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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 hypothesis that will be tested during this research will be the following:

- H1: Eco-anxiety rates correlates with geographical location (urban, local)
- H2: Eco-anxiety rates correlates with education
- H3: Eco-anxiety can be experienced indirectly via media and public discourse

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





Climate change impacts in Belgium

Belgium has a temperate maritime climate characterized by moderate temperatures, prevailing southerly to westerly winds, abundant cloud cover and frequent precipitation. Summers are relatively cool and humid and winters relatively mild and rainy. Observed temperatures have revealed a significant upward trend since the end of the 19th century. In recent years, the temperature shows a constant increase of 0.4 °C per decade. Precipitation in Belgium reveals high variability over time, with a slow, but significant, rising trend. Significant increase in annual accumulations have been observed (about 7%), as well as winter and spring accumulations (approximately 15%). The number of days with heavy precipitation and the maximum amount of precipitation in 5, 10 and 15 days have also increased significantly. (World Bank, 2023)

Greenhouse gas emissions

Greenhouse gas emissions in Belgium are predominantly driven by its industrial sector, which encompasses a diverse range of activities, from steel production to chemical manufacturing. The country's strategic location as a transportation hub further contributes to emissions, as does its reliance on fossil fuels for energy.

One of the key contributors to Belgium's carbon footprint is the steel industry, a cornerstone of the nation's economy. Steel production, while vital for economic growth, emits substantial amounts of carbon dioxide. Efforts to decarbonize this sector have become a focal point for policymakers and industry leaders alike, as they explore innovative technologies and sustainable practices to reduce emissions without compromising competitiveness.

The transportation sector also plays a significant role in Belgium's emissions profile. As a crossroads for European trade and travel, the country faces the challenge of curbing emissions from road, air, and maritime transportation. The government has initiated policies to incentivize the adoption of electric vehicles, invest in public transportation infrastructure, and explore alternative fuels to gradually shift away from reliance on traditional fossil fuels.

Emissions per capita for 2019 were the seventh highest in the Union. The Belgian per capita level decreased at a slightly faster rate than average EU27 per capita emissions between 2005 and 2014. Going against the EU27 trend, per capita emissions in Belgium did not decrease between 2016 and 2019. The difference has become smaller, however, from 3.6 tonnes CO2 equivalent (tCO2e) per capita above the EU27 average in 2005 to 2.4 tCO2eper capita above in 2019 (EP, 2021)



Climate change impacts in Belgium

Extreme weather events

Belgium has become a silent battleground for the relentless forces of climate change, grappling with a decade of extreme weather events that have reshaped its familiar landscapes and challenged the resilience of its people. From torrential rains and catastrophic floods to heatwaves that defy historical norms, Belgium finds itself caught in the throes of a changing climate.

One of the most emblematic events of this climate saga unfolded in July 2021 when Belgium experienced catastrophic floods that shocked the nation and the world. The usually serene rivers, including the Meuse and the Ourthe, swelled to menacing levels, inundating towns and villages in the Ardennes region. The town of Pepinster, in particular, bore the brunt of the deluge, with entire neighborhoods submerged and infrastructure crumbled under the force of the rushing waters. The floods left a trail of destruction, claiming lives and displacing thousands, forcing Belgians to confront the stark reality of climate change in their own backyard.

In the summer months, Belgium has also witnessed a disturbing increase in heatwaves, challenging the nation's reputation for moderate temperatures. The summer of 2019 saw record-breaking temperatures, with thermometers soaring well above 40 degrees Celsius (104 degrees Fahrenheit). Cities like Brussels and Antwerp, unaccustomed to such scorching heat, grappled with the impacts on public health, agriculture, and energy demand. The heatwaves strained resources and strained the capacity of Belgium's infrastructure to cope with extreme conditions.

These extreme weather events are not isolated incidents but part of a larger pattern that includes more frequent and intense rainfall. Flash floods have become a recurrent nightmare, disrupting daily life and causing considerable damage. In recent years, cities like Liège and Namur have experienced intense downpours that overwhelmed drainage systems, turning streets into rivers and leaving residents stranded.





Survey results

LOCATION



Urban Area





Rural Area



EDUCATION

Elementary School Degree



High School's Degree



Bachelor's Degree



Master's Degree or higher

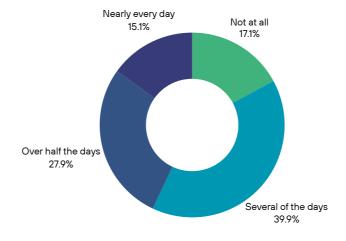




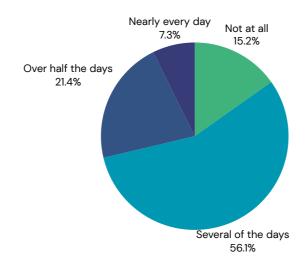
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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

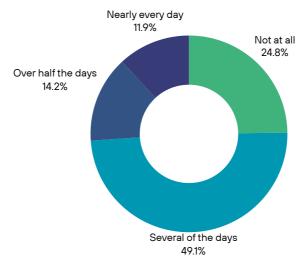




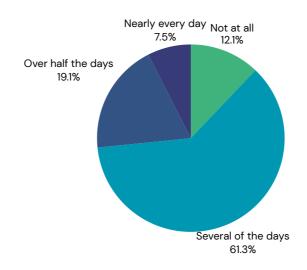
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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

Worrying too much



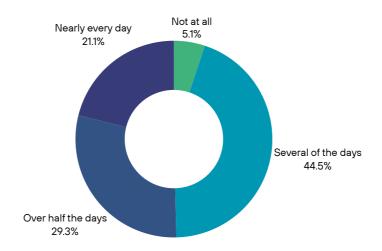
Feeling afraid



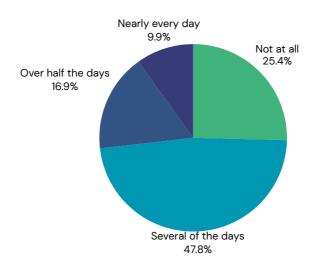


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



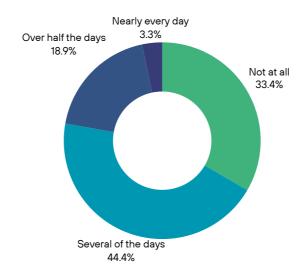
Unable to stop thinking about past events related to climate change



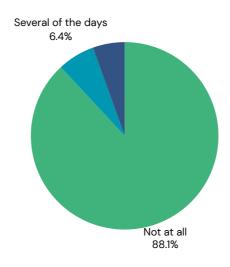


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Unable to stop thinking about losses to the environment



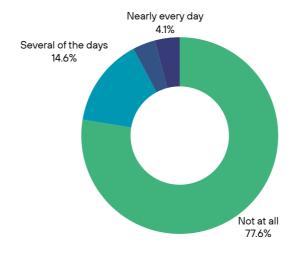
Difficulty sleeping



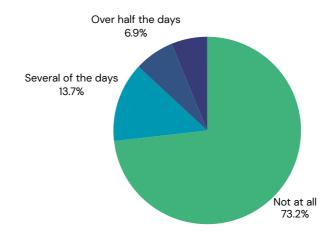


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

Difficulty enjoying social situations with family and friends



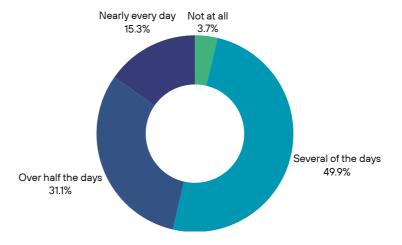
Difficulty working and/or studying



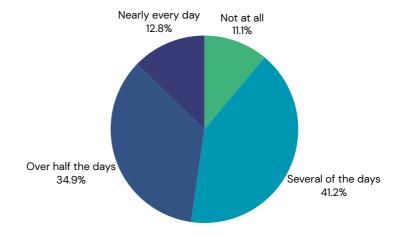


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



Feeling anxious about your personal responsibility to help address environmental problems

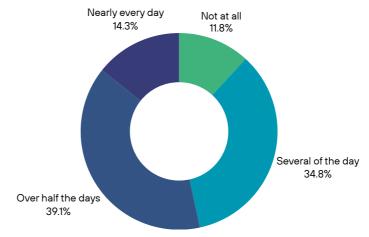




Survey results: The Hogg Scale and Beliefs about climate change

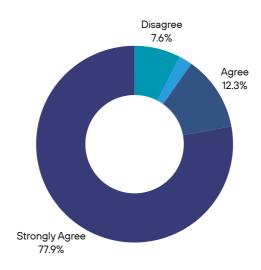
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



Beliefs about Climate Change

Climate change is real

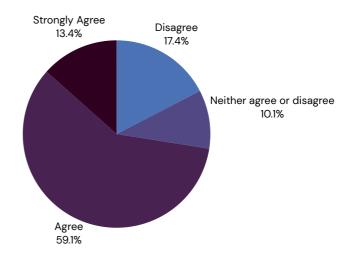




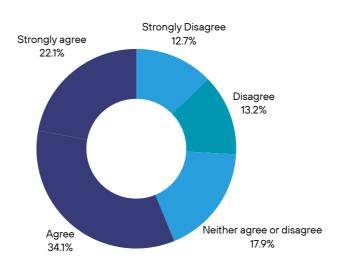
Survey results: Beliefs about climate change

Beliefs about Climate Change

Climate change is caused by humans



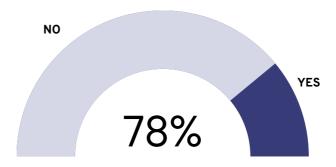
Climate change is reversible





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

	Floodings
Wildfires	
Global Warming	Heatwaves



Key Conclusions

Our research reveals a notable prevalence of eco-anxiety among the Belgian 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 correlation 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 correlated with eco-anxiety. It is important that the 81% 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, the most significant correlation was found with the variable of indirect experience via media discourse, since 82% has expressed that is experiencing eco-anxiety indirectly indicating 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 correlation 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 Belgium 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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European Parliament. (2021). The EU and Climate Change: Impacts, Opportunities, and Challenges. Retrieved from

 $\frac{https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690578/EPRS_BRI(2021)690578_EN.pdf$

World Bank. (2023). Climate Data Historical - Belgium. Climate Knowledge Portal.



