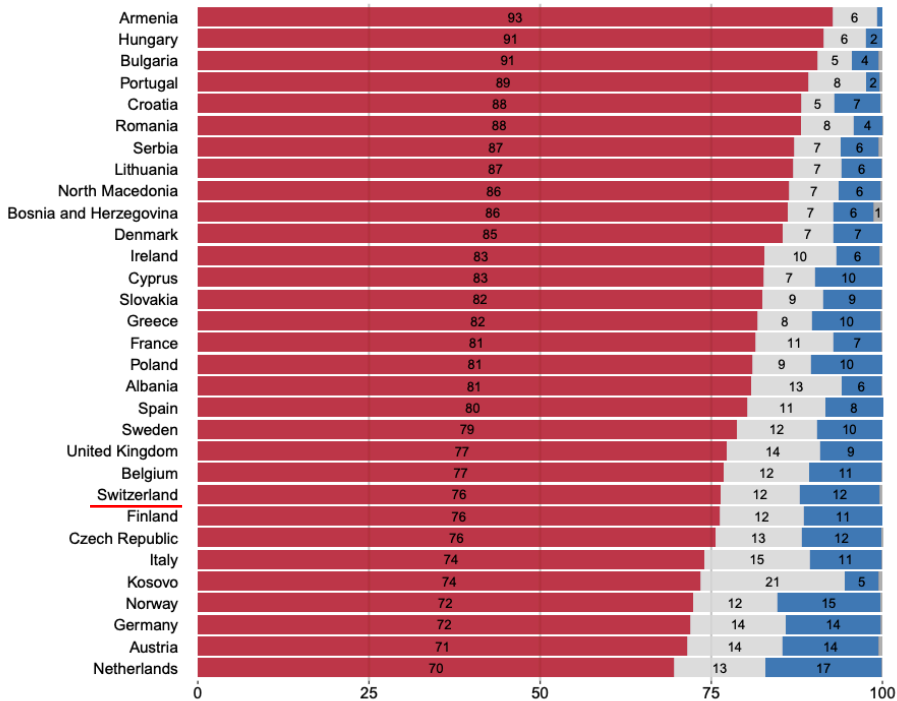


# International Public Opinion 2023

## Climate change is happening

### Europe

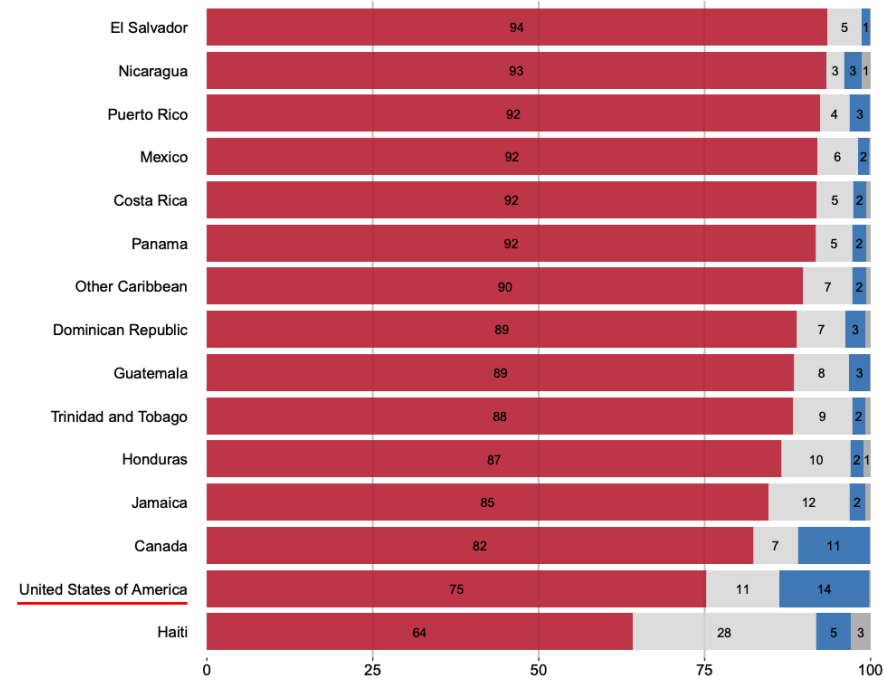
■ Yes ■ No ■ Don't know ■ No response



## Climate change is happening

### North America, Central America, & the Caribbean

■ Yes ■ No ■ Don't know ■ No response



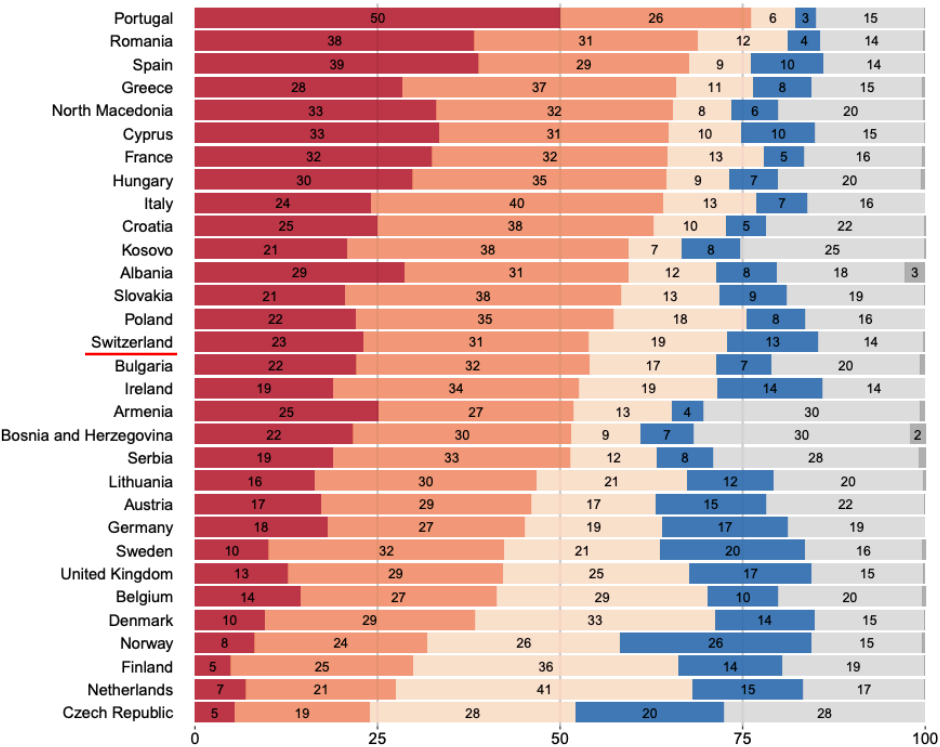
Climate change refers to the idea that the world's average temperature has been increasing over the past 150 years, will increase more in the future, and that the world's climate will change as a result. What do you think: Do you think that climate change is happening?

# International Public Opinion 2023

## Climate change will be personally harmful

### Europe

■ A great deal  
■ A moderate amount  
■ Only a little  
■ Not at all  
■ Don't know  
■ No response



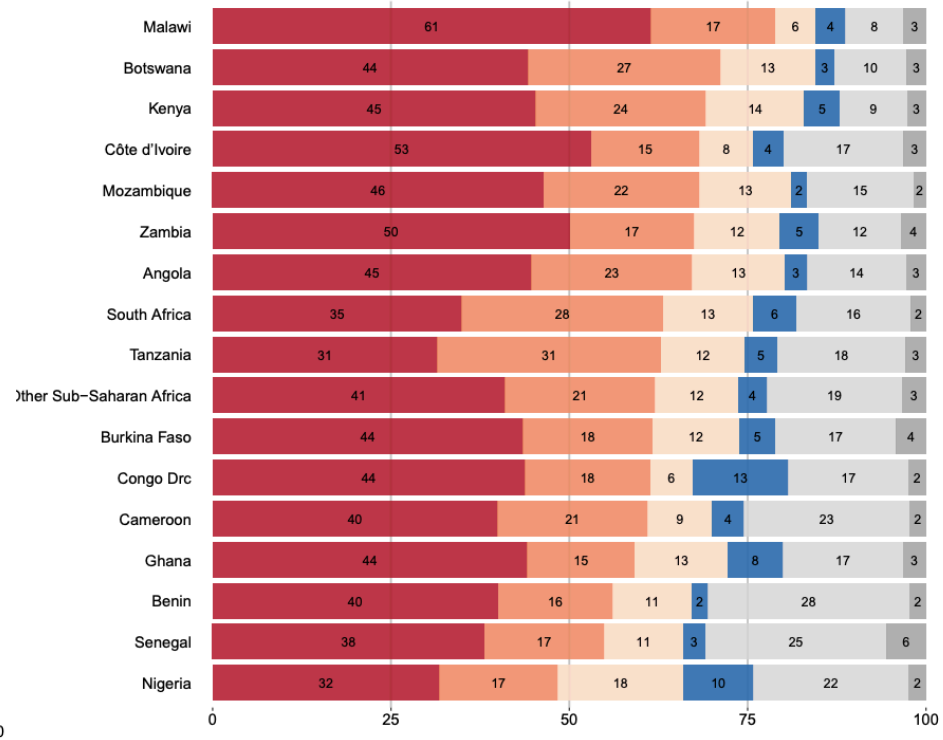
How much do you think climate change will harm you personally?

Source: Yale Program on Climate Change Communication / Data for Good at Meta / Rare's Center for Behavior & the Environment; 2023

## Climate change will be personally harmful

### Sub-Saharan Africa

■ A great deal  
■ A moderate amount  
■ Only a little  
■ Not at all  
■ Don't know  
■ No response

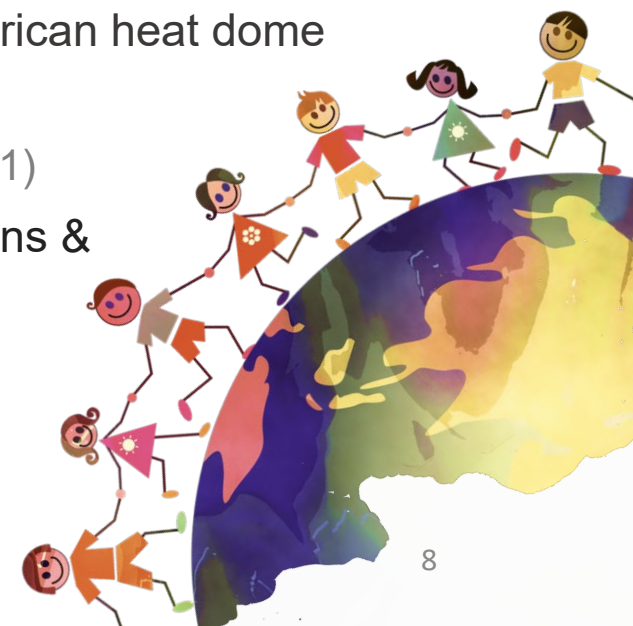


How much do you think climate change will harm you personally?



# Research - What do we know?

- N = 284, college students (Schwartz et al., 2023)
  - Climate change anxiety (CCA) subscales → significantly associated w/ general anxiety disorder symptoms
  - Only subscale “functional impairment” → associated w/ higher major depression disorder (MDD) symptoms
  - Engaging in collective action (but not individual action) reduced the association b/t CCA impairment & MDD symptoms
- N = 420, ≥ 16 y.o., western Canada (Bratu et al., 2022)
  - British Columbians → significantly higher CCA following the 2021 Western North American heat dome
- N = 1011, 18-69 y.o., Climate anxiety correlated: (Wullenkord et al., 2021)
  - Positively w/ general anxiety & depressiveness, pro-environmental behavioral intentions & policy support
  - Negatively w/ different forms of climate denial





# Climate/Eco-Anxiety (Hickman et al., 2021)

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THE LANCET  
Planetary Health

ARTICLES | [VOLUME 5, ISSUE 12, E863-E873, DECEMBER 2021](#)

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## Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey

[Caroline Hickman, MSc](#)  <sup>†</sup>  • [Elizabeth Marks, ClinPsyD](#) <sup>†</sup> • [Panu Pihkala, PhD](#) • [Prof Susan Clayton, PhD](#) • [R Eric Lewandowski, PhD](#) • [Elouise E Mayall, BSc](#) • et al. [Show all authors](#) • [Show footnotes](#)



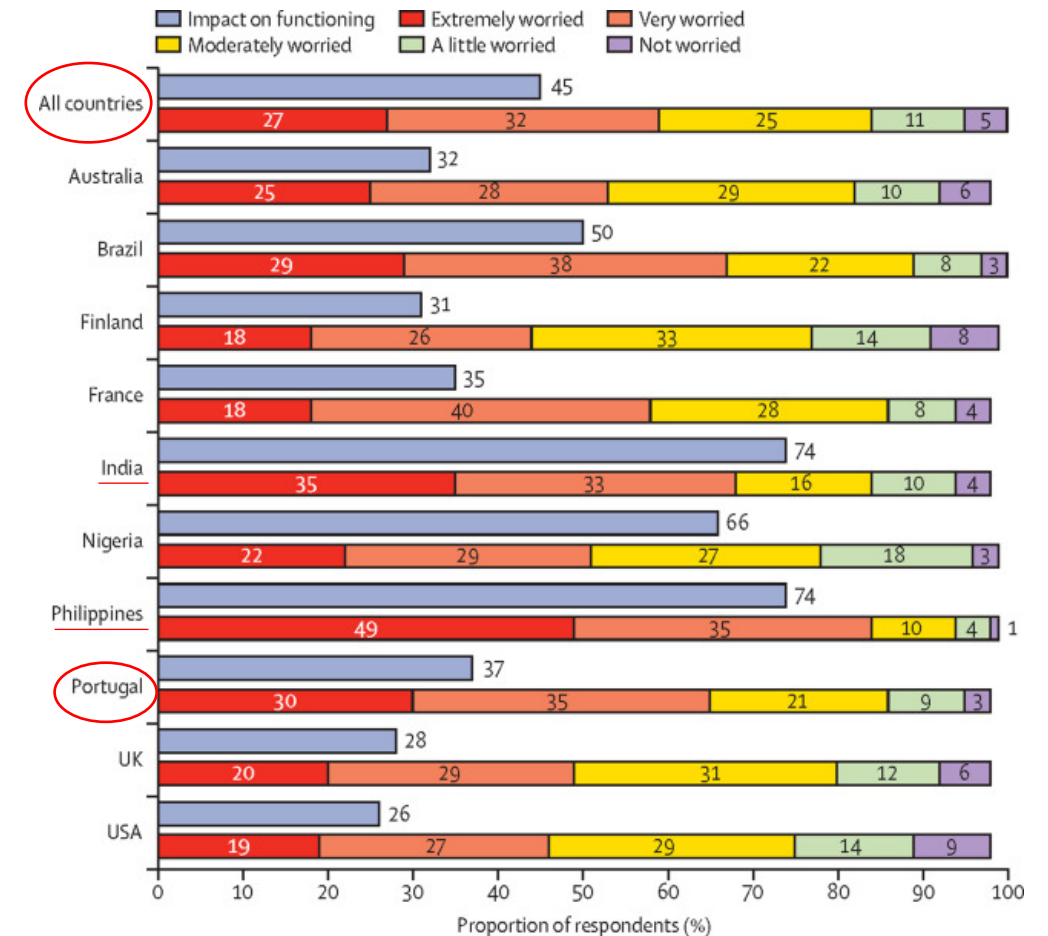
# Methods (Hickman et al., 2021)

- 10.000 16-25-year-olds
- In: Australia, Brazil, Finland, France, India, Nigeria, Philippines, Portugal, UK, USA
  - 1.000 participants per country
- Survey invitations (via the Kantar platform)
  - May 18 - June 7, 2021
  - Nature of the study was not advertised



# Results: Worry & Functioning (Hickman et al., 2021)

- Climate anxiety & dissatisfaction with government responses → widespread in children & young people
- Worry
  - 59% → very or extremely worried
  - 84% → at least moderately worried
- Functioning (e.g., eating, sleeping, concentration)
  - >45% → climate change rel. feelings negatively affected their daily life & functioning

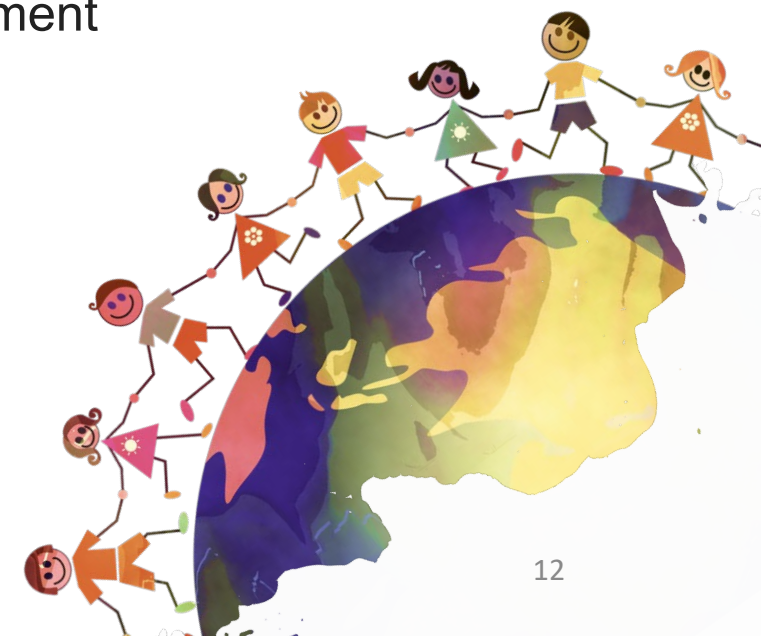


\* ↑ worry & functioning problems → poorer countries in Global South that are more directly impacted by climate change

# Research - What do we know?

N = 10.000, 16–25 y.o., 10 countries (Clayton et al., 2023)

- Gender differences → small but consistent
  - Females expressed greater levels of concern & negative emotions
  - Males → more optimistic & expressed greater faith in the government
- Concern & negative emotions about climate change
  - → slightly higher among older respondents



# Climate/Eco-Anxiety among People with Mental Illness?

## Studies

- N = 89, adults with pre-existing mental health diagnoses (outpatient university clinic in Heidelberg; Gebhardt et al., 2023)
  - Reported mental health symptoms (21% anxiety, 11% mild depression) due to climate change awareness
- N = 433, 18-26 y.o. (Reyes et al., 2021)
  - Significant relationship b/t climate anxiety & mental health
    - Climate anxiety predicted 13.5% of the overall Mental Health Index variance
- N = 128,484, adolescents in Norway (Leonhardt et al., 2022)
  - Most pupils were not or only a little worried about climate change
  - Girls who had 1+ parent with higher education & pupils from urban areas
    - → more inclined to worry about the climate
  - Those more worried about the climate
    - → more symptoms of depression



# University Hospital for Child & Adolescent Psychiatry (CAP)

## Climate/Eco-Anxiety Research Project Initiation

- Informed hospital's director about climate/eco-anxiety
  - no evaluation of adolescent psychiatric patients
- Received permission to gather data from all adolescent patients admitted to hospital
- Translated 3 questions from Hickman et al. (Lancet, 2021) publication into German (with permission)
- Developed one additional question to compare climate & eco-anxiety
- Integrated questions into hospital's standard diagnostic data collection system



# Aim of CAP Research Project

To evaluate:

- Adolescent psychiatric patients' feelings, thoughts & functioning associated w/ CC
- If relationships exist b/t cognitive + emotional responses to CC and:
  - Daily functioning
- Differences between:
  - Worry about climate vs. environment
  - General population (Hickman et al., 2021)
  - Younger vs. older adolescents



# Preliminary Findings

N = 18 (!), adolescent psychiatric patients (12-17 y.o., M: 15.4)

- Environmental degradation worry
  - 27% → very or extremely worried
  - 45% → at least moderately worried
  - 55% → not or a little worried
- Climate change worry
  - 23% → very or extremely worried (Lancet study: 59%)
  - 38% → at least moderately worried (84%)
  - 62% → not or a little worried (16%)





# Preliminary Findings

- Functioning (e.g. eating, sleeping, concentration)
  - 5% → climate change rel. feelings negatively affected their daily life & functioning
    - Lancet study: >45%
- Climate change makes me feel (yes / no / prefer not to say):
  - 61% Afraid (Lancet study: 67%)
  - 38% Helpless (51%)
  - 44% Despair (44%)
  - 16% Indifferent (3%)



# Resilience

= withstanding, recovering, adapting from adversity

- Individual
  - Managing anxiety (e.g., cognitive reframing, stress reduction)
  - Exercise/Mindfulness/Meditation
- Community related activities associated w/ health & well-being
  - Social connection
  - Spending time in nature
  - (Engagement/activism)





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# Questions?



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# Climate/Eco-Anxiety among Psychiatric Patients?

## Questions

- I am worried that climate change threatens people and the planet.  
*not worried / a little / moderately / very / extremely / prefer not to say*
- Does climate change make you feel any of the following?
  - Sad
  - Helpless
  - Anxious
  - Afraid
  - Optimistic
  - Angry
  - Guilty
  - Ashamed
  - Hurt
  - Depressed
  - Despair
  - Grief
  - Powerless*yes / no / prefer not to say*
- My feelings about climate change negatively affect my daily life (at least one of the following: eating, concentrating, work, school, sleeping, spending time in nature, playing, having fun, relationships).  
*yes / no / prefer not to say*



# Coping with Eco-Anxiety

The Journal of Climate Change and Health 9 (2023) 100211



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Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

## The Journal of Climate Change and Health

journal homepage: [www.elsevier.com/jochim](http://www.elsevier.com/jochim)



### Perspective

## Coping with eco-anxiety: An interdisciplinary perspective for collective learning and strategic communication

Hua Wang<sup>a,\*</sup>, Debra L. Safer<sup>b</sup>, Maya Cosentino<sup>b,c</sup>, Robin Cooper<sup>d</sup>, Lise Van Susteren<sup>e</sup>, Emily Coren<sup>b</sup>, Grace Nosek<sup>f</sup>, Renee Lertzman<sup>g</sup>, Sarah Sutton<sup>h</sup>

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# Predictions Based on Past Results



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The Journal of Climate Change and Health

journal homepage: [www.elsevier.com/joclim](https://www.elsevier.com/joclim)



Research article

## Planning for the perfect storm: Perceptions of UK mental health professionals on the increasing impacts of climate change on their service users



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### A B S T R A C T

**Introduction:** Climate change poses a considerable risk of further increasing the world's mental health burden. The ways that, and extent to which, climate change is affecting mental health service users is poorly known. **Mental health professionals (MHPs)** views on the nature of climate-related distress and the need for specialist training to support service users is undetermined globally.

**Methods:** A questionnaire survey was disseminated to an opportunity sample of MHPs based in the United Kingdom (UK). It investigated whether MHPs perceived that the number of service users mentioning climate change as affecting their mental health or emotional distress had increased in the five years prior to 2021, and if they believe it will increase further. The survey explored MHPs' perceptions of the influence of climate change on service users' mental health needs, if they perceive this to be rational, and if they feel adequately prepared to manage climate change related mental health problems or emotional distress.

**Results:** We surveyed 75 MHPs, including professionals in psychotherapy (38), psychology (19), psychiatry (6). **MHPs reported a significant increase in the perceived prevalence of mental health problems or emotional distress related to climate change, believing this increase will continue.** MHPs reported a range of impacts on service users due to climate change, typically viewed as a rational response. **MHPs felt equipped to manage the consequences of climate change but would benefit from specific training.**

**Conclusions:** Our results indicate an increasing incidence of climate-related emotional distress among service users as perceived by MHPs. The expectation among professionals is that this service need is here now but will continue to increase in the future, with potential implications for the provision of training.

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