

Understanding “Eco Anxiety” in Adolescents and Young Adults [†]

Julie Garcia Souza 

The Climate School, Columbia University, New York, NY 10011, USA; jgs2167@columbia.edu

[†] Presented at the 2nd International One Health Conference, Barcelona, Spain, 19–20 October 2023.

Abstract: As environmental issues become more complex, so do our emotional responses to them. Paul Robbins and Sarah A. Moore offer the term “ecological anxiety” to frame scholarly discourse around a fearful response to the “negative normative influence of humans on the earth” and the “inherent influence of normative human values within one’s own science”. This comprehensive literature review unpacks the implications of “eco anxiety” within. The eco anxiety framework is relatively new, with minimal consensus on symptomatic criteria. To appropriately reflect the thoughts, emotions, and experiences of adolescents and young adults, this literature review encourages more accessible climate communication for the sake of the public and science community. Furthermore, more avenues of research are needed to study the term eco anxiety to fit a global context extending beyond Western understanding.

Keywords: eco anxiety; climate change; environmental destruction; environmental degradation

1. Introduction

What is “eco anxiety”? The academic definition of eco anxiety within the context of the Anthropocene is provided by historians of geography and environment Paul Robbins and Sarah A. Moore. Their provocative article, “Ecological Anxiety Disorder: Diagnosing the Politics of the Anthropocene”, presents the first scholarly investigation of the term “eco anxiety” in the context of the Anthropocene. The Anthropocene is best described as the geological epoch characterized by anthropogenic influence on the Earth, humans, and nonhuman life (p. 25, [1]). Eco anxiety, as defined by Robbins and Moore, is “either a fearful response to: (1) the negative normative influence of humans on the earth (anthrophobia), or (2) the inherent influence of normative human values within one’s own science (autophobia)” [2]. Robbins and Moore identify broad cultural concerns about climate change and the Anthropocene as a geological era, which is also politically defined in the context of anthropo- and autophobia. Their definition successfully frames an awareness of eco anxiety within the Anthropocene from an academic perspective, yet “eco anxiety” is a relatively new term to young people that actually feel it with minimal consensus on how it is experienced.

This literature review compiles research regarding emotions towards climate, specifically eco anxiety, over the last decade to better comprehend the history and purpose of the said term within academic contexts. In conclusion, this study found that current research focuses on Western understanding and does not find conclusive results regarding symptomatic consensus as a disorder. In fact, recent research suggests that there is no strong correlation between eco anxiety and anxiety as a disorder (p. 7, [3]). In addition, most research outlined in this study was conducted using the survey methodology. The scientific literature that explores ecological anxiety does not include first-hand accounts in articulating the nuances of eco anxiety (pp. 25–50, [1]). This study calls for additional, diverse research methodologies to better understand the term “eco anxiety” as it is experienced by adolescents and young adults.



Citation: Souza, J.G. Understanding “Eco Anxiety” in Adolescents and Young Adults. *Med. Sci. Forum* **2024**, *25*, 4. <https://doi.org/10.3390/msf2024025004>

Academic Editor: Gea Oliveri Conti

Published: 6 March 2024



Copyright: © 2024 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

2. Historiography

While Robbins and Moore defined eco anxiety within the Anthropocene in 2013, anxiety and ecological distress were discussed within academic settings as early as 2007 [4]. Glenn Albrecht has the most cited definition of eco anxiety from 2011 [5]. However, it was not until 2017, when Clayton et al. published “Mental Health and Our Changing Climate: Impacts, Implications, and Guidance”, that the scientific community began to discuss the actual definition of this term at large. It was clear that the general public, especially youths as the affected group in question, are also beginning to speak out about anxieties related to ecology, but more poignantly, climate change. Greta Thurnberg began her activism, Fridays for Future or School Strike for Climate, in 2018 [6]. This sparked global awareness, specifically among younger generations, regarding the climate, with Thurnberg publicly discussing her own emotions related to our changing planet [7].

With research continuing to discuss the nuances of eco anxiety (such as climate anxiety), the 2020s brought accessible literature for the general public to manage or cope with eco anxiety [8–10]. Eco anxiety, along with other terms such as eco grief [11] is becoming increasingly popular in research and mainstream media. Most research has exploded within the last decade, particularly in the last five years, so the study of eco anxiety, climate, and mental health is novel, with long-term understandings yet to be fully realized. The continual monitoring of the use of this term in scientific research is necessary as it relates to the communication of the said term to the general public and most impacted groups.

3. Methodology

All researched materials come from the past ten years across various disciplines, with specific attention to peer-reviewed, published studies from academic journals. This study acknowledges how research has prioritized Western perspectives with oral accounts and other forms of communication beyond the written word, lacking in the methodology of this study. Key terms used across search engines to find specific research studies include the following:

- Eco anxiety and ecological anxiety;
- Climate anxiety.

Research was selected if it included one of the following topics:

- Eco anxiety/ecological anxiety related to adolescents and young adults;
- Climate anxiety related to adolescents and young adults;
- Definitions and understandings of the term eco anxiety.

This study acknowledges the ultimate broad search conditions but justifies the said broad conditions given the limited time the term “eco anxiety” has been discussed in academic contexts. To clarify, eco anxiety and climate anxiety are two terms with different definitions. Eco or ecological anxiety refers to anxiety concerning one’s ecology, while climate anxiety refers to anxiety concerning anthropogenic climate change. However, these terms tend to be used interchangeably outside academic contexts (p. 2, [3]). Thus, this study included the term “climate anxiety” as it relates to the term “eco anxiety”. This study acknowledges that not every study, article, or journal that explores the term “eco anxiety” has been included in favor of comprehensive studies that have already compiled relevant information related to this term.

4. Results

4.1. Eco Anxiety: Defining the Term

Just as generalized anxiety is a multifaceted term, so too is “eco anxiety”. As a result, there is significant debate regarding its classification as a disorder, thus calling its definition into question within the scientific community (p. 2, [3]). Eco anxiety fundamentally refers to a reaction to ecological issues, which can showcase itself as “practical” anxiety (p. 3, [12]). As Panu Pihkala states in his research, eco anxiety is “practical” because it forces those affected to consider the best course of action (p. 3, [12]). On the other hand, those who

suffer from eco anxiety may be negatively coping through dysfunctional and paralyzing mechanisms (p. 2, [13]). Ultimately this is because eco anxiety, as Panu Pihkala and Charlie Kurth best describe it, is a moral emotion that indicates a person's moral philosophy where complexities may lead a person to cope through adaptive or maladaptive measures (p. 10, [14]). The adaptive function can encourage people to act with a future-orientated approach that prepares them for the crisis, while a maladaptive form can be triggered by an overwhelming response that prevents action (pp. 2–3, [13]).

Eco Anxiety and Climate Anxiety

Similar to eco anxiety, young people are also more likely to experience climate anxiety (p. 2, [13]). According to the APA, as of 2019, 57% of teenagers in the United States were afraid of climate change [15]. Eco anxiety may be felt as a more generalized experience related to one's environment or one's understanding of ecology, while climate anxiety refers to one's experience and perception of climate change. As previously mentioned, young people often conflate the two. Those who feel climate and/or eco anxiousness, but more generally climate emotions, are not experiencing it within a vacuum. The psychological and emotional impacts of climate change are unevenly distributed among individuals and communities (p. 13, [16]). The experience of injustice due to socio-economic, cultural, and geographic backgrounds negatively impacts a person's or community's emotional response to climate and environmental issues (p. 13, [16]). Regardless of the nuances of eco and climate anxiety, the following adaptive strategies remain the same: "support and enhance [specifically highly vulnerable climate populations such as indigenous and those of the Global South] community attempts to overcome challenges and connect with the interest in activism as a form of 'pro environmental behavior'" (p. 16, [16]).

4.2. How Adolescents and Young Adults Experience Eco Anxiety

As Maria Ojala states, there are three ways most young people have taken to cope with eco anxiety: de-emphasizing, emotion-focused, and problem-focused strategies (p. 13, [17]). De-emphasizing includes minimizing ecological issues as a means of denying certain adaptation realities that elicit negative emotions due to perceived personal implications (p. 12, [17]). Emotion-focused coping entails emotionally distancing or avoiding the issue but may also include seeking social support to actually discuss one's emotions (pp. 12–13, [17]). Finally, problem-focused coping involves seeking information regarding actionable steps one may take to tackle the issue (e.g., eating less meat, protesting, etc.) (p. 13, [17]). These are the three categories of coping that young people have used to manage their eco anxiety.

Unfortunately, those who feel eco anxious do not tend to utilize problem-focused coping; in fact, those with eco anxiety are associated with having lower well-being (p. 1, [18]). It is important that researchers do not study eco anxiety as an isolated emotional experience since other emotions (such as eco-anger) have been linked to more adaptive responses (p. 4, [18]). Additionally, research has shown that engaging with the physical environment through a corporeal experience is vital to sustained behavioral change (p. 150, [19]). In other words, for young people, coping through action requires just as much of the body as it does the mind. Being in a physical community within one's environment and for community research in support of communal activism fosters adaptive climate action (p. 16, [16]). Eco anxiety, as it is felt and managed by those who are affected, tends to be experienced in conjunction with other emotions (p. 4, [18]), leading to lower levels of well-being (p. 4, [18]) and coping mechanisms such as de-emphasizing, emotions-focused, and problem-focused strategies (pp. 12–13, [17]) (although problem-focused coping tends to be used the least due to challenges with sustained behavioral change (p. 150, [19])).

5. Discussion

This literature review explores understanding the term "eco anxiety" and how it is felt by adolescents and young adults through a decade of research. However, what much of

the analyzed research fails to address is how eco anxiety is ultimately a Western experience since occurrences such as climate displacement from natural disasters, war over natural resources, and famine are realities for millions of affected people and areas (MAPA) [20]. Many people have a seemingly abstract relationship to their physical environment, meaning they are dissociative or dismissive of their physical surroundings (p. 93, [21]). Even with a dismissive attitude, climate trauma can be a very real disturbance with eco anxiety as a symptom (p. 95, [21]). The experience of MAPA populations does not diminish or invalidate the Western experience of eco anxiety, but what is most important to keep in mind is that these experiences are inherently different. For most of the research analyzed in this study, we utilized survey data that prioritized the white dominant form of communication: written language (p. 3, [22]). A new era of research should prioritize understanding climate emotions through a methodology that values all forms of communication as valid. Not only will this support reach non-Western audiences in a more accessible way, but will put marginalized groups at the forefront of climate action for the most sustainable future. Researching climate mental health vulnerabilities among MAPA through under-utilized methodologies may reveal new comprehensions of climate-related mental health otherwise difficult to realize from survey data alone. Thus, embracing the difference between MAPA and Western experiences of eco anxiety and other climate emotions while leaving the opportunity to communicate the nuance of both realities through varied methodologies is necessary. This study acknowledges that, ultimately, MAPA should be at the forefront of global climate action to best represent their experience and better communicate issues regarding climate and mental health to the general global population.

Most of the research analyzed in this study pointed to the benefits of community action and communal support as a form of adaptive coping for eco anxiety. Community research and action regarding eco anxiety and other climate emotions there requires a deeper understanding of the connection between the said term and adaptations. Jessica Fern, psychotherapist, public speaker, and trauma and relationship expert, describes working with her eco anxious patients with similar methods of treating relational attachment trauma (p. 96, [21]). This methodology addresses the inner sense of safety and security, which is important for addressing collective trauma (p. 96, [21]). Ultimately, all humans on this Earth exist in a traumatized collective that feels separate from one another, including the Earth itself and the spirit [23]. Community climate work is an important way to adaptively manage eco anxiety and other climate emotions, but addressing climate trauma in the collective, especially unresolved trauma from previous generations, is crucial to the reality of not only young people but all individuals (p. 97, [21]). The traumas of previous generations can alter current generations' expressions of DNA that manifest as certain health issues, anxieties, PTSD, and more, which means that what an individual feels at the level of the self may be a result of collective traumas inherited from generations prior (p. 97, [21]). Communal climate action that is aware and actively addresses collective traumas is crucial in addressing eco anxiety and climate-related mental health issues. Methods of treating relational attachment trauma through communal climate mental health support is a vital step in managing eco anxiety and climate emotions.

Eco anxiety, as felt by adolescents and young adults, represents just one element of an emotional experience that stems from generations of collective traumas. While eco anxious individuals are more likely to function at a maladaptive level of anxiety, this emotion is not an isolated feeling, with other climate emotions leading to more adaptive levels and problem-focused coping strategies (p. 4, [18]). The importance of community research and action for eco and climate mental health is key for physical and corporeal support that aids emotional well-being. Future acknowledgments and the deconstruction of Western and white dominant perspectives are crucial in decolonizing research to properly represent and include MAPA for not only diverse methodologies but also eco and climate mental health support as accessible and sustainable for generations to come.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Acknowledgments: The author would like to thank and acknowledge Helio Souza and Veronica Souza for their support.

Conflicts of Interest: The author declares no conflicts of interest.

References

1. Merola, N. Juliana Spahr and Anthropocene Anxiety. What do we do but keep breathing as best we can this/minute atmosphere. In *Affective Ecocriticism: Emotion, Embodiment, Environment*; Bladow, K., Ladino, J., Eds.; University of Nebraska Press: London, UK, 2018. [CrossRef]
2. Robbins, P.; Moore, S.A. Ecological Anxiety Disorder: Diagnosing the Politics of the Anthropocene. *Cult. Geogr.* **2013**, *20*, 3–19. [CrossRef]
3. Pihkala, P. Anxiety and the Ecological Crisis: An Analysis of Eco-Anxiety and Climate Anxiety. *Sustainability* **2020**, *12*, 7836. [CrossRef]
4. Cossman, B. Anxiety Governance. *Law Soc. Inq.* **2013**, *38*, 892–919. [CrossRef]
5. Albrecht, G. Chronic Environmental Change: Emerging ‘Psychoterratic’ Syndromes. In *Climate Change and Human Well-Being: Global Challenges and Opportunities*; Weissbecker, I., Ed.; Springer: New York, NY, USA, 2011; pp. 43–56.
6. Britannica, T. Editors of Encyclopaedia. “Greta Thunberg”. *Encyclopedia Britannica*. 21 September 2023. Available online: <https://www.britannica.com/biography/Greta-Thunberg> (accessed on 28 September 2023).
7. Thunberg, G.; Thunberg, S.; Ernman, M.; Ernman, B. *Our House Is on Fire: Scenes of a Family and a Planet in Crisis*; Penguin Random House: New York, NY, USA, 2020.
8. Ray, S.J. *A Field Guide to Climate Anxiety: How to Keep Your Cool on a Warming Planet*; University of California Press: Oakland, CA, USA, 2020.
9. Tsui, T. *It's Not Just You*; Gallery UK: London, UK, 2023.
10. Wray, B. *Generation Dread: Finding Purpose in an Age of Climate Crisis*; Knopf Canada: Toronto, ON, Canada, 2022.
11. Cunsolo, A.; Ellis, N.R. Ecological grief as a mental health response to climate change-related loss. *Nat. Clim. Chang.* **2018**, *8*, 275–281. [CrossRef]
12. Pihkala, P. The Process of Eco-Anxiety and Ecological Grief: A Narrative Review and a New Proposal. *Sustainability* **2022**, *14*, 16628. [CrossRef]
13. Clayton, S. Climate anxiety: Psychological responses to climate change. *J. Anxiety Disord.* **2020**, *74*, 102263. [CrossRef] [PubMed]
14. Kurth, C.; Pihkala, P. Eco-anxiety: What it is and why it matters. *Front. Psychol.* **2022**, *13*, 981814. [CrossRef] [PubMed]
15. American Psychological Association. Majority of US Adults Believe Climate Change Is Most Important Issue Today. American Psychological Association. 2020. Available online: <https://www.apa.org/news/press/releases/2020/02/climate-change> (accessed on 28 September 2023).
16. Adams, M. Critical psychologies and climate change. *Curr. Opin. Psychol.* **2021**, *42*, 13–18. [CrossRef] [PubMed]
17. Ojala, M. Eco-Anxiety. *RSA J.* **2018**, *164*, 10–15.
18. Stanley, S.; Hogg, T.; Leviston, Z.; Walker, I. From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing. *J. Clim. Chang. Health* **2021**, *1*, 100003. [CrossRef]
19. Schelly, C. Bringing the Body into Environmental Behavior: The Corporeal Element of Social Practice and Behavioral Change. *Hum. Ecol. Rev.* **2018**, *24*, 137–154. [CrossRef]
20. Reyes, M.; Calderón, A. What Is Mapa and Why Should We Pay Attention to It? Fridays Future 2023. Available online: <https://fridaysforfuture.org/newsletter/edition-no-1-what-is-mapa-and-why-should-we-pay-attention-to-it/> (accessed on 28 September 2023).
21. Fern, J. *Polysecure Attachment, Trauma and Consensual Nonmonogamy*; Thorntree Press: Portland, OR, USA, 2020; pp. 93–98.
22. Okun, T. *White Dominant Culture and Something Else*; COCo: Montreal, QC, Canada, 2020; pp. 1–5.
23. Pocket Project. Available online: <https://pocketproject.org/climate-change/> (accessed on 28 September 2023).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.