

## **Exploring the Experiences of Students Coping with Climate Anxiety to Maintain Hope & Motivation: A Scoping Review of Current Literature**

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**Abstract:** Climate Anxiety, or anxiety stemming from an overwhelming fear of the climate crisis, is a growing phenomenon among student populations studying climate, environmental, and sustainability-related subjects (Clayton et al., 2021). When not managed properly, feelings of climate anxiety can lead to a dismissal of the seriousness of the climate crisis and even action paralysis (Hickman et al., 2021; Sangervo et al., 2022). This scoping literature review aims to synthesize the current literature on how students cope with climate anxiety, addressing the research question: How do students experience climate-related hope and anxiety, and how do different interventions or practices influence their motivation to engage in climate action? This review employed a SPIDER approach and PRISMA-ScR guidelines to identify and examine the 12 included pieces of literature through an inductive thematic analysis. This analysis identified three main themes: the complex relationship between climate anxiety and pro-environmental behaviors, the role of hope as a coping strategy, and education-focused interventions for coping with climate anxiety. This analysis highlighted tools that can be utilized in education to help students manage climate anxiety, foster critical hope, and maintain motivation to engage in pro-environmental behaviors. This literature review supports the call for academic institutions to integrate well-being support for their students studying climate-related subjects. It suggests further research on coping strategies to develop critical hope among undergraduate students.

**Keywords:** climate anxiety, hope, climate education, coping, pro-environmental behavior

Climate Change is a crisis that touches everyone, whether directly through intense storms or indirectly through the media and education. Due to the ongoing climate crisis and its intensifying impacts, many people are starting to feel anxiety in response as their awareness increases (IPCC, 2023). This anxiety can manifest as worry, fear, sadness, numbness, and other emotions and is often referred to as “climate anxiety” (Clayton et al., 2020). Climate anxiety is related to eco-anxiety, or the overwhelming fear of environmental doom, but more specifically focuses on climate change-related experiences rather than general ecological problems (Clayton et al., 2021). This is particularly relevant for undergraduate student populations studying climate, sustainability, and environmental-related subjects, as they encounter and engage with these topics on a daily basis. Additionally, younger generations appear to be more prone to higher levels of climate anxiety (Clayton et al., 2020; Hickman et al., 2021). This is clear in the results of Hickman et al.’s 2021 survey of 10,000 adolescents aged 16-25, which found that 59% of the respondents reported extreme worry due to the climate crisis and 75% reported they believe the future to be frightening (Hickman et al., 2021). It should raise concerns among educators that such a large number of students are likely experiencing these negative mental health impacts due to climate anxiety, leading them to feel less motivated about their futures.

People experiencing climate anxiety choose to cope with it in various ways, sometimes by denying or distancing themselves from their stressors, and sometimes by taking steps to address their worries (Sangervo et al., 2022). However, research on these varied responses does suggest positive coping strategies and interventions can actually foster hope and help people feel less overwhelmed by these anxious feelings (Crandon et al., 2024; Sangervo et al., 2022). Newer research suggests that anxiety, when paired with constructive hope, that is, hope beyond wishful thinking and rooted in action, can actually help motivate individuals to take positive action (Sangervo et al., 2022). The purpose of this research is to review current literature on this topic to better understand how students can manage their climate-related anxiety to maintain hope and motivation going into their futures; to understand what is identified as effective coping strategies to foster constructive hope; and to understand what the current literature suggests about different interventions, such as individual or collective. This scoping review aims to expand the current research field beyond the prevalence of climate anxiety and the related maladaptive coping to focus on adaptive coping strategies that foster hope and motivation, specifically relevant to undergraduate students.

This research will address the question: How do students experience climate-related hope and anxiety, and how do different coping strategies influence their motivation to engage in climate action? This question and research utilized a SPIDER approach, focusing on the Sample, Phenomenon of Interest, Design, Evaluation, and Research type. The SPIDER approach is suitable for this scoping review, as it is well-suited for examining qualitative and mixed-methods studies that focus more on experiences and perceptions. This review aims to:

1. Integrate findings from the literature on how anxiety and hope are interrelated and can help motivate pro-environmental behaviors.
2. Examine the current literature to identify effective coping strategies that foster critical hope/ encourage motivation to act.
3. Understand the current findings on how students experience coping with feelings of climate anxiety and hope in the context of their education.

With these aims in mind, the scope of this review includes literature that addresses climate anxiety and/or hope in student or younger populations, literature focused on constructive/critical hope, and literature focused on the relationship between anxiety and hope with motivation (e.g., activism and pro-environmental behaviors). This review is not focused on general climate anxiety literature, literature focused on the prevalence of climate anxiety, or literature focused on the causes of climate anxiety. The three main themes identified in this review include the complex relationship between climate anxiety and pro-environmental behavior, the role of hope as a coping mechanism, and education-focused interventions to help students cope with climate anxiety.

### **Theoretical Framework**

This scoping literature review uses deductive reasoning based on a relatively new theoretical model of climate anxiety and coping, published in 2024 (Crandon et al., 2024). This theoretical model explains how climate anxiety can lead to both maladaptive and adaptive behaviors, dependent on various interventions or systemic influences (Crandon et al., 2024). This new theoretical model was developed to address the need for more coherent ways to analyze how climate anxiety manifests and affects individual behavior. Crandon et al.'s theoretical model of climate anxiety and coping is based on the finding that climate anxiety feelings are related to existential threat feelings, which elicit the fight/flight/freeze response (Crandon et al., 2024). It explains how this existential threat response to climate anxiety provokes a need for coping, which can be maladaptive, leading to dismissal/denial, or adaptive, leading to motivation and engagement (Crandon et al., 2024).

Another important aspect of this theoretical framework is that it is not focused on eliminating climate anxiety but instead recognizes that climate anxiety and hope can and often coexist and oscillate in intensity, and that both are helpful motivators when adaptive coping is leveraged (Crandon et al., 2024; Sangervo et al., 2022). This is further aligned with and supported by Sangervo et al.'s (2022) conceptual findings, which show that climate anxiety and climate hope, when combined, positively correlate with climate action. In their theoretical model, Crandon et al. (2024) suggest the need for further research that includes the full spectrum of coping, specifically adaptive coping, as much research has focused on maladaptive responses to climate anxiety. This review aligns with this theoretical framework by exploring current literature on coping with climate anxiety to highlight research findings about these adaptive coping strategies and their relevance to undergraduate climate education contexts. The review

builds on this deductive theory with inductive analysis to allow themes to emerge from the literature.

## **Methods**

### **Search Strategy**

This scoping review utilized the PRISMA-ScR guidelines to ensure transparency and trustworthiness (Page et al., 2021). A scoping review was chosen because the topic of students' experiences coping with climate anxiety is still developing in an intersectional space, which helps synthesize the varied pieces of new research. Since the SPIDER framework helped shape the research question, these elements informed the search strategy to stay within the scope. The SPIDER strategy focused the search on the:

- Sample: students and young adults
- Phenomenon of Interest: climate hope and anxiety, coping strategies
- Designs: surveys, interviews, ethnographic studies, focus groups
- Evaluation: experiences, perceptions, and motivation
- Research Type: mixed methods

A search for published literature was conducted through the Prescott College library Academic Search Complete feature, which draws from the following databases: JSTOR, ScienceDirect, ProQuest, ERIC, and EBSCOhost. Specific search terms included combinations of the following: “climate change,” “anxiety,” “worry,” “climate anxiety,” “eco-anxiety,” “coping,” “interventions,” “hope,” “critical hope,” or “active hope” WITH “students” or “universities” or “colleges” or “education” or “youth.”

### **Inclusion/Exclusion Criteria**

This scoping review included only peer-reviewed, English-language, journal-published studies. Qualitative, quantitative, and mixed-methods research were eligible for inclusion. For this review, eligible studies addressed climate anxiety and/or hope in older students, young adult populations, and education. This could also include studies that focused on fear or worry or motivation related to climate change, even if they did not directly mention “anxiety” or “hope.” Also eligible for inclusion were literature focused on experiences, practices, and behavioral interventions related to critical hope, and literature focused on the relationship between anxiety and hope or their relation to motivation (e.g., activism and pro-environmental behaviors). This review excluded general climate anxiety literature and literature focused on the causes or existence of climate anxiety. Also excluded were studies focused on children, as they have different experiences and are at a different development stage than undergraduate-aged populations. While these are related, they are too broad for this review to focus specifically on undergraduate students or young adult populations coping with and overcoming climate anxiety.

### **Selection Process**

To select which research to include in this scoping review, the researcher conducted an initial screening of titles and abstracts based on the search criteria. This allowed the researcher to narrow down potentially eligible literature based on general themes and remove duplicates that may have appeared from different searches or databases. Once this step was completed, a second screening of the full texts was conducted, allowing the researcher to understand each article of its entirety and determine whether it was relevant based on the inclusion and exclusion criteria. The researcher also reviewed the selected literature with a peer to ensure that their bias was not influencing the selection and that the selected texts met the requirements.

### **Data Extraction & Thematic Analysis**

Data and information were extracted through several phases of reading and re-reading the selected literature. The researcher read over each text multiple times to become familiar with the themes and data presented. Standard data collected from each study included the type of research, the year, the sample/population, aims, findings, and any suggestions for further research. Once the researcher became familiar with the literature and extracted the standard data, they began coding to conduct an inductive thematic analysis. This approach allowed the themes to emerge directly from the literature being reviewed rather than from preconceived assumptions about the existing literature. Initial codes were woven together to form larger themes that connected the various literary pieces. Themes were reviewed and defined to create the finalized themes and sub-themes.

### **Results / Thematic Analysis**

During the initial search conducted in July 2025, detailed counts of search results were not recorded. This missing information did not affect the included evidence, but it is important to note for transparency and replicability. Future reviews on the same topic would benefit from recording these counts, so it is more transparent to see how the body of research on this topic is expanding and how search results are becoming clearer at this intersection of interests. The initial search and screening of titles and abstracts identified 18 peer-reviewed articles that were eligible for inclusion. After reviewing the articles, 12 studies were identified as meeting the inclusion criteria for this scoping literature review and were included in this analysis. These 12 studies employed a range of research methods, including qualitative, quantitative, and mixed methods, such as surveys, questionnaires, curriculum analysis, and one longitudinal study (See Table 1 for details of the included articles). Most studies focused on a sample population of youth/young adult-aged participants. One study examined the relationship between climate anxiety and pro-environmental behavior in adults, but it also suggested the need for further research focused on adolescents. The research settings included the United States, the United Kingdom, Australia, Sweden, Finland, Turkey, Spain, and Portugal. Most of the included articles were recent, 2023-2025, with two outliers, one from 2020 and one from 2013.

The inductive thematic analysis yielded three main themes: the complex relationship between climate anxiety and pro-environmental behavior, the role of hope as a coping mechanism, and education-focused interventions to help students manage climate anxiety. Within each of these broad themes, several sub-themes were identified that helped build an understanding of the current findings in the literature on undergraduate student populations managing and coping with climate anxiety.

**Table 1**  
*Details of Articles Included in the Scoping Review*

Article #	Title	Authors	Study Type	Year published
1	Climate change hopefulness, anxiety, and behavioral interventions among adolescents: randomized controlled trial of a brief “selfie” video intervention	Benoit, L., R. Lowe, S., Thomas, I., Amsalem, D., & Martin, A	Randomized controlled trial of video interventions	2025
2	Against the odds: Hope as an antecedent of support for climate change action.	Bury, S. M., Wenzel, M., & Woodyatt, L.	Surveys	2020
3	Responsible environmental education in the Anthropocene: Understanding and responding to young people’s experiences of nature disconnection, eco-anxiety and ontological insecurity.	Gienger, A., Nursey-Bray, M., Rodger, D., Szorenyi, A., Weinstein, P., Hanson-Easey, S., Fordham, D., Lemieux, D., Hill, C. & Yoneyama, S.	Narrative literature review	2024
4	Addressing eco-anxiety in Turkish schools: A document analysis of the environmental and climate change education curriculum.	Demir Gdl, M., & Tatli Dalioglu, S.	Curriculum Analysis	2024
5	What drives pro-environmental behavior? Investigating the role of eco-worry and eco-anxiety in young adults. Sustainability	Lpez-García, L., Latorre, F., Vecina, M. L., & Díaz-Silveira, C.	Survey	2025
6	Some slice of climate anxiety ... is good: A cross-sectional survey exploring the relationship between college students media exposure and perceptions about climate change.	Maduneme, E.	Survey	2024
7	A call for intergenerational solidarity in climate change education: Outlining a strategy to manage climate anxiety and facilitate action.	Mateer, T. J.	Theoretical explorative essay	2024
8	Coping with climate change among adolescents: Implications for subjective well-being and environmental engagement.	Ojala, M.	Survey	2013
9	How do children, adolescents, and young adults relate to climate change? Implications for developmental psychology	Ojala, M.	Narrative review	2023

10	Heads, hearts, and hands: A systematic review of empirical studies about eco/ climate anxiety and environmental education.	Olsen, E., Lawson, D., McClain, L., & Plummer, J.	Systematic Review	2024
11	Compassion towards nature and well-being: The role of climate change anxiety and pro-environmental behaviors.	Prata, A., & Matos, M.	Survey	2025
12	From distress to action? – A three-wave longitudinal study of climate change distress, pro-environmental behavior, and coping strategies among Finnish adolescents.	Veijonaho, S., Hietajärvi, L., Ojala, M., & Salmela-Aro, K.	Survey	2025

### ***The Complex Relationship Between Climate Anxiety and Pro-environmental Behavior***

**Climate Anxiety as a Motivator.** A main sub-theme revealed in the scoping review was that climate anxiety can be a motivating factor for action, unless feelings become too intense without being managed (Maduneme, 2024). Much of the existing literature supported the premise that climate anxiety and pro-environmental behavior influence each other in one way or another. Pro-environmental behaviors are considered “conscious actions aimed at reducing the negative impact of human behaviors on the natural or built environment” (Prata & Matos, 2025). Some literature suggested that feelings of climate anxiety can motivate individuals to engage in more pro-environmental behaviors (López-García et al., 2025; Maduneme, 2024; Veijonaho et al., 2025). However, some researchers also found that if feelings of climate anxiety become too strong, they can actually have an inverse relationship with pro-environmental behaviors, leading to less engagement (Maduneme, 2024; Veijonaho et al., 2025). These findings suggest that climate anxiety can be a motivating factor for engaging in pro-environmental behaviors, provided it is managed or coped with effectively ( Benoit et al., 2025; Maduneme, 2024; Veijonaho et al., 2025). When left unmanaged, climate anxiety can actually lead to less engagement or action paralysis if an individual feels like there is no point or hope, similar to the body's natural fight, flight, freeze response (Lopez-Garcia et al., 2025; Prata & Matos, 2025; Veijonaho et al., 2025). This reinforces the theoretical framework of climate anxiety and coping by showing how climate anxiety can lead individuals to cope maladaptively or adaptively, depending on how strong these anxious feelings can be (Crandon et al., 2024). Some literature also found that for youth there is often a threshold where engaging in pro-environmental behaviors too frequently or intensely, without spending time and energy towards other interests, can also lead to increasing feelings of climate anxiety as they become too overwhelmed with the work that needs to be done or feeling like they are not achieving their desired outcome (Prata & Matos, 2025; Veijonaho et al., 2025).

Examining these separate research findings together reveals that the relationship between climate anxiety and pro-environmental behaviors among young adults is complex and nuanced. To a certain extent, climate anxiety can motivate pro-environmental behaviors, which in turn can help individuals adaptively cope with their feelings of climate anxiety (López-García et al., 2025; Maduneme, 2024; Veijonaho et al., 2025). However, if either levels of anxiety or

engagement are too high, they can become overwhelming and potentially lead to less action and/or create more anxiety (Maduneme, 2024; Prata & Matos, 2025; Veijonaho et al., 2025). If academic institutions want to help motivate undergraduate students studying climate change to engage in pro-environmental behaviors, it is important to consider this relationship. They should help students manage their climate anxiety so they can adaptively cope and stay motivated to engage in activities that address their concerns. Without proper attention, students have the potential to be overwhelmed by their feelings of climate anxiety and cope maladaptively through disengaging from positive climate-related work and activities in their futures.

**Personal Agency as a Motivator.** Another sub-theme that emerged from this analysis was the importance of developing personal agency to motivate pro-environmental behaviors and manage climate anxiety. Personal agency has been a key focus in much of the literature on younger populations, who often feel their voices are diminished or that they have limited influence compared to older role models (López-García et al., 2025; Mateer, 2024; Ojala, 2023). Encouraging and supporting students' agency can be done in a variety of ways, such as elevating their voices and concerns and using them to shape their projects and focuses in the classroom, and including place-based activities such as projects rooted in community and local systems (Demir Güdül & Tatli Dalioglu, 2024; Mateer, 2024; Ojala, 2013; Olsen et al., 2024). Across several studies and countries, place-based community engagement has consistently been found to be a strong factor in adaptive coping with climate anxiety and in motivating action (Demir Güdül & Tatli Dalioglu, 2024; Mateer, 2024; Olsen et al., 2024). This helps students develop agency by showing them, often in a hands-on manner, that their concerns are shared by other members of their community, and it is a direct way to see how efforts can make a change (Mateer, 2025; Olsen et al., 2024). The place-based lens mitigates feelings of climate anxiety by encouraging students to focus on something tangible and familiar rather than becoming overwhelmed by global-scale problems that can seem impossible to address as individuals (Demir Güdül & Tatli Dalioglu, 2024; Mateer, 2024; Olsen et al., 2024). Climate educators can help develop students' personal agency by encouraging them to engage in actions that address their own concerns, such as getting involved in activism, focusing a project on a local problem, or joining a relevant club, which helps show them that they are capable of being involved and shaping change as a student.

### ***The Role of Hope as a Coping Strategy***

**Hope must be Constructive or Critical.** Hope was often identified as a necessary step in coping with climate anxiety in a constructive manner, rather than simply dismissing or ignoring the problems to alleviate stress. A key sub-theme that emerged was the need for hope to be constructive or critical in order to effectively help cope with climate anxiety and motivate engagement (Bury et al., 2020; Ojala, 2013; Olsen et al., 2024). This means that hope must be involved in action and grounded in reality, rather than simply wishing for the best without taking steps to help achieve what one hopes for. (Bury et al., 2020; Mateer, 2025; Olsen et al., 2024). Constructive or critical hope is distinct in that it is grounded in taking action towards the positive

change one wishes to see, rather than just passively hoping it will happen without engaging in anything to help make that shift (Bury et al., 2020; Ojala, 2013). When climate anxiety makes one feel overwhelmed, hope can be the motivating factor to “bridge the gap” between paralysis and action when the outcome is unsure (Bury et al., 2020; Olsen et al., 2024). Constructive/critical hope is often identified as a necessary component in coping with climate anxiety, as it enables individuals to fully accept the reality causing them anxiety while simultaneously seeking solutions that are possible or already making an impact (Bury et al., 2020; Ojala, 2013). This method of coping is described as “meaning-focused coping” in Maria Ojala’s work, which found that this combined coping focused on solutions and emotions leads to increased pro-environmental behaviors and well-being for individuals (Ojala, 2013; Ojala, 2023). Constructive or critical hope is another example of how adaptive coping can motivate students to engage in positive behaviors to address the problems they learn about in climate education.

**Diversity Encourages Hope through Possibilities.** This leads to the next sub-theme, which is the importance of including diverse success stories and examples to help encourage visioning of multiple possibilities. Many of the reviewed studies on hope emphasized that hopelessness arises when an individual can see only a single, typically negative, outcome (Geinger et al., 2024; Ojala, 2023; Olsen et al., 2024). However, in reality, there are many possible outcomes, and constructive hope is rooted in recognizing these possibilities and understanding that our actions can shape the future (Geinger et al., 2024; Olsen et al., 2024). Several studies highlighted the importance of including diverse stories, voices, and examples in education regarding climate change because it helps paint the picture that there are many different ways to achieve sustainability (Bury et al., 2020; Geinger et al., 2024; Mateer, 2024 Olsen et al., 2024). Recognizing that there are multiple possible pathways to address climate change can help foster creative visioning (Geinger et al., 2024; Bury et al., 2020; Geinger et al., 2024). Visioning fosters hope by encouraging people to see many solutions that can lead to a desired outcome (Geinger et al., 2024). Including diverse voices and examples can also help students from diverse backgrounds feel more hopeful by seeing their cultures and identities centered as inspiration for climate action rather than always learning from the same dominant cultures and voices that may not always have the most creative or effective solutions (Geinger et al., 2024; Mateer, 2024 Olsen et al., 2024). The practice of exploring diverse examples helps students adaptively cope with their climate anxiety by expanding their understanding of what is possible. When one’s focus is on a single solution or pathway, it can feel overwhelming if that solution seems unlikely to come to fruition. Visioning and diversity expand what one sees as possible solutions and pathways to positive change. Educators can integrate diverse stories by looking at examples relevant to students’ backgrounds, identifying small-scale changes that differ from mainstream large-scale focuses, encouraging creativity, or highlighting multiple cultures.

### ***Education-Focused Interventions for Coping with Climate Anxiety***

**Classrooms as a Safe Space for Emotional Expression.** Throughout the inductive analysis, several sub-themes emerged, focusing specifically on how interventions can be utilized in academic settings to help students cope with climate anxiety. One main sub-theme is the importance of creating space in the classroom for emotional expression and support (Demir Gdl & Tatli Dalioglu, 2024; Olsen et al., 2024; Prata & Matos, 2025). Several studies found that a key part of students' developing climate anxiety is learning about the wicked, systemic problems related to climate change in the classroom without any support or space to discuss their real emotions related to these topics (Ojala, 2023; Olsen et al., 2024; Prata & Matos, 2025). Many curricula do not provide guidance or support on maintaining well-being while engaging with the challenging realities of climate change (Demir Gdl & Tatli Dalioglu, 2024; Olsen et al., 2024; Veijonaho et al., 2025). Without allowing space for emotional expression and compassion, students can begin to feel alone in their reactions as their feelings continue to grow without understanding that they are often collective, shared emotional experiences that do not have to feel overwhelming (Demir Gdl & Tatli Dalioglu, 2024; Mateer, 2024; Olsen et al., 2024; Veijonaho et al., 2025). Several studies highlighted how education that emphasizes or focuses on the well-being of its students often leads to more manageable feelings of climate anxiety as well as higher levels of hope, motivation, and agency (Ojala, 2023; Olsen et al., 2024; Prata & Matos, 2025; Veijonaho et al., 2025). Emotional expression is another example of adaptively coping with climate anxiety by acknowledging one's stress, rather than maladaptively coping through ignoring the adverse emotional reactions and disengaging with the concerns.

**Culturally Responsive Pedagogies as a Coping Strategy.** Another sub-theme that emerged in this analysis was the importance of including culturally responsive pedagogies to help students manage these anxious feelings and maintain motivation (Mateer, 2024; Olsen et al., 2024). Similar to the sub-theme focused on place-based and community projects driven by students' concerns and interests, culturally responsive pedagogies are shaped by the culture of the students and include what is relevant and meaningful to them, rather than only teaching from the perspective of the dominant culture (Mateer, 2024; Olsen et al., 2024). Culturally responsive pedagogies are open to influence from current problems and progress being made, rather than adhering to a curriculum that has remained stagnant over time and potentially become out of touch with student experiences (Demir Gdl & Tatli Dalioglu, 2024; Mateer, 2024; Olsen et al., 2024). Making classroom education more dynamic can help students better manage their worries and anxieties, allowing them to maintain motivation and drive for what they want their future to include. This approach supports students' development of agency and visioning skills, discussed above, that can promote feelings of hope through adaptive coping (Geinger et al., 2024; Mateer, 2024; Olsen et al., 2024).

**Individual and Collective Engagement Needed to Foster Hope.** A final sub-theme that emerged was the need for both individual and collective coping strategies. Research findings in this analysis revealed that focusing solely on collective or individual action can increase feelings

of anxiety, whereas leveraging both has greater potential to build motivation and hope (Gienger et al., 2024; Prata & Matos, 2025; Veijonaho et al., 2025). However, it is important to highlight that engaging in collective action was found to improve well-being more than individual action across multiple studies (Benoit et al., 2025; Gienger et al., 2024; Prata & Matos, 2025).

Engaging in collective action can allow individuals to feel more at ease knowing that others share their concerns and are also working towards solutions (Benoit et al., 2025; Gienger et al., 2024). One study even found that viewing videos with collective-effort messaging increased reported hope and agency more than viewing videos with individualistic messaging (Benoit et al., 2025). Focusing on collective efforts can also help individuals manage overwhelm and burnout by fostering awareness that even if they need to take a step back, others are continuing the work (Gienger et al., 2024).

At the same time, one study found that self-efficacy was a greater predictor of pro-environmental behaviors than collective-efficacy beliefs (Maduneme, 2024). In general, collective-efficacy beliefs are shown to lead to pro-environmental intentions; however, in the United States, self-efficacy was a higher predictor, likely due to the highly individualistic culture (Maduneme, 2024). Individual action (that can strengthen personal agency and connect one to their values) combined with collective engagement (that can reduce individual burden) helps manage overwhelm by sharing the weight of action needed between self and others (Gienger et al., 2024). This further underscores the importance of combining individual and collective coping strategies to help U.S. undergraduate students mitigate their climate anxiety through a well-rounded approach. These findings suggest that both forms of engagement, individual and collective, should be encouraged and integrated in educational contexts. Collective strategies can enhance well-being and alleviate burnout, while individual efficacy supports sustained motivation to act.

## **Discussion**

Throughout this inductive thematic analysis, several distinct themes emerged from examining multiple separate studies. These combined themes represent how individual research influences one another and can build on each other to create a bigger picture and a greater understanding of students' experiences with climate anxiety and hope. The findings of this review contribute a new lens to the current sphere of climate anxiety literature by focusing on the adaptive forms of coping that are related to constructive/critical hope and connecting how those can be leveraged for specifically motivating an undergraduate student population. This population distinction is important to highlight, as similar studies have been conducted, but often with a focus on younger students up to the age of 18 or on adults outside of the education experience, with many studies calling for more research to be done on this population. This review contributes to this growing area within climate anxiety coping research.

Regarding the help undergraduate students need to adaptively cope with climate anxiety, develop hope, and maintain motivation, the literature emphasizes the importance of focusing on emotional well-being, exploring diverse possibilities, encouraging both individual and collective

action, and grounding education in local, culturally relevant ideas and concerns. While the analysis identifies separate sub-themes, they are interconnected by a focus on managing climate anxiety and fostering hope to increase motivation and pro-environmental behaviors. This inductive analysis revealed that there is no single clear solution for helping students adaptively cope with climate anxiety, but rather that multiple strategies can influence one's well-being. Coping with climate anxiety does not require eliminating the emotions. Instead, adaptive coping involves understanding what these feelings mean, how to acknowledge them, and how, when combined with other factors such as agency, hope, or collective support, they can actually be a positive, motivating force. Feelings of climate anxiety, hope, and motivation often shift in intensity rather than simply being present or absent.

Research shows ways that climate education can help students cope adaptively. Utilizing culturally responsive pedagogies provides space to acknowledge students' emotions and to create projects rooted in their communities and aligned with their personal concerns. These projects develop students' personal agency, helping them foster more constructive hope and motivation to act pro-environmentally and keep these shifting feelings of climate anxiety manageable. Allowing students to express, understand, and work through their anxious emotions can help them feel less overwhelmed and, in turn, feel more capable of taking action now and in their futures. Providing space to explore multiple possibilities and allowing for creativity and diversity in ideas and projects helps develop creative visioning skills and constructive hope by supporting students' realization that change is tangible in many ways beyond what may dominate the narrative. Climate education can utilize these coping strategies to help motivate their undergraduate students to stay engaged in their lives and their work with positive climate action as they graduate and begin careers.

### **Limitations**

Limitations of this study include the lack of detailed data on the total number of search results for the literature search conducted in July 2025, as it was completed before a PRISMA-ScR approach was chosen as the framework. Also, this scoping review is limited to sources written in English and available through the Prescott College Academic Search Complete, without a fee. The researcher acknowledges there may be other pieces of literature contributing to this field that may not have been included in this review due to these reasons.

### **Conclusion**

In conclusion, this inductive thematic analysis has found that across separate research projects, countries, and samples, youth and student populations are already finding and have the potential to find effective ways to adaptively cope with climate anxiety and stay motivated to take action in their future. Feelings of climate anxiety can either be motivating or paralyzing, depending on how they are managed and coped with. Therefore, as these feelings are growing among undergraduate-aged student populations studying climate-related subjects, educators and

academic institutions need to support students in adaptively coping with these emotions, thereby fostering constructive hope that prevents action paralysis. Through listening to the concerns of students, encouraging local engagement and personal agency, and emphasizing the visioning of many possibilities through diverse voices, education can help future generations feel hopeful, motivated, and capable in tackling the climate crisis both locally and globally. Many of the research articles suggested the need for educators and academic institutions to provide support for their students' well-being; as well as the importance of further research on these topics, particularly on undergraduate student populations and adaptive coping strategies within higher education settings. This literature review emphasizes these suggestions and further suggests the need for more research on specific ways to center constructive, critical hope in climate-related pedagogies to help students adaptively cope with potential feelings of climate anxiety.

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