frontiers in Psychology

TYPE Original Research
PUBLISHED 09 November 2026
DOI 10.3389/fpsyg.2026.1960083

Check for updates

OPEN ACCESS

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RECEIVED 06 August 2026
REVISED 12 October 2026
ACCEPTED 14 October 2026
PUBLISHED 09 November 2026

CITATION
Oblak A, Holnthaner A, Zibelnik A, Ganslmeier J, Gregorič Bon N, Čoderl Dobnik S, Škodlar B and Bon J (2026) Inhabiting a wounded world: a qualitative phenomenology of ecological anxiety. *Front. Psychol.* 17:1960083. doi: 10.3389/fpsyg.2026.1960083

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Inhabiting a wounded world: a qualitative phenomenology of ecological anxiety

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Introduction: Ecological anxiety is defined as distress caused by awareness of the ongoing climate crisis. This qualitative phenomenological study aimed to describe how lived experience is altered in ecological anxiety.
Methods: We conducted 58 interviews with 30 participants who identified themselves as experiencing ecological anxiety. Interviews combined lifeworld analysis with a micro-phenomenological approach to explore specific experiential episodes. Transcripts were analyzed using constructivist grounded theory, with participant validation and intercoder verification.
Results: Participants reported fatigue, rumination, bodily symptoms, and sleep difficulties, alongside feelings of guilt, shame, and anger and heightened empathy toward humans and non-human entities. We identified two forms of ecological anxiety: informational, involving distress associated with information about the climate crisis, and experiential, arising from witnessing its consequences. A central phenomenological characteristic was a marked attitude toward information, including a perceived obligation to remain informed despite the associated distress. Participants also described altered temporality, feeling alienated from the future and rushed in the present. These temporal disturbances were intertwined with a pervasive loss of agency.
Discussion: Our findings suggest that ecological anxiety extends beyond discrete episodes of worry to broader alterations in participants' lifeworlds, which we conceptualized as a prereflective sense of inhabiting a wounded world. Within this predominantly European, highly educated sample, ecological anxiety also provided a framework for interpreting wider personal and societal concerns. These findings highlight the importance of considering informational, temporal, and social dimensions when understanding and addressing ecological anxiety.

KEYWORDS
climate crisis, ecological anxiety, polycrisis, qualitative phenomenology, eco-feelings, lifeworld analysis, micro-phenomenology

1 Introduction

Large scale disasters are associated with amplification of negative emotions that can evolve into psychiatric disorders (Chique et al., 2021; Cuijpers et al., 2023; Gawrych, 2022; Marazziti et al., 2021; Ramadan and Ataallah, 2021; Ramadan et al., 2023; Rus Prelog et al., 2022; White et al., 2023; Woodland et al., 2023). In particular, exposure to environmental disasters represents a risk factor for depression, anxiety, and post-traumatic stress disorder (PTSD) and is also

associated with adverse developmental trajectories of children (Barkin et al., 2021; Gislason et al., 2021; Martin et al., 2022; Olson and Metz, 2020; Ramadan et al., 2023; To et al., 2021; Walinski et al., 2023). While many researchers have investigated the direct effects of environmental disasters on mental health, others have pointed out that merely having an abstract awareness of climate crisis while living in otherwise unaffected areas can be detrimental to one's psychological wellbeing (Ramadan et al., 2023; Soutar and Wand, 2022).

The term polycrisis refers to a theoretical framework describing the post-Cold-War world. Initially linked with globalization, this concept now emphasizes existential concerns like climate change and global military threats (Henig and Knight, 2023). Although the term recently became popularized, the origins of the concept can be traced back to Morin and Kern (1999), who argued that humanity is confronted not by a single defining crisis but by a constellation of interdependent ecological, economic and social crises that together constitute a single planetary crisis. Rather than treating these as separate problems, they emphasized their "complex intersolidarity," arguing that they require forms of thinking capable of addressing complexity and interdependance (Morin and Kern, 1999, p. 74). Building on their perspective, Hobson (2022) suggests that polycrisis echoes with a broader social and political apparatus of living in an imperfect world. Taking a processual lens, Henig and Knight (2023) further argue that the polycrisis is not a singular event, but an ongoing condition, characterized by unprecedented interrelations between various crises that are taking place on different spatial and temporal scales. They propose that viewing it through the lens of complexity and interconnectedness may reflect a positive bias. This paper will focus on how the ecological aspects of the polycrisis are reflected in lived experience.

Attitudes toward the climate crisis are often contradictory. Niedzwiedz and Katikireddi (2023) found that in Europe, those who worry about climate change are mostly women, highly educated, and in the minority. Conversely, Pohjolainen et al. (2018) emphasize eco-concern rather than eco-anxiety, noting that most Europeans feel at least some worry about climate issues. They argue that eco-concern can be a positive emotion, driving action and improving mental well-being.

Emotions are historically contingent phenomena (Hacking, 1996). For example, during the middle ages, hope, and the boredom while performing liturgy were recognized as distinct emotions (Boquet and Nagy, 2016). Fussell (2000) noted that in the wake of World War I, "valor" disappeared from public discourse as a distinct emotional state of great determination in the face of danger that was desirable among soldiers. Today, many speak of novel experiential states such as *fear of missing out* as distinct forms of affectivity (Liu et al., 2023). Relating to the climate crisis, Voşki et al. (2024) speak of so-called *eco-emotions*: complex and culturally varied affective states that refer to the environment and changes to it, primarily those driven by human factors (eco-anger, eco-grief, etc.).

One eco-emotion is solastalgia, which refers to the distress caused by environmental changes in one's hometown, particularly due to interventions such as large-scale mining (Albrecht et al., 2007). The term combines *solace* (comfort of home) and *algia* (pain). Cáceres et al. (2022) found that solastalgia is prevalent in areas affected by droughts and monoculture plantations, often co-occurring with post-traumatic stress disorder related to sudden changes in familiar environments. Another common affective state related to the climate crisis is *ecological anxiety* (EA). In a recent conceptual analysis of this term, Kurth and Pihkala (2022), and Pohjolainen et al. (2018) point out that EA is a practical emotion: it plays a meaningful role in how we make decisions. Nonetheless, conceptual issues remain. It is unclear to what extent are eco-feelings, such as EA related to themes of climate crisis, and to what extent are they related to other types of global crises that we are facing (e.g., wars) (Mento et al., 2023).

Calls have been made to design interventions to address psychiatric conditions triggered and exacerbated by the climate crisis (Baudon and Jachens, 2021), as well as to develop novel and reappropriate existing tools for better identification of symptoms (Cáceres et al., 2022; Olson and Metz, 2020). Additionally, researchers have pointed out that the current literature places too much focus on the acute states of eco-emotions without addressing broader societal dynamics shaping our psychology (Kałwak and Weihgold, 2022). Furthermore, psychological resilience represents an important protective factor against developing long-term psychiatric disorders associated with exposure to climate crises (e.g., extreme weather events) (Barkin et al., 2021; Baudon and Jachens, 2021; Olson and Metz, 2020; To et al., 2021). Resilience is broadly conceptualized as regulating negative emotions and having appropriate coping mechanisms when faced with stressors (Zager Kocjan et al., 2021). While associated with intrinsic neuronal dynamics (Perellón-Alfonso et al., 2022), it can be mediated with more adaptive ways of dealing with emotions. Nonetheless, as pointed out by Massazza et al. (2023) there is a poverty of literature investigating the coping mechanisms for combating the psychological effects of the climate crisis.

In light of these issues, the primary research question of the present study is to describe the phenomenological structure of EA. The present paper is interdisciplinary in its orientation. Throughout the text, we will employ concepts and modes of discourse from psychopathology, psychology, anthropology, and phenomenology to represent the lived experience of our participants.

2 Method

2.1 Sample

Thirty participants (22 women) signed an informed consent to participate in the study. They were, on average, 31.4 years old (SD = 11.8) and had 17.2 years of education (SD = 3.8). Fourteen had a formal diagnosis of psychiatric disorder: eight with major depressive disorder (one in remission for 30 years), eight with generalized anxiety disorder, two with obsessive-compulsive disorder, and two with acute transient psychotic disorder (both in remission for several years). Sixteen participants reported no formal psychiatric disorders, with one having a past experience of burnout, and another with neurodevelopmental disorder of dyslexia. The mixed psychopathological profile of the sample followed similar approaches for the study of psychopathology (Van Nieuw Amerongen-Meeuse et al., 2024).

Participants were recruited by contacting various Slovenian environmentalist agencies and non-governmental organizations (NGOs), as well as existing EU-wide projects dealing with the climate crisis (via Ana Zibelnik and Jakob Ganslmeier). As such, the participants were individuals residing in the European Union, except for one participant (EA-10) originally from Brazil but living in France. All participants are from affluent backgrounds with access to higher education and amenities, despite some reporting material and economic struggles. Participants were chosen based on their self-understanding as experiencing EA.

The study was approved by the internal review board of the University Psychiatric Clinic Ljubljana.

2.2 Data collection

Phenomenological interviews were conducted according to the technique of lifeworld analysis (Stanghellini, 2019; Stanghellini and Mancini, 2017). We explored participants' experiences of embodiment, space, time, others, emotions, and values. While these six themes guided our inquiry, we maintained an open-ended interviewing style, using closed questions mainly to validate emerging categories. We encouraged participants to provide pre-conceptual descriptions of their experiences (Husserl, 2012) and employed a micro-phenomenological approach (Petitmengin, 2006) to focus on concrete episodes of EA across all experiential modalities. This was essential, as participants often defaulted to discussing political beliefs or general opinions about the climate crisis.

2.3 Analysis

The interviews were transcribed verbatim and analyzed using constructivist grounded theory (Charmaz, 2014). Data collection and analysis occurred in parallel, starting with the existentialist position of radical beginnings (Watson, 2022): i.e., we allowed categories to emerge from the data. We used coding to apply abstract categories to sections of text based on conceptual similarity (Flick, 2009). The analysis had three stages: (1) inductive coding: constructing novel categories from the data, (2) inductive-deductive coding: applying existing categories to new data and refining them (for example, the category of climate crisis recognition was revised when it was found to be idiosyncratic) and (3) deductive coding: fitting a final taxonomy of experiential categories to the entire dataset.

In phenomenology, distinction is commonly made between *static* (i.e., analysis of momentary states), *genetic* (i.e., analysis of how one experience transforms into another), and *generative* (i.e., how broader psychological and cultural context impact experience) phenomenology (Thompson, 2010). At the level of analysis, the present study addresses all three types of data.

In the final stage, we created a codebook (Nelson, 2017), which serves to make the analysis tractable, allows independent research groups to understand our coding framework, ensures validity, and can be used to develop future research instruments. Each codebook entry includes a name, definition, relationships to other categories, examples, and additional considerations. The codebook is available in full at https://osf.io/2xw5f/.

2.4 Validation

As new experiential categories emerged, we validated them through consensual validation. Participants who were recruited earlier in the research process were invited for follow-up interviews. For later participants, validation occurred at the end of the interview session. We also used intercoder verification, where two researchers agreed on the final category taxonomy. To ensure sufficient data for theory construction, we tested for conceptual depth (saturation) using a saturation grid (Fusch and Ness, 2015). Figure 1 summarizes the novel categories observed for each participant. No new experiential categories emerged after the 25th participant, although the later categories were all related to emotion regulation strategies and coping mechanisms, which were highly idiosyncratic. Saturation for categories unrelated to emotion regulation was reached after the 17th participant.

3 Results

In total, 58 interviews were conducted (on average, 1.93 per person (*min* = 1; *max* = 5). The analysis of the qualitative material yielded 79 codes, which were organized into three levels of coding with higher levels representing higher degree of abstraction from the raw data (Figure 2).

Aspects of the lived experience of EA that clinicians in the group (Sana Čoderl Dobnik, Borut Škodlar, and Jurij Bon) recognized as potential clinical symptoms included fatigue, avolition, tangential thoughts (i.e., participants reported their mind was "racing," having "no control" over their thoughts, and that their interlocutors remarking that they were confusing in their speech), isolation (both in terms of feeling alone as well as self-isolating), and sleep difficulties. Ruminating was a common feature. Our participants reported on two types of ruminating: *looping* (rethinking the same scenarios over and over again), and *spiraling* (trying to find a solution for one's situation,

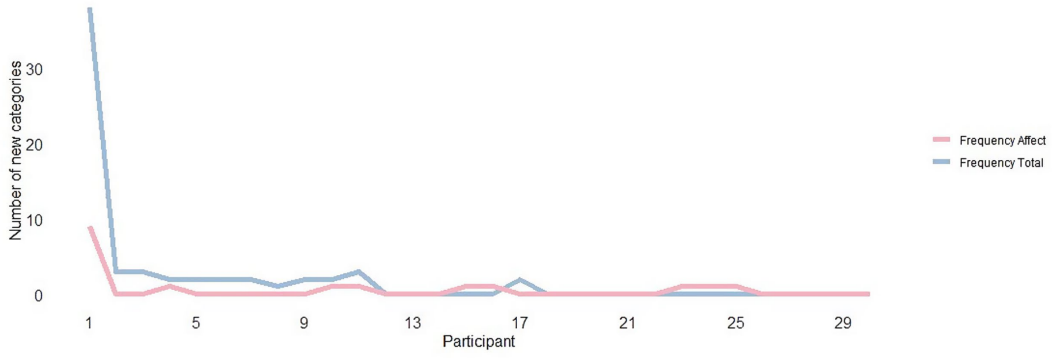

FIGURE 1
Visualization of conceptual depth. Experiential categories relating to emotion regulation are depicted in red; others are depicted in blue.

but encountering only a deeper problem)[1]. Many experienced unpleasant bodily sensations, typically tightness in the chest. Two participants had panic attacks, and one experienced severe suicidality (with a prior diagnosis of generalized anxiety), prompting her to seek psychiatric help. Two participants reported referentiality-like states. Referentiality is a phenomenon that is otherwise more common of psychosis-spectrum disorders where it refers to pervasive feelings of centrality (e.g., feeling as if others are talking about you). In the context of EA, our participants reported that they feel everybody knows they do not recycle or bring their own bag to the store.

For seven participants, EA was episodic, occurring for a limited time before subsiding. Twelve reported that their EA was linked to other psychological phenomena (e.g., fear of death, general sensitivity). Seven participants with psychiatric diagnoses noted that they understand EA as another aspect of their existing disorder. For others, it was a novel feeling, distinct from their usual state.

3.1 Emotional landscape of ecological anxiety

Fourteen participants described EA as an aspect of experience that is novel (i.e., not continuous with similar affective states such as trepidation or anxiety), with five noting a unique disposition toward the future, blending optimism, pessimism, and realism (which we, based on the phrase used by EA-06 coded as *optimism of will*). The participants themselves reported that it is this novel experiential structure of EA that makes it challenging to find effective coping mechanisms. Participants often used highly idiosyncratic ways of dealing with EA, such as fostering a disdain for humanity. Common coping methods included searching for community, compartmentalizing, dissociating, distraction, and adopting a restricted digital diet. Strategies that our participants appraised as most effective were seeking community and adopting a digital diet (see Table 1).

Participants frequently felt guilt and shame, both toward others whom they perceived as living in a more sustainable way and toward themselves for not meeting their ideals. Some likened EA to a cycle of sin and penance, being constantly aware of their environmental impact, which intensified when quantified (e.g., calculating their carbon footprint), leading to actions like increased recycling. The most prevalent emotion was anger, directed at themselves, and known individuals and distant figures seen as responsible for the climate crisis (e.g., the ultra rich). Finally, participants often reported heightened empathy toward both people and non-human entities.

> *I am not really afraid of the end of humanity. I am fine with that. I feel bad looking at the elephants migrating through China. […] But I know that they will not reach any place suitable for them. […] For me, it's individual, it's not statistical. […] it's not about a species dying out. (EA-15-01).*

3.2 The lifeworld of ecological anxiety

EA as we observed is a distinctly affluent phenomenon. By this, we do not mean that all of our participants come from privileged backgrounds (excluding, of course, the immense privilege of residing in Europe). Some struggle materially. But many also hold jobs that are typically perceived as desirable, such as researchers or physicians. Several of our participants are artists who have garnered considerable success and therefore comfort. EA, as reported by our participants, is an atmosphere that exist against a background of otherwise stable life paths.

Based on the narrow context of specific experiential episodes of EA, we constructed two types of EA: *informational* and *experiential*. Informational EA involves distress from engaging with information about the climate crisis, while experiential EA arises from witnessing its direct consequences. Experiential EA has four dimensions: offending objects (e.g., seeing a full trash can of plastic), noticing changes in nature (e.g., noticing the absence of bees), witnessing natural disasters, and experiencing the malignancy of the world (e.g., as experiencing extreme summer heat). Interestingly, experiential EA was experienced as less distressful. For some, witnessing a natural disaster provided a sense of clarity and agency, contrasted with the ambiguity of informational EA.

3.2.1 Marked attitude toward information

The lived experience of EA is characterized by a *marked attitude toward information.* In the lifeworld of a person with EA, there is an experience of what we framed as the *world-altering power of knowledge.* Indeed, for most participants, the experience of EA came about when they first learned about the climate crisis (e.g., in elementary school class or through a documentary). One participant, herself a trained ecologist, reported: "When I started studying this stuff, I suddenly started seeing it everywhere. Everywhere. In the lichens growing around me." (EA-15-01).

Concordantly, it is precisely by engaging with information that our participants tackled the feelings of EA. Participants report that *engaging in art and knowledge production* is a successful coping mechanism. One participant, for instance, who works for an environmental NGO saw the news about trees in the capital city being cut down. Initially, she felt a pronounced loss of agency, which was restored when she started writing a protest letter.

Participants commonly report on the *need to be informed,* otherwise they feel guilty for not caring about the climate crisis: "I was actively looking for this information. I wanted to know everything." (EA-22-01) Sometimes, engagement with information about the

TABLE 1 Frequency of participants reporting on specific emotion regulation strategies associated with ecological anxiety.

Experiential category	*f*
Searching for a community	12
Compartmentalizing	9
Dissociating/Detachment	7
Thinking about something else	7
Engaging in art and knowledge production	7
Abstaining from digital information	6
Apocalyptic imagery (positive)	4
Engaging in hobbies	3
Breathing and relaxation techniques	3
Cultivating a sense of oneness	3

1 We again observed *looping* and *spiraling* in a subsequent phenomenological study of ruminating (Oblak et al., 2026a).

climate crisis cannot be avoided. The environment forces it on the people, which, in turn, prompts them to overthink the existential situation at hand. We termed this phenomenon *extended ruminating*. We employed the clinical term "ruminating" as exposure to information about the climate crisis triggers lingering negative emotions in our participants:

> *The more that I paid attention to [the news], the more anxious I felt. Weighed down. Or helpless. Passive. It started seeping into my daily life. (EA-22-01).*

In most participants ($f = 22$), EA is associated with what we, from the third-person, researcher perspective, evaluated as *epistemic sprawl*. Our participants have a habit of setting loose boundaries around the idea of the climate crisis. In their minds, it starts to be related to everything. Sometimes these links are justified (e.g., decrease in biodiversity, rising levels of sea water, or food security). Somewhat relatedly, EA can be linked to the ongoing political situation. Several participants related it to the housing crisis. Finally, it can also be related to acts of stochastic terror or sexual violence:

> *So, what happened in Belgrade [a stabbing at a school]. And we do not even have to go so far geographically to talk about this. I know about two rapes that happened in the last week. […] So, this makes me think how truly broad this issue is. […] How it touches everything. How it is all connected. (EA-07-01).*

Thus, the experience of *epistemic sprawl* is characterized by an uncritical attitude toward ideas—which is sometimes apparent to people in conscious reflection:

> *I was reading a lot of National Geographic. And I was reading a biography of Bashar al Assad. And there was a documentary about Syria. And then I was reading a Dostoevsky novel where you had some poor farmers. […] And I wasn't really trying to understand the ideas. I just superficially connected them. […] It did not matter to me what the idea behind it really was. As long as there were certain similar keywords, I made the connection. (EA-21-02).*

On the other hand, it is apparent in participants' reports that they exhibit *low tolerance for uncertainty*.

> *I think the feeling that comes closest to this, or that is the easiest to identify with is having a pet, a cat, and knowing it is there. This field of uncertainty forms. […] [I]t is going to be unexpected. […] And this is then additionally related to me feeling very small and not being able to change anything. […] It is in a sense similar to living with a rowdy cat. (EA-21-03).*

Additionally, EA acts as a *unifying cosmology*. By this we mean that our participants derive causal explanations of what is going on in the world from this feeling:

> *[T]here is a lot of wind, if the clouds are really dark. […] Such weather events, of weather excesses, become related to these thoughts: okay, this is because of this. This is because of climate change. […] I know what the cause is, but it is so big that I feel I cannot really stop it. I cannot really contribute to stopping it. (EA-19-01).*

3.2.2 Marked attitude toward temporality

As mentioned above, our participants reported a distinct attitude toward the lived experience of time, especially the future. They anticipate the destruction of objects in their environment (e.g., imagining the shoreline disappearing). One of the older participants noted that, unlike in his youth when springtime buds on trees anticipated blooming, this sense is now absent:

> *I looked at the plants around me with fear. I did not know whether they would turn green again. […] Everything that I look at now, I am wondering whether it will be normal or will it already be something catastrophic. (EA-09-01).*

Many participants feel that the future does not exist, reporting: "There is actually no future" (EA-20-01) or "I feel a sense of hopelessness. [pause] Yeah, it's like there is no future." (EA-19-01) One participant, who reported feeling "alienated from the future" in an e-mail when arranging for her participation in the study, was unable to talk about it, during the actual interview:

> *I feel I bottled all of this up inside [dry laugh] […] I am trying to reflect on it, but it feels like I cannot access it at all. [pause] Perhaps we can return to this subject later. (EA-15-01).*

In general, this question was associated with high levels of distress in several participants. One participant asked for the interview to be terminated afterwards.

For many participants, the lived experience of alienation from the future grounds cognitive difficulties with planning:

> *[The future] is emptier. […] I do not feel much of it anymore. I am emptier now. I am focusing on the things I have to do until tomorrow. Or in one month. I am still stressed out but that feels more manageable. (EA-14-01).*

While the future is inaccessible, the present seems rushed:

> *I can see how things are accelerating. You cannot turn it off […] You can see that things are changing around you. So, there's a sense of panic. How little time we have left. How much we should have already done. (EA-07-02).*

For some ecological grief was associated with *solastalgia*, a sense of grief for the natural world that is being lost. As one participant explained, the emotional impact of ecological change was experienced less as a fear of future and more as a painful connection to a disappearing past:

> *I am not sure that there is an okay future awaiting us. […] But all of the things that I am describing to you are cold and intellectual to me. […] The thing that I feel is this grief for the past. That is what hurts more than some abstract idea about the future. (EA-21-01).*

3.2.3 Loss of agency

EA was reported to be characterized by a pervasive feeling of powerlessness, both individually and collectively. Individually, our participants primarily experienced *negative agency,* believing they can only worsen the climate crisis. One participant, concerned with the materials she used, adopted an ascetic lifestyle, denying herself things that would make her happy. Many reported that the experience of negative agency influenced drastic life choices (e.g., dropping out of university, deciding not to have children).

At a generative level of analysis, *loss of agency* was grounded in two experiential domains: temporality and the sense of self. In terms of temporality, there is an understanding that the fight against the climate crisis cannot be done in the short-term. It amounts to what one participant referred to as "an epochal struggle". Thus participants find it difficult to enact change in the present moment whose consequence might be seen in a year, a decade, or perhaps even a century:

> *This will only have an effect in a couple of generations. And my self-sacrifice will probably not lead to anything. (EA-20-01).*

Secondly, *loss of agency* was reflected in feelings of self-consciousness. People often feel silly, awkward or ashamed of their position on the climate crisis and so feel unable to act:

> *I said to my friend [that I was afraid of the storm] and she said ah, this part of Slovenia is not that windy. And then I felt a little bit silly. (EA-18-01).*

3.2.4 Being/world: ecological anxiety as a generalized experience of alienation

We construe the concept of EA as describing a particular way of inhabiting one's lifeworld. We refer to this lifeworld as *being/world*. Participants feel separated from the world, characterized by the "/" in the category name[2]. We conceptualize *being/world* as a form of background feeling (Colombetti and Ratcliffe, 2012); that is, it is an aspect of lived experience that is not in the foreground of consciousness (people need not always be thematically aware of it), but nonetheless forms a part of how it feels to be a certain person. As one participant remarked: "I do not know how to experience this awareness. It's kind of like breathing. […] It's a part of who I am." (EA-15-01) Similarly, "This feeling of *being thrown* is something that I would describe as a feeling that you have, throughout the day, of not being able to regulate yourself." (EA-18-01). We think of *being/world* as an aspect of experience that has two main dimensions: (a) an overarching sense of alienation; and (b) the sense of inhabiting a *wounded world.*

Sense of alienation might be triggered by hearing people remark that warm days in the middle of the winter are pleasant: "[I]t's dystopian because it feels like people are happy about it when they should not be." (EA-01-02) Participants could feel alienated from concrete individuals, but also from the culture in which they grew up:

> *I do not feel like I am a Slovenian or a Westerner […] We are wrapped up in a daily cycle of things that we must do. […] The pace of life is very rigid. Very fast. Everything must be structured. Everything must be productive. (EA-11-04).*

Finally, as we suggested above, our participants feel *alienated from (institutional) knowledge,* specifically, the body of knowledge that was generated after the Enlightenment with the scientific method:

> *[I]t is also something that I am noticing in the world. […] There is this idea that if you knew everything in the pre-internet era, if you knew about everything that is happening, you would go crazy, because we are just not built like that. And this is exactly what is happening. (EA-16-01).*

The second dimension of *being/world* is a background awareness of inhabiting a *wounded world.* Different participants conceive the world that is being lost in different ways. For many, what is being lost can be some sense of a mythical past where human beings existed in concert with nature. For others, what is being lost is the current state of society, which contains, for example, airplane travel and Erasmus exchange programs.

As mentioned above, the awareness of inhabiting a wounded world inheres in the background of participants' awareness. However, a genetic analysis[3] suggested that when they are faced with a *triggering event,* this awareness comes into the foreground:

> *So, the way in which I experience, um, ecological anxiety, I would describe it as, like, a force that stops me in the middle of the day. Um, especially when I'm thinking about the things that happen and I see no one taking action around me. (EA-23-01).*

When the *triggering event* takes place, participants become thematically aware of inhabiting a *wounded world.* Typically, this triggers symptoms of anxiety, described above, most notably ruminating (see Figure 2).

4 Discussion

Our participants recognized EA as a novel emotional state; that is, it amounts to an experience that they have not been familiar with from their earlier life. This novelty is associated with difficulties in recognizing, describing, and dealing with EA. In the reports, ecological concerns often took the form of ruminating, self-referential thinking that can trigger negative emotional states (Meyer et al., 2015). Ruminating is reported to impacting the etiology, persistence, and treatment outcomes of various mood disorders (Berman et al., 2011; Chu et al., 2021; Nolen-Hoeksema, 2000). As a form of worry, it is a core symptom across all anxiety disorders (Stahl, 2021) and correlates with

2 A similar conception of the polycrisis can be found in Zimmerman's (2025, p. 2) analysis from the perspective of contemplative studies. "Everything is riven," she describes insights from her meditations, "We humans have fractured it."

3 The annotated codebook contains relational codes that establish temporal links between categories.

Level 3	Level 2	Level 1	f
Signs and symptoms	Referentiality		2
	Fatigue and avolition		6
	Suicidality		1
	Panic attacks		4
	Tangential stream of consciousness		3
	Loneliness and isolation		7
	Bodily symptoms		15
	Disordered sleep		6
	Ruminating		14
		Looping	3
		Spiraling	4
	Apocalyptic imagery	Positive (fantasies)	4
		Negative (hauntings)	6
	Episodic structure of ecological anxiety		7
	Links with other psychological phenomena		
Emotional landscape of ecological anxiety	Specific emotions	Anger	9
		Guilt and shame	11
		Sin and penance	4
		Empathy	9
	Eco-feelings	Solastalgia	7
		Optimism of will	4
		cf. anxiety	8
	Emotion regulation and coping mechanisms	Common emotion regulation strategies	NA
		Idiosyncratic emotion regulation strategies	NA
Cognitive mechanisms	Being at cognitive or emotional capacity		5
	Cognitive complexity		10
	Systemic issue		10
	Uncertainty and low tolerance for uncertainty		12
Behavioral change			13
Looping effect of human kinds			4
Material conditions			4

Level 3	Level 2	Level 1	f
Object of ecological anxiety	Informational ecological anxiety		29
		Extended ruminating	10
		The need to be informed	4
		Marked attitude towards information	4
		World-altering power of knowledge	19
		Epistemic sprawl	22
		Art and knowledge confer agency	6
	Experiential ecological anxiety		25
		Offending object	5
		Malignancy of the world	9
		Witnessing the changing of nature	10
Loss of agency			23
	Loss of collective agency		13
	Loss of agency and self-consciousness		5
	Negative agency		7
Marked attitude towards temporality	Disturbance of lived future	Anticipation of the destruction of objects	2
		Alienation from the future	16
	Temporality and loss of agency		7
	Urgency and the rush of life		7
Being/world			29
	The world that is being lost	The world of youth	10
		The natural world	8
		Commonsense world	12
	Experiential microdynamics of being/world	Background awareness of inhabiting a wounded world	23
		Trigger	8
	Existential relevance	Providing purpose	5
		Devaluing of existential projects	9
	Sense of alienation		23
		Alienation from institutional knowledge	5
		Alienation from others	14
		Alienation from society	12
		Performativity	7

FIGURE 2
Taxonomy of experiential categories. Static phenomenological categories are presented on the left. Genetic and generative phenomenological categories are presented on the right. In both tables, the far right column represents in how many participants we observed a given experiential category.

anxiety and depression in individuals high in trait neuroticism (Singh and Mishra, 2023).

In our qualitative material, a common way of dealing with EA were what could be termed certainty-affirming practices (e.g., religion). It may be that EA is associated with low tolerance of uncertainty. This construct is a known predictor of anxiety disorders (Dugas et al., 1997). Anderson et al. (2012) link this intolerance to negative mental outcomes during crises, which can trigger adverse emotions. Additionally, low tolerance for uncertainty has been associated with problematic smartphone use and increased anxiety (Annoni et al., 2021; Liu et al., 2019). Interestingly, it can also serve as a protective factor during global crises, encouraging low-risk behaviors such as vaccination during the Covid-19 pandemic (Gillman et al., 2023). Furthermore, numerous studies highlight the importance of community support for mental well-being after natural disasters (Iwasa et al., 2021; Kwesell, 2022; Kwesell and Jung, 2021). Strong social ties act as a buffer that mitigates uncertainty, thereby protecting against pathological responses to traumatic events.

Our participants reported highly idiosyncratic coping mechanisms for their feelings of EA. They reported general difficulties with regulating EA, citing (a) that there was sufficient external evidence that their feelings were justified; and (b) the sense that this is a new kind of emotional state that they do not recognize and therefore cannot control. Reflecting our findings, Orrù et al. (2024) found a link between emotion dysregulation, future-oriented worries, and EA.

4.1 Information and uncertainty

In our study, a central aspect of the lived experience of EA is a *marked attitude toward information.* Participants exhibited what we termed *epistemic sprawl*, a cognitive pattern characterized by broad inclusion of concepts related to the climate crisis with low specificity.

A related phenomenon might be the notion of *concept creep*. Coined in the context of meta-psychology by Haslam (2016), it refers to the ever-expanding notion of disorders. *Outward concept creep,* specifically, refers to researchers including ever broader, seemingly unrelated phenomena in a specific concept. Furthermore, *Epistemic sprawl* may be linked to overinclusive thinking, a cognitive phenomenon characterized by sweeping associations, which often lack clear logical connections (Andreasen and Powers, 1974).

We hypothesize that the loosening of conceptual boundaries may be related to two factors. Firstly, the complexity of modern societal issues is often viewed through the lens of the polycrisis. As such it integrates ecological, economic, and geopolitical challenges. Secondly, information about the climate crisis is primarily consumed through social media, which mixes climate news with personal and political updates.

In relation to the first factor, the polycrisis is associated with a breakdown of public's faith in institutions (e.g., universities) (Slavik et al., 2026). Fonagy and Allison (2014) developed the concept of *epistemic trust;* that is, a person's capacity to trust in the bodies of knowledge provided by others (e.g., scientists, medical professionals). Disruption of epistemic trust is thought to lead to heightened feelings of anxiety. Low epistemic trust increases base level of uncertainty, which, coupled with high sensitivity to ambiguous information, leads to anxiety. Furthermore, in states of low epistemic trust, individuals exhibit self-isolating behaviors further exacerbating anxiety.

This is related to the second hypothesized factor: information consumption. Excessive information consumption is associated with psychiatric disorders like depression, anxiety, and increased aggression. Additionally, rumination mediates the relationship between social media use and increased anxiety during the Covid-19 pandemic (Stone and Veksler, 2022), suggesting that it is made worse by global crises.

4.2 Disturbed temporality

Our participants reported a notable attitude toward temporality, specifically a sense of a distant or inaccessible future. Distorted experiences of time are common across various psychopathologies (Fuchs, 2005; Moskalewicz and Schwartz, 2020; Owen et al., 2015; Stanghellini et al., 2017). For instance, individuals with depression may feel time slowing down, feeling trapped in the present and unable to change or grow (Stanghellini and Mancini, 2017). This altered perception can affect social cognition, as they may feel out of sync with others. While a marked attitude toward temporality is a common characteristic across psychiatric disorders, EA presents unique alterations in lived time that warrant consideration.

Our participants reported the future to be experientially nonexistent. Participants described their marked attitude toward futurity in two ways. First, they reported experiencing flashforwards of apocalyptic scenarios, which may indicate a disturbance in perceptual intentionality (i.e., not consciously differentiating between different modalities of intentionality, such as memory, planning, and imagination; Parnas et al., 2005). Perception is not merely an event for cognizing agents; each perceptual act involves a specific kind of intentionality, meaning consciousness is always directed at something (Brentano, 2015; Slaby, 2008; Slaby and Stephan, 2008). We speculate that in EA, an imagined future overlays object perception without participants necessarily intending to imagine it. Instruments such as the Examination of Anomalous Self (EASE; Parnas et al., 2005) and World Experience (EAWE; Sass et al., 2017) semi-structured interviews, which explicitly inquiry into modality of intentionality, could be used to test this hypothesis.

Second, participants experienced disturbances of futurity on a broader scale, often reporting a sense that the future does not exist. For example, one participant doubted that winter branches would bloom again. We interpret this through Sartre and Moran's (2020) phenomenology, which posits a teleological aspect to our experience of time: we are drawn to future events both perceptually (e.g., anticipating the fullness of a new moon) and existentially (e.g., a medical student envisioning herself as a physician). Our participants report that in EA, this connection to the future feels severed, leading participants to make drastic life choices, such as quitting university or deciding not to have children.

Several participants, all active in environmentalist communities, found Morton's (2013) philosophy helpful in making sense of their confusing feelings about EA. Morton coined the term *hyperobject* to describe phenomena such as global warming, which are so vast in time and space that they defy comprehension as distinct events. Anthropological studies of the Anthropocene, such as Ahmann's (2018) ethnography on a trash incinerator in Maryland, United States, describe *slow violence,* characterized by gradual, often imperceptible harm and deferred consequences. Ahmann (2018) concludes that slow violence invites incoherence, a sentiment echoed in our findings.

In how we construed our categories, the climate crisis' extended temporality relates to both *epistemic sprawl* (difficulty in defining climate-related concepts) and a *loss of agency*, as the effects of environmental actions are not immediately visible. To feel agency, individuals must recognize their intentions and envision outcomes (Chik, 2022). Without a stable horizon for the future, participants may struggle to sustain plans and experience a sense of helplessness. The temporal gap between the long arc of human history and the brevity of an individual life can produce tension: even when participants imagine contributing to change, those changes may remain too slow to become experientially visible within their own lifetimes.

4.3 Ecological anxiety as a framework for self-understanding

Our qualitative material suggests that EA amounts to a global alteration of people's lifeworlds through a prereflective awareness of inhabiting a wounded world. In consciousness studies and phenomenology, prereflective feelings are those aspects of experience that we are not thematically aware of in a given moment, but nonetheless constitute a sense of how it feels to be us (Colombetti, 2011). Importantly, prereflective feelings can be uncovered in reflection through guided interviewing techniques, such as micro-phenomenology (Petitmengin, 2006). Our participants reported that in specific moments (e.g., when encountering an offending object such as a full trash can or experiencing the malignancy of the world in the summer heat), they become thematically aware of inhabiting a wounded world, which is often associated with anxiety. Beyond a prereflecitve feeling, we additionally conceptualized EA as a specific form of conceptual schema, through which people interpret their experiences: what we termed a unifying cosmology. To further clarify our construction of this category, reflexive positioning of our research praxis is needed.

In our earlier work, we have examined how people derive various (often idiosyncratic) worldviews from their lived experience, and how these worldviews can, in a circular fashion, shape subsequent experience (Škodlar and Ciglenečki, 2017). Our case study of self-narration and worldview construction explored how an individual's attempts to understand his experience became articulated into a broader account of what the world is and how it works (Oblak et al., 2026b). Furthermore, our investigation of ruminating similarly considered how repetitive interpretative activity can organize self-understanding and reshape the broader lifeworld (Oblak et al., 2026a). These studies inform an approach in which experience and interpretation are understood as dynamically interrelated, rather than as separate descriptive and conceptual domains. Our understanding of this interpretative dynamic is similar to Obeyesekere's (1981) framing of *karma*, which he understands as a sufficiently broad set of laws that can help people make sense of their daily struggles.

Our conceptualization of EA as a unifying cosmology is therefore grounded both in participants' accounts and our interpretative framework. EA may represent a specific way participants make sense of their experiences (De Haan, 2020; Mento et al., 2023). While EA is a salient type of experience (evident from the high congruency in participants' reports) it likely also reflects a broader anxiety associated with the current crisis, coupled with the availability of information on climate change. This creates a circular dynamic that is reflective of the notion of *interacting kinds*[4]. Hacking (1998) developed this notion by tracing the origins of dissociative identity disorder to the Satanic Panic of the 1960s and 70s, positing that psychiatric diagnoses shape self-perception and behavior. He noted that some disorders are linked to sociohistorical contexts, exemplified by the *mad traveler's disease,* which arose during the post-World War I era of closed borders. This phenomenon aligns with research on sociogenic epidemics, which categorize them into anxious and motor variants (Boss, 1997).

EA may show similar dynamics. Based on our qualitative material, we propose the following genetic structure of experience. Individuals experience various psychiatric symptoms and non-clinical agony-inducing states. Exposure to information related to the climate crisis offers new perspectives on their experiences, solidifying them within the semantic field of EA. Although elements of this trajectory were common across participants' accounts, its full configuration was reported by only four participants. See, for example, the following:

> *I like to experience nature as it is. Unbridled and as beautiful as possible. So, my anxiety being related to that is just something that happened. It could have been tied to, I do not know, cryptocurrencies. (EA-11-01).*

We therefore treat it not as a general developmental trajectory of EA, but as a hypothesis-generating observation that warrants further investigation.

Furthermore, the lived experience of EA as we observed it suggests that it amounts to an information-mediated *limit situation.* In his conceptualization of limit situations, the psychiatrist Karl Jaspers (1990, 1997) posited that human lives are framed by a series of inevitable contradictions (or *antinomies*). For example, human beings seek love and affection but are ultimately alone, the future is uncertain but we must all plan for it. In our daily lives, we are shielded from these contradictions by our *worldviews.* These are all-encompassing, largely prereflective systems of commitments about what the world is and how it works that stem from our own embodied experiences (Škodlar and Ciglenečki, 2017). In limit situations, these worldviews become untenable and we are faced with the contradictions of life. For Jaspers (1990), it is essential that in these situations we not fall back on our old worldviews or received ideologies but construct them anew through active engagement. Many of these ideas were later taken up by existential psychotherapy, which, rather than dealing with clearly defined psychopathologies, attempts to address inevitable, but painful parts of life (mortality, loneliness, uncertainty, responsibility).

4.4 Clinical implications

Several psychotherapeutic approaches for dealing with EA have already been proposed. Individualized cognitive behavioral therapy has shown some success by reducing catastrophizing and promoting behavioral activation and agency (Lindhe et al., 2023). Similarly, acceptance-and-commitment therapy works toward reclaiming a sense of agency by cultivating cognitive flexibility and reaffirm pro-environmental values (Williams and Samuel, 2024). Consistent with our findings, Existential approaches frame EA not as a psychopathology but an adaptive response to the rapidly worsening environmental situation. Similarly to its approaches with dealing with mortality (Yalom, 1980), it fosters a sense of death acceptance, responsibility, and authentic choice (Budziszewska and Jonsson, 2021).

However, these are all person-centric approaches whereas our qualitative material suggests that it has an important social dimension as well. In *Climate Change and Mental Health Report*, published by the United Kingdom's Health Security Agency (2025), relational and community-based interventions have been shown to be the most successful. Furthermore, according to our interpretation of a EA, it has a distinctly epistemic component. We suspect that EA, may be fueled by irresponsible data dissemination and consumption, and overinclusive appraisal of knowledge. Even among the activist participants, many are unaware that there are *many* legitimate proposals to tackle the climate crisis (e.g., The Carbon Almanac Network, 2022). Thus, we hypothesize that explicitly epistemic interventions, such as citizen science projects (Williams et al., 2022; Pocock et al., 2023) may exhibit a beneficial effect on EA. These could allow people to construct a worldview in which the challenges of the polycrisis can be better evaluated and agency regained.

Building on Morin's and Kern's (1999) emphasis on "complex intersolidarity," future clinical work might focus less on replacing one worldview with another and more on cultivating forms of thinking that can hold complexity, interdependence, and uncertainty. This could include explicit training in tolerating ambiguous and incomplete climate information, situating individual agency within collective action, and integrating pro-environmental values into everyday decision-making. Such epistemic-existential work may be as central to EA as traditional symptom-focused interventions. We admit that exactly how such interventions might be implemented is an open question, requiring future work.

4 Also known under the older term of *looping effect of human kinds* (Hacking, 1996).

5 Limitations

Our study has several limitations that need to be addressed. Firstly, we limited our investigation to a constrained sample of participants from affluent backgrounds. With exception of one, they all originated from so-called WEIRD (western, educated, industrialized, rich, and democratic) countries. As such, the coupling of EA to specific means of information consumption may be a cultural specificity. Given the planet-wide impact of the polycrisis, cross-cultural studies are needed. We suspect that paradigms such as *clinical ethnography* (Luhrmann and Marrow, 2016; Weisman and Luhrmann, 2020) are particularly appropriate for a more comprehensive understanding of EA.

Second, given that the background of most of our research team is in psychiatry and the sciences of the mind, we approached EA as if it were a psychopathology. We strived to be sensitive to the collective nature of the polycrisis (e.g., by targeting specific groups such as activist communities), and in our choice of analytical framework in constructivist grounded theory, which treats knowledge-construction as a relational process (Charmaz, 2014). Nonetheless, our methods of data collection (micro-phenomenology and lifeworld analysis) are *a priori* centered on the person. Our qualitative material suggests that methods that look beyond the individual (e.g., cognitive ethnography; Hucthins, 1996) may be better suited for investigating this phenomenon.

Finally, while our sample was moderately sized for a qualitative study, the paucity of data on specific ways of dealing with the emotional side of EA, suggests that larger scope is necessary. We hope to rectify these shortcomings in our future work.

6 Conclusion

In this study, we conducted a qualitative phenomenological investigation of EA using micro-phenomenology, lifeworld analysis and constructivist grounded theory for data collection and analysis. Our interpretation was interdisciplinary, drawing on psychopathological, phenomenological, anthropological, and psychological literature to describe the lived experience of EA. Participants described wide-ranging distress associated both with abstract information about the climate crisis as well as first-person encounters with environmental change. Their reports extended beyond mere worries to changed relationships with their surroundings and others. Our participants felt obliged to remain informed about the climate crisis despite the associated distress. Our qualitative material suggests a broad change in the experience of temporality. We framed these interrelated experiences as a background, prereflective sense of inhabiting a wounded world. Within this predominantly European, highly educated sample, EA also provided a framework through which some participants interpreted wider personal and societal concerns.

Data availability statement

The original contributions presented in the study are publicly available. This data can be found here: https://osf.io/2xw5f.

Ethics statement

The studies involving humans were approved by the Review Board of University Psychiatric Clinic Ljubljana. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

AO: Formal analysis, Writing – original draft, Methodology, Project administration, Data curation, Visualization, Conceptualization, Investigation, Funding acquisition, Writing – review & editing. AH: Methodology, Data curation, Investigation, Writing – review & editing, Conceptualization, Formal analysis, Writing – original draft. AZ: Conceptualization, Writing – review & editing, Resources, Writing – original draft. JG: Writing – review & editing, Conceptualization, Resources, Writing – original draft. NG: Conceptualization, Writing – review & editing, Methodology, Formal analysis, Writing – original draft. SD: Writing – original draft, Writing – review & editing, Supervision. BŠ: Formal analysis, Supervision, Writing – review & editing, Conceptualization, Writing – original draft, Data curation. JB: Writing – original draft, Writing – review & editing, Project administration, Supervision.

Funding

The author(s) declared that financial support was received for this work and/or its publication. This work was supported by the project TerP-UPKL-2025/08 and the project J6-60102 awarded by the Slovenian Research and Innovation Agency.

Acknowledgments

The authors would like to thank Nika Kovačič for her help in preparing the manuscript.

Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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