



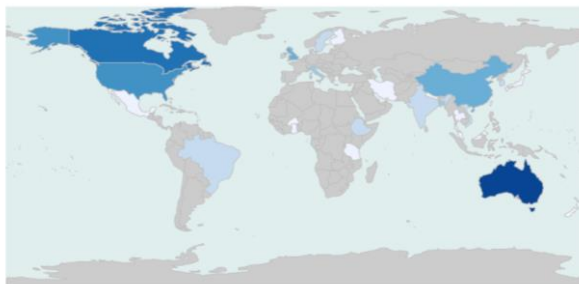
**INSTYTUT PSYCHOLOGII**  
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# What we know, what we don't know, and what we assume about the impact of climate change on mental health and well-being in Europe – a narrative literature review

Weronika Kałwak



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## Stressed about climate change? Eight tips for managing eco-anxiety





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**Where?** Jagiellonian University in Kraków (Poland), Institute of Psychology, Department of Psychological Prevention and Psychotherapy, Qualitative Research Lab

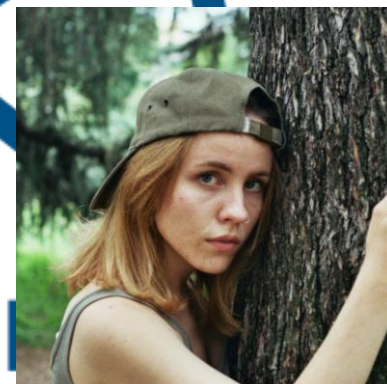
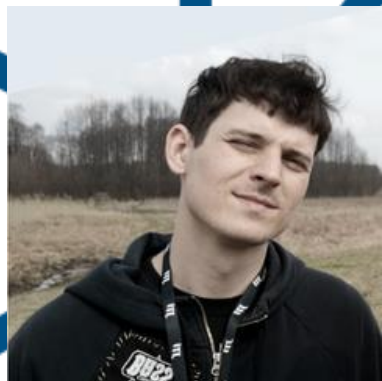


POLSKIE  
TOWARZYSTWO  
PSYCHOLOGICZNE



**The (EnvironMental) Team and collaborators:** Karolina Bonarska (XR), Zuzanna Garncarek, Krzysztof Hankus, Marta Pawlikowska, Helena Walasz, Anna Wojewoda, Vanessa Weihgold (IZEW, Tuebingen), dr Joanna Grzymała-Moszczyńska (Dept. of Social Psychology, Institute of Psychology, JU) dr Magdalena Budziszewska (University of Warsaw), dr Marta Łukowska (University of Silesia in Katowice, Nyeleni Polska)

- **impact of climate change on mental health and well-being in (Middle) Europe (and PL)**
- ethical aspects of climate emotions and mental health support in the times of climate crisis
- psychological situation of climate activists
- polycrisis and mental health of emerging adults (*COVID-19, war in Ukraine, climate*)



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## Take home message(s)

1. The impact of climate change on mental health is regionally specific and should be studied in contextualized way.
2. (At the background of other regions) Europe may be specific in terms of the impacts of climate change on mental health. There is, however, virtually no research on mental health consequences of climate change in Europe.
3. The impact of climate change on mental health in Europe is not limited to *eco-anxiety* (mediated impacts). Assuming in the literature that we're dealing - mainly or only – with mediated impacts has some post-colonial underpinnings.
4. We need to study indirect mental health impacts of climate change specific to the temperate climate zone in order to address mental health of actual populations of concern.





Anthropogenic global climate change has a disruptive influence over ecosystems and communities around the world. It is a threat to natural environment, to society, economy, politics, and **human health** - (*THE CLIMATE CRISIS*) -

- life-threatening natural disasters and extreme weather events (e.g. hurricanes, floodings)
- heat-waves (e.g. cardiovascular diseases)
- altered patterns of ecosystems that generate sanitary risk (e.g. vector-borne diseases)
- difficulties in access to basic living resources (e.g. fresh water and high quality food)
- **deteriorated mental health and well-being**



**250 000**  
additional deaths

from climate-sensitive diseases (heat stress,  
malnutrition, dengue and malaria) from 2030  
onward

[Find out more](#)





## Climate anxiety in young people: a call to action

Judy Wu • Gaelen Snell • Hasina Samji

Open Access • Published: September 09, 2020 • DOI: [https://doi.org/10.1016/S2542-5196\(20\)30223-0](https://doi.org/10.1016/S2542-5196(20)30223-0)

[Check for updates](#)

➤ Int Rev Psychiatry. 2014 Aug;26(4):415-22. doi: 10.3109/09540261.2014.925851.

# Climate change: the next challenge for public mental health?

François Bourque<sup>1</sup>, Ashlee Cunsolo Willox

➔ many questions, little answers

➔ majority of literature: opinion papers, literature reviews, calls to research

counselling & psychotherapy research  
Linking Research with Practice

bacp | counselling  
changes lives

ORIGINAL ARTICLE | [Open Access](#) | [CC](#) | [i](#)

## Therapists' experience of climate change: A dialectic between personal and professional

Jules F. B. Silva ✉ Jennifer Coburn ✉

First published: 19 January 2022 | <https://doi.org/10.1002/capr.12515> | Citations: 1

Springer Link

Open Access | Published: 16 February 2021

Negative emotions about climate change are related to insomnia symptoms and mental health: Cross-sectional evidence from 25 countries

[Charles Adedayo Ogunbode](#) ✉, [Ståle Pallesen](#), ... [Michael J. Lomas](#) [+ Show authors](#)

[Current Psychology](#) (2021) | [Cite this article](#)

7754 Accesses | 11 Citations | 127 Altmetric | [Metrics](#)

➔ impact on mental health (like the climate change) presented as a global problem

➔ we assume a universal character of knowledge **BUT** we need a contextualized one for action and prevention

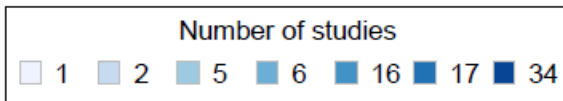
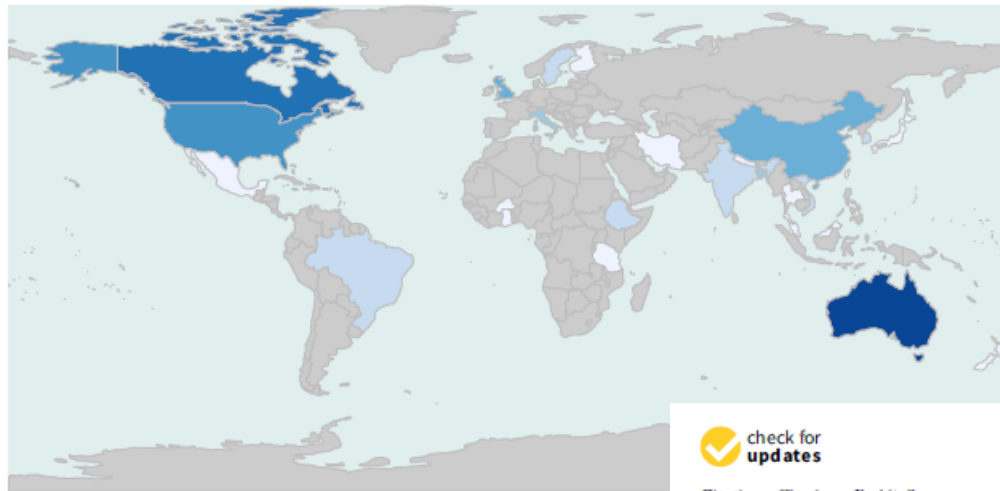


Figure 2. Map of included studies.

two reports on the topic in Europe: based on studies done outside of Europe



## Climate change impacts on mental health in Europe

An overview of evidence

March 2022



The Lancet Planetary Health

Volume 5, Issue 12, December 2021, Pages e863–e873



### Articles

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

Caroline Hickman MSc<sup>a,†</sup>, Elizabeth Marks ClinPsyD<sup>b,†</sup>, Panu Pihkala PhD<sup>c</sup>, Prof Susan Clayton PhD<sup>d</sup>, R. Eric Lewandowski PhD<sup>e</sup>, Elouise E. Mayall BSc<sup>f</sup>, Britt Wray PhD<sup>g,h</sup>, Catriona Mellor MBChB<sup>i</sup>, Lise van Susteren MD<sup>j,k</sup>



**Citation:** Charlson, E.; Ali, S.; Benmarhnia, Y.; Pearl, M.; Massazza, A.; Augustinavicius, J.; Scott, J.G. Climate Change and Mental Health: A Scoping Review. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4486. <https://doi.org/10.3390/ijerph18094486>

the paper: global perspective adopted in studies  
the map: origins of most empirical research on the topic (not many btw) are out of Europe (Australia, Canada, USA, China – other climate zones)  
→ based on that, are we able to gain specific understanding necessary to act?

[Home](#) > [European Child & Adolescent Psychiatry](#) > [Article](#)

Review | [Open Access](#) | [Published: 26 August 2020](#)

## Report of the intergovernmental panel on climate change: implications for the mental health policy of children and adolescents in Europe—a scoping review

Vera Clemens<sup>✉</sup>, Eckart von Hirschhausen & Jörg M. Fegert

*European Child & Adolescent Psychiatry* **31**, 701–713 (2022) | [Cite this article](#)

7197 Accesses | 25 Citations | 73 Altmetric | [Metrics](#)





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## Why it is so difficult to study empirically?

Box 1. Mental Health Definitions

**Mental Health:** Everyone has mental health and this can be better or worse over time, varying along a continuum. It is a state of cognitive and emotional experiences within an individual that are always in flux, and uncomfortable emotions are part of good mental health and wellbeing. Good mental health was defined by the World Health Organisation as: "every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and a contribution to her or his community" (43). Alternative definitions of wellbeing include: "a subjective and dynamic happy that ties into life satisfaction and influences a person's (or a collective's) psychological and social function" (46).

**Mental Disorder:** A mental disorder is a health condition generally involving some combination of abnormal changes in thoughts, behaviours or relationships with others (46, 47). They are associated with distress and/or problems functioning in social relationships. Mental illnesses and mental disorders include common disorders such as depression, anxiety, and common disorders such as schizophrenia and bipolar disorder. Developmental disorders such as autism, and degenerative disorders such as dementia also fall under the umbrella of mental disorders (5, 47).

### Key Outcomes of Interest

**Increased population mental health:** An increase in the number of people with poorer mental health and emotional wellbeing.  
**Increased onset of mental disorders:** An increase in the number of people experiencing symptoms that can be diagnosed including anxiety, depression, post-traumatic stress disorder and substance abuse. More people with a diagnosed mental disorder.  
**Poorer outcomes for those with existing mental disorders:** An increase in symptoms or more severe symptoms; poorer of death.  
**Increase in suicide attempts or completed suicides:** An increase in the frequency or rate of completed or attempted suicides.

Lawrance, E. L., Thompson, R., Newberry Le Vay, J., Page, L., & Jennings, N. (2022). The impact of climate change on mental health and emotional wellbeing: a narrative review of current evidence, and its implications. *International Review of Psychiatry*, 34(5), 443-498.

MENTAL HEALTH *what is it?*

ETIOLOGY of DETERIORATED MENTAL HEALTH (individual, community, epidemiological level)

IMPACT ON EMOT. KNOWL. GENE RATION

DISCOURSE ON (DETERIORATED) MENTAL HEALTH IN THE CLIMATE CRISIS

CLIMATE CRISIS is a part of POLYCRISIS

CLIMATE CRISIS

CLIMATE CHANGE KNOWLEDGE (incl. academic knowledge) and COMMUNICATION is politically involved in mitigation and adaptation of climate change

adverse changes to environment change our prereflective way of *being in a [natural] world*



# Droughts in Australia and India – well-documented (indirect) impact on mental health

[Int J Environ Res Public Health](#). 2022 Jul; 19(13): 7855.

Published online 2022 Jun 27. doi: [10.3390/ijerph19137855](https://doi.org/10.3390/ijerph19137855)

PMCID: PMC9266200

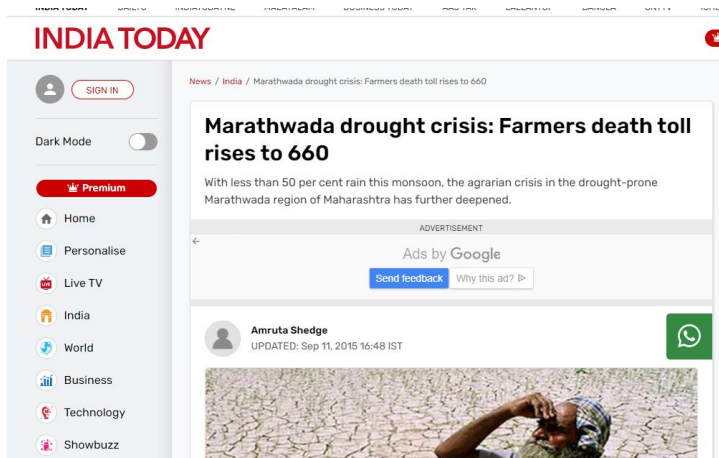
PMID: [35805514](https://pubmed.ncbi.nlm.nih.gov/35805514/)

## Climate Change, Drought and Rural Suicide in New South Wales, Australia: Future Impact Scenario Projections to 2099

[Ivan C. Hanigan](#)<sup>1,2,\*</sup> and [Timothy B. Chaston](#)<sup>2,3</sup>

outcomes. We estimated the numbers of suicides attributable to drought under possible climate change scenarios for the future years until 2099, based on the historical baseline period 1970–2007.

Drought and rural suicide data from the Australian state of New South Wales (NSW) were analyzed



Original Article | [Published: 26 January 2018](#)

## Effects of Drought and Flood on Farmer Suicides in Indian States: An Empirical Analysis

[Yashobanta Parida](#) , [Devi Prasad Dash](#), [Parul Bhardwaj](#) & [Joyita Roy Chowdhury](#)

[Economics of Disasters and Climate Change](#) **2**, 159–180 (2018) | [Cite this article](#)

1825 Accesses | 30 Citations | [Metrics](#)

## Increasing droughts in Poland – no data on linked-to-drought mental health and suicides among farmers in Europe

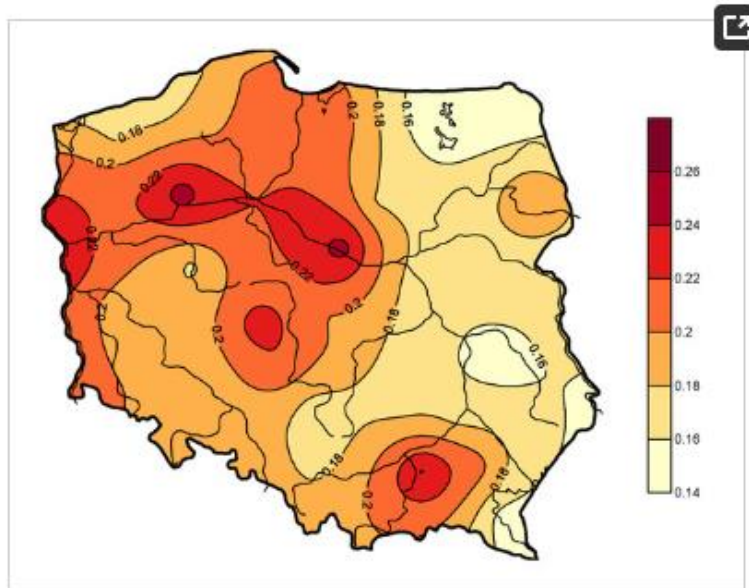


Figure 10. Isarithms of the coefficient of variation of yearly precipitation totals in Poland in 2001–2018.

Ziarnicka-Wojtaszek A, Kopcińska J. Variation in Atmospheric Precipitation in Poland in the Years 2001–2018. *Atmosphere*. 2020; 11(8):794.





## DIRECT IMPACT



## INDIRECT IMPACT



## MEDIATED IMPACT



## MEDIATED IMPACT

### CLIMATE CHANGE AWARENESS

### ENVIRONMENTAL CONCERN

- knowledge, education, climate change attitudes, personal values, political views

### ENGAGEMENT IN CLIMATE ACTION

- *Does it positively/negatively impact mental health and well-being?*

### EXPOSURE TO ENVIRONMENTAL COMMUNICATION AND (SOCIAL) MEDIA MESSAGES

- *The more we know, are we stressed less or more?*

### CLIMATE EMOTIONS

- eco-anxiety, climate depression, eco-trauma, climate grief





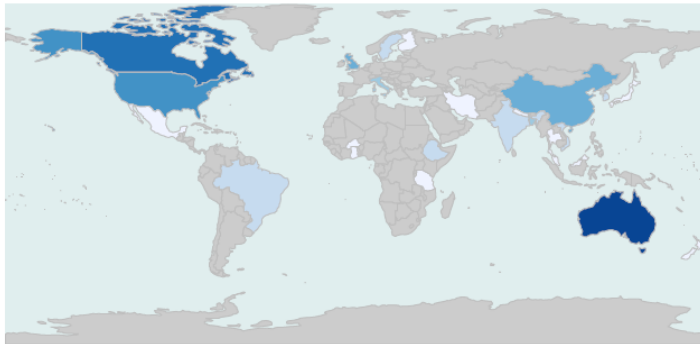


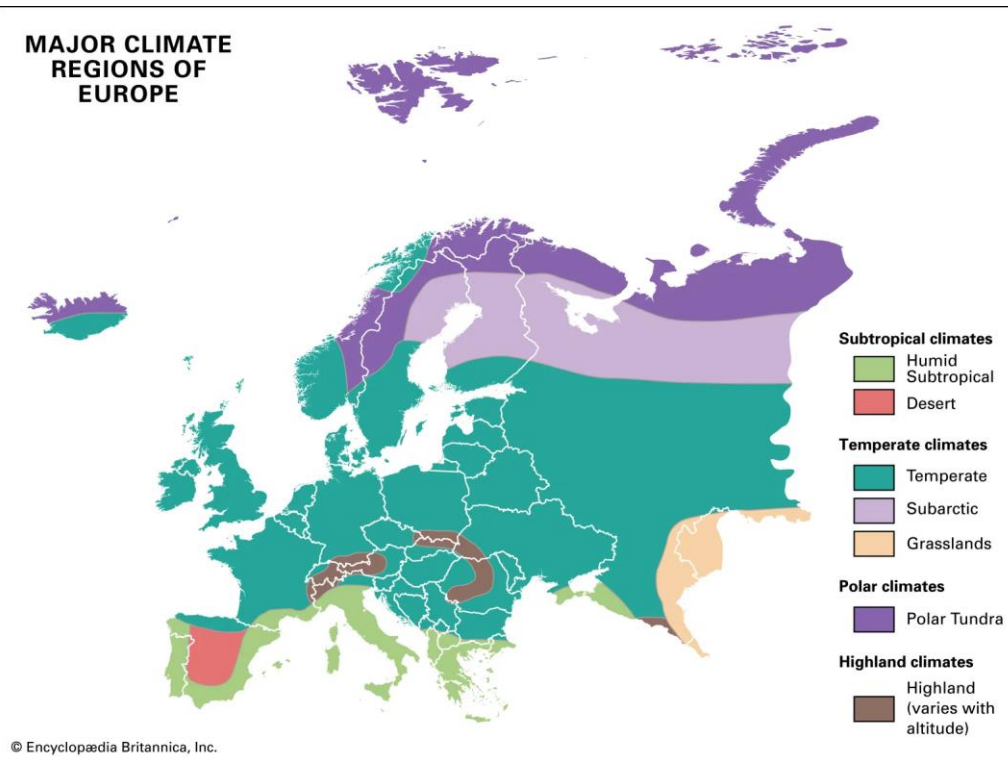
Figure 2. Map of included studies.

→ most research done in the regions **deeply touched** by climate change-related environmental degradation and extreme weather events (e.g., Australian wildfires and droughts, American hurricanes, Alaskan communities experiencing the sea ice melting)

There are more studies origin. in subtropical and arctic regions of Europe (and in UK) with no empirically-based understanding of the specific impacts in the temperate climate zone (charact. by less extreme weather and slowly stepping changes).

## Why we need knowledge specific to Europe?

→ in (Middle) Europe actual consequences of climate change are not yet as tangible and severe, every-day consequences of climate crisis **for most of the people** are not yet a lived reality (but: *increase in sub-extreme events*)







## What we know about Europe?

### ORIGINAL ARTICLE

Risk factors for heat related death during the August 2003 heat wave in Paris, France, in patients evaluated at the emergency department of the Hôpital Européen Georges Pompidou

A Davido, A Patzak, T Dart, M P Sadier, P Méraud, R Masmoudi, N Sembach, T H Cao

Emerg Med J 2006;23:515-518. doi: 10.1136/emj.2005.028290

Comparative Study > Actas Esp Psiquiatr. 2009 May-Jun;37(3):158-65.

[Impact of the summer 2003 heat wave on the activity of two psychiatric emergency departments]

[Article in Spanish]

A Bulbena <sup>1</sup>, L Sperry, C García Rivera, A Merino, G Mateu, M Torrents, J San Gil, J Cunillera

indirect impact of heatwaves is well-documented in Europe; there is virtually no research on direct impacts of mental health of: drought, flooding, bushfire, forced migration, loss of income

empirical studies origin. in Europe concern mainly mediated impacts

Springer Link

Open Access | Published: 22 October 2021

Anxiety and climate change: a validation of the Climate Anxiety Scale in a German-speaking quota sample and an investigation of psychological correlates

Marlis C. Wullenkord , Josephine Tröger, Karen R. S. Hamann, Laura S. Loy & Gerhard Reese

Clim

7412

**Associations between Mental Health, Lifestyle Factors and Worries about Climate Change in Norwegian Adolescents**

by Marja Leonhardt <sup>1,\*</sup> , Marie Dahlen Granrud <sup>2</sup>, Tore Bonsaksen <sup>2,3</sup> and Lars Lien <sup>1,2</sup>

**Ecological Grief as a Response to Environmental Change: A Mental Health Risk or Functional Response?**

by Hannah Comtesse <sup>1</sup> , Verena Ertl <sup>1</sup> , Sophie M. C. Hengst <sup>2</sup> , Rita Rosner <sup>1</sup> and Geert E. Smid <sup>2,3,\*</sup>

zmiany klimatu

**Depresja klimatyczna, czyli gdy zmiany klimatu niszczą twoją psychikę. "Coraz częściej ludzie nie chcą zakładać rodzin"**

WYBĄD | Szymon Bujalski 6 września 2019 | 01:13

Springer Link

Published: 27 July 2022

On climate anxiety and the threat it may pose to daily life functioning and adaptation: a study among European and African French-speaking participants

Alexandre Heeren , Camille Mouquiana-Daouda & Alba Contreras



European Journal of Psychotraumatology

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/zept20>

**Climate change, trauma and mental health in Italy: a scoping review**

Alessandro Massazza, Vittoria Ardino & Rita Erica Fioravanzo

To cite this article: Alessandro Massazza, Vittoria Ardino & Rita Erica Fioravanzo (2022) Climate change, trauma and mental health in Italy: a scoping review, European Journal of Psychotraumatology, 13:1, 1-16, DOI: [10.1080/20088198.2022.2046374](https://doi.org/10.1080/20088198.2022.2046374)

To link to this article: <https://doi.org/10.1080/20088198.2022.2046374>

CE MAL DU PAYS SANS EXIL. LES AFFECTS DU MAUVAIS TEMPS QUI VIENT

Baptiste Morizot

Editions de Minuit | Critique >

2019/1 n° 860-861 | pages 166 à 181

ISSN 0011-1600

ISBN 9782707345219

RESEARCH ARTICLE | APPLIED BIOLOGICAL SCIENCES |

**Climate risk to European fisheries and coastal communities**

Mark R. Payne , Manja Kudahl , Georg H. Engelhard , and John K. Pinnegar [Authors Info & Affiliations](#)

Edited by Alan Hastings, University of California, Davis, CA, and approved July 26, 2021 (received for review August 26, 2020)

September 28, 2021 | 118 (40) e2018086118 | <https://doi.org/10.1073/pnas.2018086118>

Springer Link

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Open Access | Published: 07 December 2020

The health and well-being effects of drought: assessing multi-stakeholder perspectives through narratives from the UK

Kimberly Bryan, Sarah Ward, Lindsey McEwen [+ Show authors](#)

Climate Change 163, 2073-2095 (2020) | [Cite this article](#)

**A journey with Greece's last nomadic shepherds**

The sustainable farming practice of herding sheep hundreds of kilometers dates back millennia. We meet the people keeping the tradition alive despite pressure from industrialized agriculture, tourism and climate change.



## Vulnerable groups (groups of concern) in European region

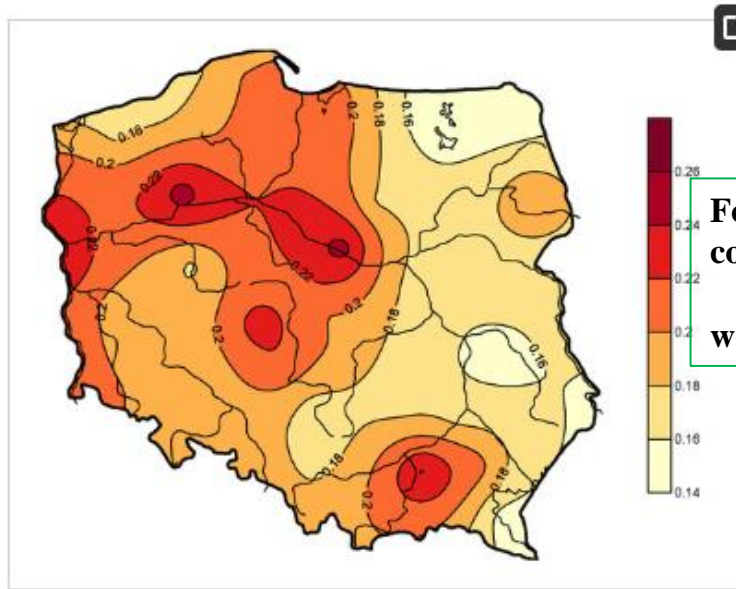
→ Populations of concern in terms of mental health and wellbeing usually identified in the „so far intact” regions (Global North) – **vulnerable to mediated impacts:**

- **youth (children, teenagers, young adults)**
- **parents (and *possible parents*)**
- **individuals with preexisting mental health difficulties (*whistleblowers*)**
- **mental health practitioners**
- **environmentalists (climate activists, journalists)**
- **academics (students and teachers, environmental scientists)**

There seems to be an assumption that mediated mental health impacts (*eco-anxiety kind*) are specific for European societies (almost no research and reflection on specificity of indirect impacts)

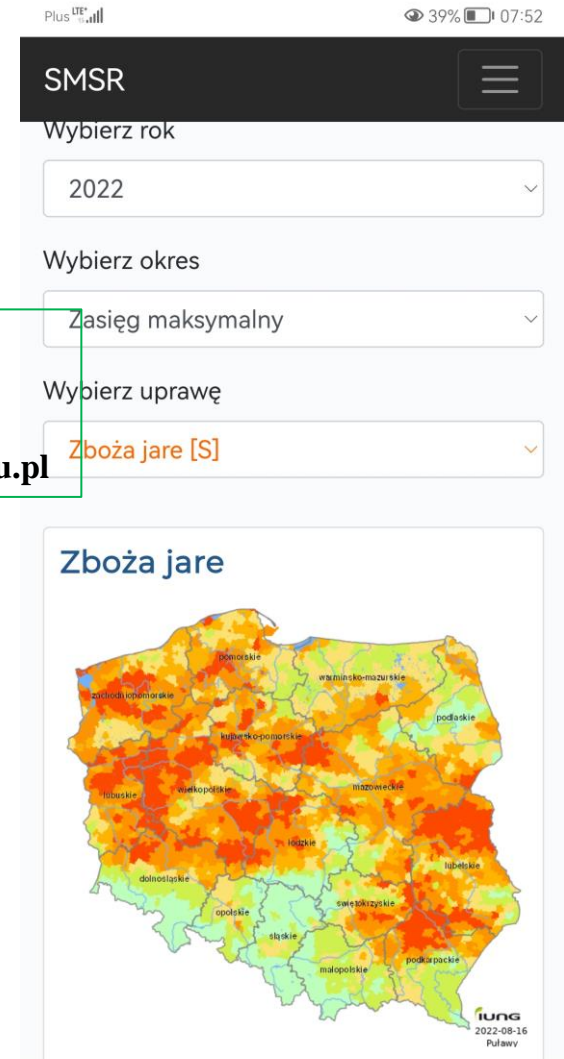


## A case of Poland – characteristic for a temperate climate zone (a significant part of Europe)



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**Figure 10.** Isarithms of the coefficient of variation of yearly precipitation totals in Poland in 2001–2018. Ziernicka-Wojtaszek A, Kocińska J. Variation in Atmospheric Precipitation in Poland in the Years 2001–2018. *Atmosphere*. 2020; 11(8):794.

- IPCC: water scarcity in Central and Western Europe
- agricultural drought (increasing variety in temperature and precipitation, floodings, change in seasonality)
- relative loss on income, (psychological) loss of stability and predictability, altered relationship to land and weather etc.



***Eco-anxiety*** as an umbrella term and a (politically loaded) performative (Kalwak & Weihgold, in press).

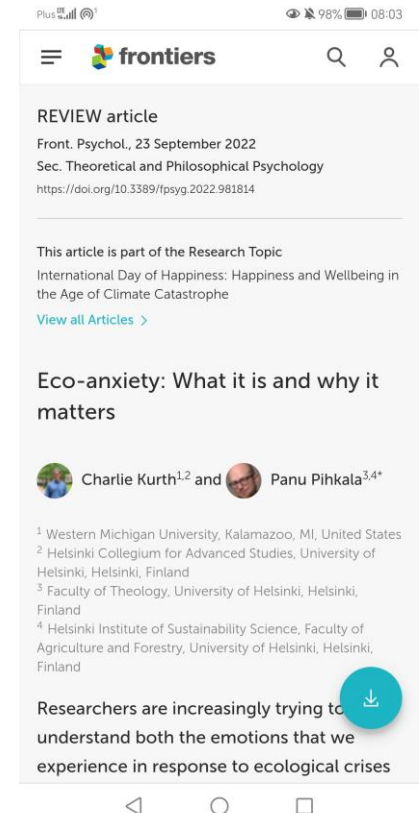
→ Finally, we don't know what is really hidden inside it.

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Are there (*indigenous*) **traditional communities** in Europe impacted by or vulnerable to climate change?

→ Finally, is it just to think only about them in terms of *loss of connection to land*, and about ourselves in terms of *educated environmental concern*?





**Thank you!**

**Looking forward to hear your questions and comments.**

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