



Table of Contents

| 1. Note from IRIS Sustainable Development | 3 |
|---|---|
| 2. Climate change impacts in Poland | |
| 3. Survey Results | |
| 4. Key Conclusions | |
| 5. References | |

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Note from Iris Sustainable Development

Anxiety relating to a multitude of ecological crises, or eco-anxiety, is a subject of growing research significance. The main idea of the first report series is to establish an international overview of eco-anxiety rates in 20 countries utilizing the HEAS scale and correlate these rates with variables of geographical location (urban, rural), education as well as the type of experiencing climate crisis (indirectly via the media or public discourse).

More precisely, the main objectives of this report series is to:

- create an international overview of eco-anxiety rates in 20 countries
- contribute to the growing body of knowledge around to what extent the climate crisis affects mental health identifying possible differentiation on eco-anxiety determinants
- raise awareness on the impact of climate crisis on mental health

The target group of the Polish national report are citizens of Poland and/or people (ages 18-50) that are/have experiencing climate change in the country.





Climate change impacts in Poland

The Polish climate is characterized by a high degree of weather variability and significant changes in the course of each season. Annual average air temperatures range from 5°C to nearly 9°C. The warmest area is the southwestern part of Poland, while the coldest is the north-eastern part of the country and in the mountain areas. A distinctive feature of Poland's climate characteristic is the number of cold days (with maximum temperatures below 0°C) the country experiences mostly in January. Poland is located in a moderate climate zone and is dominated by four distinct seasons, Autumn from September to November; Winter from December to February; Spring from March to May; and Summer from June to August. Poland has an additional two periods described as early spring (przedwiosnie) and early winter (predzimie). January and February are typically the coldest months. Agricultural cropping seasons, typically occur from spring to autumn. (World Bank, 2023)

Greenhouse gas emissions

Greenhouse gas emissions and carbon dioxide emissions have increased in Poland between 2000 and 2018. In 2021, approximated domestic greenhouse gas (GHG) emissions in Poland were 401.3 MtCO2-eq, 6.7% higher compared to 2020 and 2.7% above pre-pandemic levels. Overall, net domestic emissions, including the Land Use, Land Use Change and Forestry (LULUCF) sector, were 20.1% lower than 1990 levels (European Commision, 2023).



Source: https://www.euractiv.com/section/air-pollution/opinion/clean-air-for-everyone-poland-challenges-smoq/



Climate change impacts in Poland

Extreme weather events

Poland faced a stark departure from its norm in the summer of 2015 when a heatwave swept across the country. Temperatures soared above 35 degrees Celsius (95 degrees Fahrenheit), with cities like Wroclaw and Poznan experiencing record-breaking highs. The intense heat strained energy infrastructure, posed health risks, and prompted concerns about the impact on agriculture and water resources.

In 2017, Poland grappled with another facet of extreme weather as the region experienced prolonged drought conditions. Reduced precipitation levels affected agricultural productivity, particularly in the agricultural heartland of Wielkopolska, where farmers faced challenges with crop yields and water scarcity. The event highlighted the delicate balance between sustaining agricultural output and managing the impacts of changing precipitation patterns. Poland's southern mountainous regions, including the Tatra Mountains, have witnessed shifts in winter weather patterns. Reduced snowfall and milder temperatures have impacted winter tourism and ecosystems, prompting discussions about the resilience of alpine landscapes in the face of a changing climate.

The Baltic Sea, bordering Poland's northern coast, has experienced changing sea levels and temperature patterns. Coastal areas, such as the resort town of Sopot, have faced erosion and storm surges, illustrating the interconnected challenges posed by climate change on both marine environments and coastal communities.

Additionally, the country has more than 253 rivers with a total length of 14,871 km that have been recognised as a risk of flood. More than half of the polish municipalities are endangered, with flood risk increasing with urbanisation and urban sprawl which increases the amount of impermeable surface. As a result, flash flood risk will increase, increasing the vulnerability of the country.

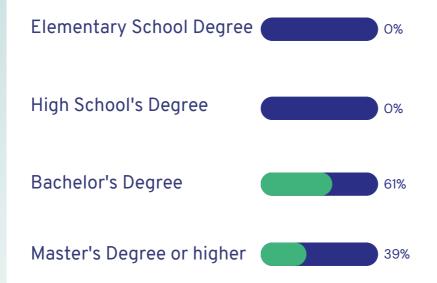
Poland has a 500km long coastline situated along the Baltic Sea. One feature of its coastline is the presence of a chain of coastal barrier lakes, only narrow coast barriers separate the low-laying lakes and the sea. As an effect of climate change and the severity of storm conditions observed since the 1970s, the risk of flooding on Poland's coastline will increase. One of the reasons is the rise of sea levels, but also long-lasting storm surges which can cause flooding along estuaries dozens of kilometres inland.



Survey results

LOCATION Urban Area 78% Rural Area

EDUCATION

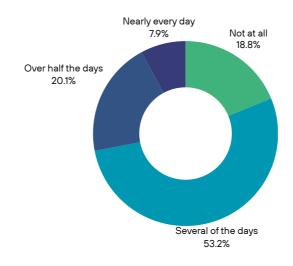




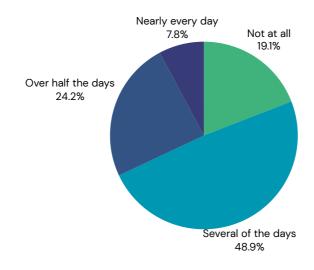
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.

Feeling nervous, anxious or on edge



Not being able to stop or control worrying

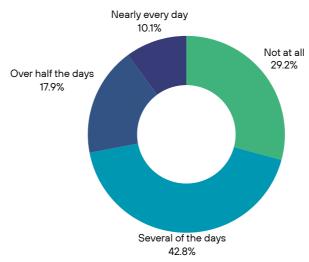




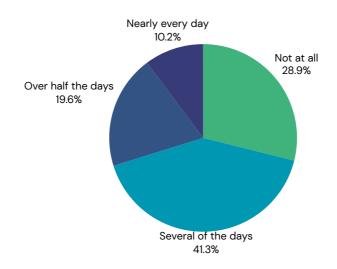
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Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.

Worrying too much



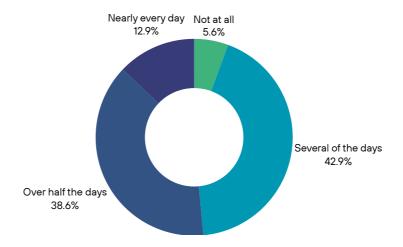
Feeling afraid



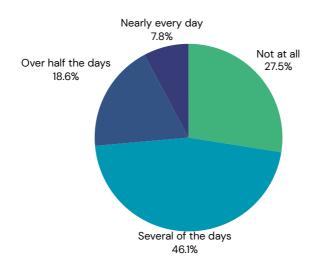


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Unable to stop thinking about future climate change and other global environmental problems



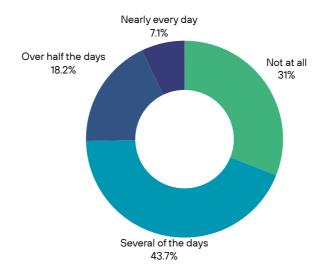
Unable to stop thinking about past events related to climate change



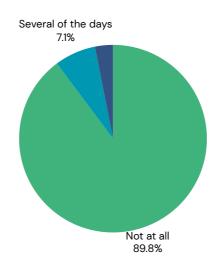


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Unable to stop thinking about losses to the environment



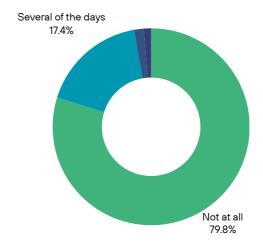
Difficulty sleeping



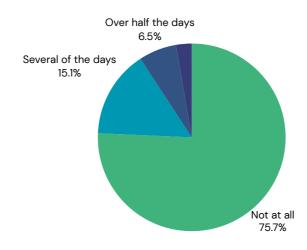


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Difficulty enjoying social situations with family and friends



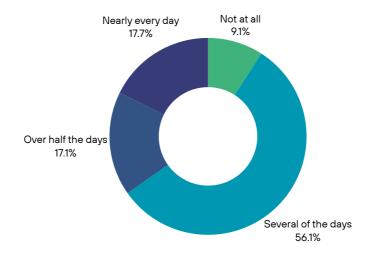
Difficulty working and/or studying



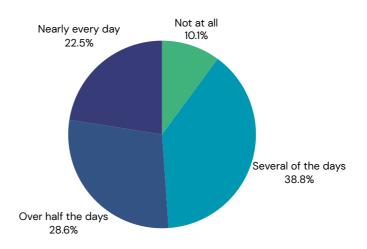


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Feeling anxious about the impact of your personal behaviours on the earth



Feeling anxious about your personal responsibility to help address environmental problems

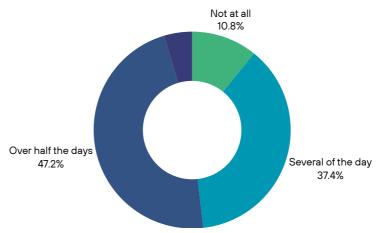




Survey results: The Hogg Scale and Beliefs about climate change

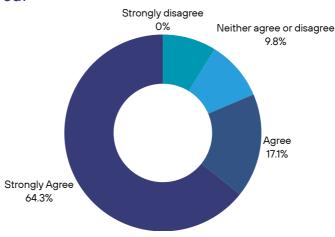
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Feeling anxious that your personal behaviours will do little to help fix the problem



Beliefs about Climate Change

Climate change is real

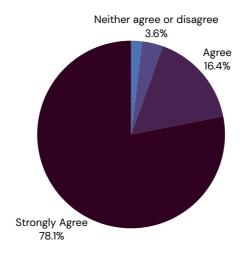




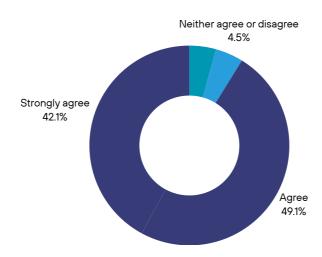
Survey results: Beliefs about climate change

Beliefs about Climate Change

Climate change is caused by humans



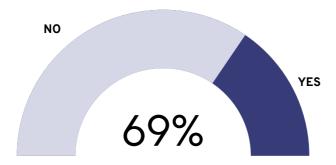
Climate change is reversible





Survey results: Beliefs about climate change

Do you have direct experience of environmental crisis?



I am experiencing climate crisis indirectly via the media or public discource



Which climate disaster made you feel nervous (in your country or globally), if any

| Floodin | gs |
|----------|------|
| Wildfire | es . |



Key Conclusions

Our research reveals a notable prevalence of eco-anxiety among the Polish population, reporting varying degrees of eco-anxiety. This underscores the significance of the issue and the need for further investigation and intervention

In terms of the interplay between eco-anxiety and specific variables significant differences in eco-anxiety rates were observed across various demographics. Notably, the geographical location of participants was strongly interconnected with eco-anxiety. It is important that the 78% of the respondents are urban residents and they are exhibited higher levels of eco-anxiety compared to their rural counterparts. Additionally, while a slight correlation with education was observed, we address that eco-anxiety can be experienced via media and public discourse, since the 78% has expressed that is experiencing eco-anxiety indirectly. This indicates that the media and information consumption play a substantial role in shaping eco-anxiety levels since participants who reported frequent exposure to alarming environmental news or content experienced higher levels of eco-anxiety. Simultaneously, the study found a strong link between eco-anxiety and heightened concerns about environmental issues. Respondents who expressed high levels of eco-anxiety consistently cited factors and events such as wildfires, ice melting, and floodings as major sources of distress.

The findings of this research underscore the urgency for policymakers to address ecoanxiety as a public health concern. Developing sustainable environmental policies, educational campaigns, and psychological support services can help mitigate ecoanxiety and its associated mental health issues. This study provides a foundation for future research on eco-anxiety. However, further investigations into the long-term consequences of eco-anxiety, the effectiveness of interventions, and potential policy changes are essential for a comprehensive understanding of this emerging issue.

In conclusion, our research highlights the significant eco-anxiety rates in Poland and the need for multidisciplinary efforts to address this concern. Addressing eco-anxiety is not only crucial for the mental well-being of individuals but also for the sustainable future.



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