

### Investigate the Mental Health Implications of Eco-Anxiety and its Impact on Behavior and Coping Strategies

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#### Abstract

Eco-anxiety has emerged as a significant mental health concern amid escalating climate change and environmental degradation. This study explores its psychological impact, revealing a strong correlation between eco-anxiety and increased levels of anxiety and depression. Notably, nearly 70% of surveyed youth report feeling anxious about environmental issues, highlighting a pervasive sense of existential worry. The findings indicate that eco-anxiety influences behavioral changes, prompting both increased engagement in environmental activism and avoidance behaviors. Critical relationships between eco-anxiety, mental health outcomes, and coping strategies are identified, emphasizing the role of social support and environmental knowledge in mitigating its effects. Individuals with robust social networks and greater environmental understanding are better equipped to cope with eco-anxiety, leading to more proactive behaviors. Conversely, those lacking these resources may withdraw, exacerbating feelings of isolation. Recognizing eco-anxiety as a legitimate psychological condition is crucial for developing targeted interventions. This research calls for enhanced public education about eco-anxiety, community initiatives to foster social support, and integration of mental health considerations into environmental policies. By addressing eco-anxiety holistically, society can empower individuals to navigate their concerns while actively contributing to environmental action.

Keywords: Eco-anxiety, Mental health, Climate change, Environmental degradation, social support, Environmental activism

#### 1. Introduction

Eco-anxiety has become one of the most pressing mental health issues at the hands of accelerated threats caused by climate change and other forms of environmental destruction. The more these people learn about ecological crises — what is happening with global warming, extreme weather, loss of biodiversity, and so on — the more anxious, fearful, and powerless they are likely to be (Moratis & Melissen, 2022). This is a situation whereby there is constant anxiety regarding ecological disasters and the impact they have on future generations. It is not just a mental experience but rather a reflection of the larger societal and environmental setting in which one lives. The American Psychological Association has legitimized it as a recognized psychological disorder, hence a need for mental health professionals to be involved in clinical work (Cianconi et al., 2020).

Research indicates that environmental anxiety cuts across all age ranges: children, adolescents, adult, and the aged. In essence, youngsters experience a surge in environmental anxiety. According to (Chou et al., 2023), this is mostly due to the general anxiety about the future of the entire planet. A case in point is the study by (McCaffery & Boetto, 2024), who documented that around 70% of the youth interviewed had anxiety about environmental issues as one of the wide-ranging existential anxieties. The growing awareness of climate change and its consequences highlights this eco-anxiety to become more relevant to mental health.

Understanding this eco-anxiety does in terms of psychic effects and behavioral expressions lead the impetus for effective intervention and support programs. Eco-anxiety may provoke a derivative psychological effect on the individual, resulting in various anxiety disorders, depression, and the feeling of powerlessness (Moratis & Melissen, 2022). According to other studies, other alterations of behavior are mentioned by subjects with high levels of eco-anxiety, including increased participation in environmental activism or, inversely, avoidance behaviors, where people withdraw from the whole range of environmental problems (Léger-Goodes et al., 2022). This duality makes it difficult for mental health professionals to work since they have to address multiple responses that affected individuals may have towards their concerns of the ecological surroundings.

Further, the impact of eco-anxiety is not limited up to the individual life but extends to social dynamics and community participation where the behaviors adopted by such people towards their sense of anxiety and fear, concerning the environmental causes, can influence collective actions and societal responses toward climate change (Pihkala, 2020a). For instance, the best example is that those with extreme degrees of eco-anxiety may be prompted to participate in a movement and press for policy changes since they feel to belong to a community that is bonded through their sense of responsibility. On the other hand, it may be that a sense of alienation coupled with that of helplessness can characterize an individual who feels overwhelmed by their degree of eco-anxiety, and they retreat into inactivity and withdrawal from social relations (McCaffery & Boetto, 2024). This paradox calls for intervention that does more than address individual distress but also enhances community capacity and collective resilience.

To really serve the needs of those suffering from eco-anxiety, there need to identify what has made individuals anxious about environmental crises. Socio-economic status, access to education, and personal values tend to influence how people perceive and respond to environmental threats (Pihkala, 2020b). For example, environmental knowledge and education can better enable those with higher levels of education to cope with eco-anxiety because they offer the tools and understanding needed for constructive participation in environmental issues (Chou et al., 2023). Conversely, those with limited access to the information or knowledge source at times may feel more helpless and anxious in the face of climate change, thereby making education an important aspect for empowerment of both the individual and community.

Apart from education, social support is also an important factor in minimizing the bad impacts of eco-anxiety. Several research studies confirm that respondents who experience high levels of social support are in a better position to cope with stressors. In fact, especially these studies point out that environmental concerns were identified as items of stressors, which means that when people are adequately supported in their life, they are better placed to cope with issues such as those caused by changes in the environment (Moratis & Melissen, 2022).

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In this aspect, support relationships can help anxious people to seek ways of dealing with their emotions through meaningful action through emotional validation and practical support. Community-based interventions that grow social support and offer resources to navigate eco-anxiety could rise substantially in resilience-building for individuals and excellent mental health outcome (Léger-Goodes et al., 2022; Ali & Senturk, 2019).

Comprehending the mental health effects of eco-anxiety call for more holistic approaches to mental health care. Service providers must be trained in providing functional solutions that include strategies to help individuals cope with their anxieties and work constructively with problems. This might involve utilization of eco-therapy practices, which support the re-establishment of human beings' connection with nature, thus providing a route for the development of environmental stewardship as an anxiety-reducing technique (Chalquist, 2009; Mehmood et al., 2022). Further, mental health therapy interventions should increase the sense of agency for the patients by encouraging them to engage in interventions that are effective and actionable in handling environmental issues combined with anxiety management (Moratis & Melissen, 2022; Audi, 2021).

As the idea of eco-anxiety continues to be brought to light, a good collaboration of researchers, mental health professionals, and policymakers is needed in the solution of this pressing issue. Hence, fostering inter-professional dialogue lead to interventions that are well-thought-out in designing to tackle the psychological impacts of eco-anxiety but also leave room for environmental engagement in better ways. This inter-professional approach enable people to be empowered in their mental health journeys alongside having a capacity to contribute to shared efforts about climate change (Beck, 1993).

In short, it is quite crucial to know what happens to mental health and behavior as a result of eco-anxiety. For this reason, mainly based on the escalating effect of climate change and environmental degradation and its subsequent influence upon humanity, the psychological impact of this anxiety is now being increasingly addressed (Audi & ali, 2016; Allen et al., 2021). Under such perspectives, this study digs deeper into the complexities of eco-anxiety and psychological effects on mental health, behavior, and coping mechanisms. It provide insights to the discourse on environmental issues and their psychological impacts. In the final analysis, a better understanding of various complexities involved in conceptualizing eco-anxiety useful in building effective interventions and support systems that can help foster resilience and people's empowerment in taking control over their concerns towards a better future of the planet(Foster & Campbell, 2007; Audi & Ali, 2017).

### 1.1. Objectives of the Study

- To Examine the psychological impact of eco-anxiety on mental health.
- To Identify behavioral changes associated with eco-anxiety.
- To Explore coping strategies employed by individuals experiencing eco-anxiety.
- To Evaluate the effectiveness of different coping mechanisms.

#### 1.2. Significance of the Study

This study is significant as it seeks to deepen our understanding of eco-anxiety and its multifaceted impacts on mental health and behavior. By examining the psychological effects of eco-anxiety and identifying effective coping strategies, the research aims to empower individuals and communities to address their anxieties while fostering resilience in the face of environmental challenges. The insights gained will contribute to the development of holistic interventions that integrate mental health support with environmental engagement, ultimately enhancing both individual well-being and community capacity to respond to climate change.

#### 1.3. Problem Statement

Despite the growing recognition of eco-anxiety as a significant mental health concern, many individuals feel overwhelmed by their fears about environmental crises, leading to inactivity and withdrawal from social relations. This response is often exacerbated by socio-economic factors, limited access to education, and inadequate social support, leaving individuals feeling helpless and anxious. The lack of a comprehensive understanding of how these elements interplay hinders the development of effective interventions. This study aims to address this gap by identifying the root causes of eco-anxiety and exploring strategies that can enhance community resilience and individual empowerment, ultimately mitigating the psychological impacts of climate change.

#### 2. Literature Review

Eco-anxiety is one of the latest additions to the list of recognized mental health issues, not only because of climate change or environmental degradation but also because they are happening more seriously than ever before. Eco-anxiety is chronic fear of ecological doom and refers to psychological distress associated with ecological threats such as rising global temperatures, extreme events, and biodiversity loss (Léger-Goodes et al., 2022). Studies have widely explored the mental health implications of having eco-anxiety; indeed, such individuals had associations with a high likelihood of anxiety and depression as well as other psychological distress. Further, the literature examines how eco-anxiety is affecting behavioral changes - prompting life-style changes in personal lives and also influencing pro-environment activism(Hart, 2020; Audi & Ali, 2017).

The American Psychological Association has considered climate change as one of the most significant threats to psychological wellbeing and recognized its association with the rising rate of anxiety disorders, depression, and post-traumatic stress disorder (Pearson et al., 2023). The intensification of environmental awareness has also resulted in increases in rates of eco-anxiety among the diverse groups of children, adolescents, and adults. This literature review synthesizes evidence from recent studies that reveal complex relationships of eco-anxiety with various mental health outcomes, behavioral modifications, and coping responses (Fredrickson, 2003).

It has recently been discovered that eco-anxiety is somehow linked to a great number of psychological problems, including anxiety disorders, depression, and even psychological distress. For instance, Gonzalez et al. identified through a study that more individuals who feel the pangs of eco-anxiety undergo various degrees of experiences of anxiety and depression compared to those who do not feel such anxiety. Using standardized scales such as the Depression, Anxiety, and Stress Scale (DASS-21), the study verified the high positive correlation between the levels of eco-anxiety and mental health challenges. In addition, (McCaffery & Boetto, 2024) has done qualitative analysis focused on youth eco-anxiety and found that a large number of young people feel very sad and hopeless when they are exposed to the facts about climate change. This study highlighted that eco-anxiety sets forth existential concerns thus

affecting the individual's general mental well-being and further that is related with a sense of powerlessness about the future. Similarly, as per the meta-analysis of (Chou et al., 2023), there is strong evidence that eco-anxiety is on the increase among adolescents and young adults in its prevalence and that it has a strong negative impact on mental health and enhances the risk for anxiety disorders and depression(Bányai et al., 2019).

Eco-anxiety has a wide range of behavioral variations as individuals face their troublesome thoughts regarding the environment. Studies show that eco-anxiety might foster individuals to display pro-environmental behaviors whereby they become actively involved in environmental activism as well as act sustainably.(Clayton et al., 2014) found that increased cases of eco-anxious people were highly active in environmental activism and less in ecological footprint. This in itself concludes that eco-anxiety can be a factor for actually driving positive behavioral change, instead of people doing something about their problems. Conversely, eco-anxiety leads to avoidance behavior when one 'bunks out' on the environmental issue owing to overwhelming anxiety and feeling of powerlessness. (Léger-Goodes et al., 2022) defined a phenomenon called "eco-paralysis," wherein people retreat into isolation from expressing or involvement with issues related to the environment, due to feeling overwhelmed by eco-anxiety. Such withdrawal intensifies feelings of isolation and powerlessness, producing a negative feedback cycle that prevents effective coping and connection with ecological demands(Travis et al., 2020).

The concept of effective coping against eco-anxiety is important because it has implications related to mental health and its associated changes in behavior. Researchers have included studies that analyze the different coping methods taken by people experiencing eco-anxiety, from problem-focused coping to emotional support. According to (Righetti et al., 2020), for instance, social support is especially essential in helping people undo the effects of eco-anxiety. Subjects who had a strong network and emotional support were found to have a much better coping mechanism with their anxiety, which therefore proved that relationship ties are an important part of building resilience. Problem-focused coping, which may be in the form of taking some action toward taking care of the environment issues, may also be very effective in lessening the problem. (Chou et al., 2023) also highlights education and consciousness as empowerments that enable individuals to use knowledge for meaningful interaction with environmental issues. Anxiety relief is produced by the sense of agency of a person who becomes empowered to act positively towards environmental solutions(Fredrickson, 2003).

According to a research study, the prevalence and expression of eco-anxiety are influenced by demographic factors such as age, gender, and socio-economic status. Younger individuals, particularly youth and young adults, tend to experience more eco-anxiety than the older age group (Pihkala, 2022). This might be because younger individuals have to deal with long-term effects of climate change and, therefore, an increase in feelings of anxiety about their future. Besides, some studies indicate that more women report more extreme levels of eco-anxiety as compared to men due to the socialization that women are more likely to be emphatic and considerate of societal issues (Canady et al., 2011). Socio-economic status further determines the experience about eco-anxiety. Those individuals with inadequate resource availability and lack of information may feel more threatened by the perceived environmental risks and therefore increase anxiety and distress levels (Sims et al., 2020). People with a higher socio-economic status and educational degrees have more resources and adequate knowledge about how to cope effectively with eco-anxiety and be more proactive in dealing with environmental concerns.

Media plays a pivotal role in influencing how the minds of the public view climate change and environmental issues, which can ultimately affect the degree of eco-anxiety. There is scientific evidence that media exposure to negative depictions of climate change amplifies levels of fear and anxiety levels among people (Malizia et al., 2021). Therefore, a recent study by (Olausson, 2011) discovered that participants who were exposed to sensational climate change messages report increased levels of anxiety and distress. This describes the role of responsible media practice in coverage of environmental issues because sensationalism can feed into fears of hopelessness and despair. Conversely, reporting that focuses on positive narratives and action-orientated solutions has the possibility to balance out eco-anxiety by providing hope and agency to audience members. Stories of successful environmental initiatives and community engagement inspire individuals to act and contribute toward positive change, countering the paralyzing effects of eco-anxiety in the minds of many people (Malboeuf-Hurtubise et al., 2024). Therefore, media landscapes play a pivotal role in shaping how individuals perceive and respond to eco-anxiety.

Given the psychological effects of eco-anxiety, interest in developing efficient therapeutic approaches for better treatment is growing. Eco-therapy or the healing potential of nature and environmental engagement is an emerging field identified to help individuals who experience eco-anxiety. According to (Chalquist, 2009), reconnecting the individual with nature would ease feelings of anxiety and promote mentally well-being. Practices in eco-therapy might include nature walks, wilderness therapy, and mindfulness-based interventions. Such practices help individuals foster a connection with their natural environment. In addition, cognitive-behavioral therapy is also broadly applied in an attempt to change thinking and, as a result, change perception of environmental challenges, with the goal of preventing catastrophic ways of thinking while promoting adaptive coping abilities and empowering people to work together on their affairs for managing eco-anxiety (Righetti et al., 2020). This form of therapy does understand that people need resilience when it comes to ecological struggles and helps them deal with their concerns in a constructive manner(Léger-Goodes et al., 2022).

This, therefore, calls for recognition of eco-anxiety as a mental health concern and has huge implications at the policy and practice levels. Mental health professionals need to be educated in providing services which identify and treat the issues presented by this form of anxiety while providing individuals with the strength and skills to contend with their concerns and take constructive behaviors. Strategies may include approaches to therapeutic treatments such as bringing in eco-therapy approaches into treatment programs and recreating activities through which the individual can recreate such connections in nature and encourage community engagement. That is, policymakers should further delve into the psychological impacts of environment policies and climate measures. In this sense, the awareness about eco-anxiety, as well as its after-effects, can lead to policy support for community-based programs that offer supports to those suffering from eco-anxiety. Program initiatives can contribute to resilience building, recovery of better mental conditions, and the people's capacity to participate actively in solving environmental problems.

Thus, the literature on ecological anxiety verifies the manifest psychological effects, behavioral changes, and coping behaviors associated with eco-anxiety. In this sense, growing concern about the development of ecological anxiety as a potentially viable condition necessitates mental health professionals, researchers, and policymakers to act in the interest of addressing this critical issue. Such is the increase in understanding complexity that explains the interplay of eco-anxiety and mental health in behavior, hence important in developing effective interventions and support systems amid the reality of climate change and environmental degradation. Supporting resilience through encouragement of social support and proactive engagement in activities related to environmental issues empowers individuals to navigate eco-anxiety toward a sustainable future.

## 2.1. Hypotheses

- Hypothesis 1: Higher levels of eco-anxiety are associated with increased mental health issues, such as anxiety and depression.
- Hypothesis 2: Individuals experiencing eco-anxiety exhibit distinct behavioral changes, including increased environmental activism or avoidance behaviors.
- Hypothesis 3: Coping strategies, particularly problem-focused coping, moderate the relationship between eco-anxiety and mental health outcomes.

# 3. Methodology

# 3.1. Participants

A total of 200 individuals aged 18 and above were recruited for this study. This sample size was determined to provide a diverse representation of the population, enhancing the validity and generalizability of the findings.

# **Dependent Variables**

- Mental Health Status
- Behavioral Changes

# **Independent Variables**

- Level of Eco-Anxiety
- Social Support
- Environmental Knowledge
- Coping Strategies
- Demographic Factors
- Engagement in Environmental Activism

# **3.2. Data Collection**

Surveys were distributed online utilizing platforms such as Google Forms. Participants completed the survey anonymously to ensure confidentiality and promote candid responses.

### 4. Data Analysis

### 4.1. Demographic Information

The demographic characteristics of the participants were analyzed to provide context for the study. A total of 200 individuals participated, and their demographic information is summarized in the tablel.

This table provides a summary of the demographi9c characteristics of the participants involved in the study. From the table, one can see that 30% are concentrated on the age distribution on the 25-34 range and a considerable amount at 25% on the 18-24 range. The gender reflection depicts that 50% are female gender, while 45% are male gender with few comprising other genders. With regards to income, the respondents comprise middle-income groups (50%), high-income groups (30%), and there are no reports of low-income groups. Education-wise, 50% of the respondents have a Bachelor's degree, 25% attained high school completion, and 20% acquired their Master's degree. This type of demographic diversity enriches the validity of the finding as it caters to a wide gamut of experience responses.

### **4.2. Descriptive Statistics**

Descriptive statistics were computed for the key variables of interest, including eco-anxiety levels, mental health status, and behavioral changes. The following SPSS-style table presents the means, standard deviations, and ranges for these variables.

These means, standard deviations, minimums, and maximums for each of the key variables can be summarized in the following table. For instance, a score on ecological anxiety was at a mean of 3.85 (SD = 0.75), indicating that participants reported to experience an average state of Eco anxiety, with scores ranging between 1.00 and 5.00. The mean score for mental health status, measured by DASS-21, is 24.30 (SD = 6.22), and the results showed that participants experienced high levels of psychological distress. The range of mental health status from 10.00 to 40.00 presents great variability. The behavioral changes' mean score was 4.20 (SD = 1.15), signifying that participants often engaged in moderate pro-environmental behaviors. The other variables, social support and coping strategies, also have means to indicate levels of the construct being measured and the different participants, hence giving an overall view of how the data is distributed.

### 4.3. Correlation Analysis

Correlation analysis was performed to explore the relationships between eco-anxiety levels and the independent variables. This analysis provided insight into how closely related eco-anxiety is to factors such as social support, environmental knowledge, coping strategies, and engagement in environmental activism. The results of the correlation analysis are presented in the table 3.

Table 1				
Demographic Variable	Frequency	Percentage		
Age				
18-24	50	25%		
25-34	60	30%		
35-44	40	20%		
45-54	30	15%		
55 and above	20	10%		
Gender				
Male	90	45%		
Female	100	50%		
Other	10	5%		
Income Level				
Low	40	20%		
Middle	100	50%		
High	60	30%		
Education Level				
High School	50	25%		
Bachelor's Degree	100	50%		
Master's Degree	40	20%		
Doctorate	10	5%		

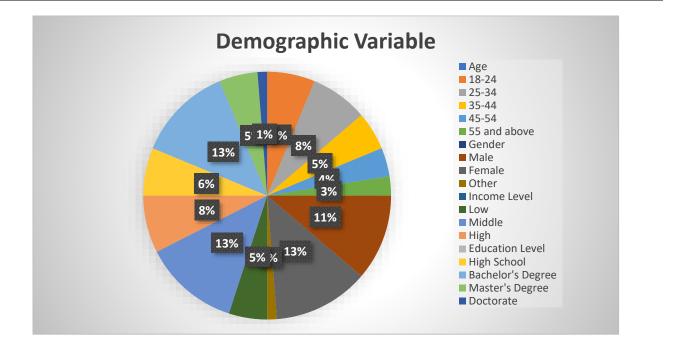


Table 2					
Variable	Ν	Mean	Standard Deviation	Minimum	Maximum
Eco-Anxiety	200	3.85	0.75	1.00	5.00
Mental Health Status (DASS-21)	200	24.30	6.22	10.00	40.00
Behavioral Changes	200	4.20	1.15	1.00	7.00
Social Support	200	5.10	0.85	1.00	7.00
Environmental Knowledge	200	6.25	1.05	1.00	8.00
Coping Strategies	200	4.75	0.95	1.00	7.00
Engagement in Environmental Activism	200	3.50	1.20	1.00	6.00

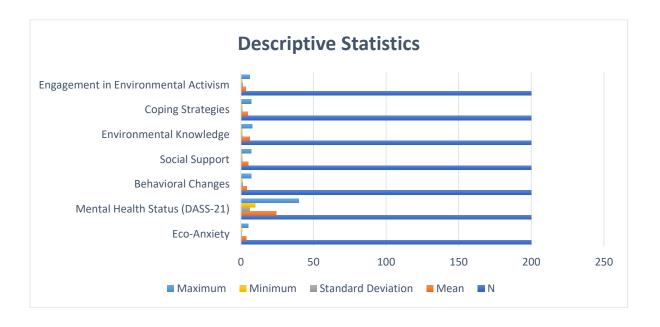


			Table 3		
Variable	Eco- Anxiety	Social Support	Environmental Knowledge	Coping Strategies	Engagement in Activism
Eco-Anxiety	1.000	-0.612**	-0.478**	-0.564**	0.482**
Social Support	-0.612**	1.000	0.325**	0.276*	0.391**
Environmental Knowledge	-0.478**	0.325**	1.000	0.301**	0.435**
Coping Strategies	-0.564**	0.276*	0.301**	1.000	0.497**
Engagement in Environmental Activism	0.482**	0.391**	0.435**	0.497**	1.000

Note: Correlation coefficients marked with \*\* denote statistical significance at p < 0.01, while those marked with \* denote significance at p < 0.05.

This table 3 shows the strength and direction of relationships between eco-anxiety and independent variables. Negative correlation between eco-anxiety and social support (-0.612\*\*) indicates that the higher the levels of eco-anxiety are, the lower perceived social support is. Similarly, negative correlations found between eco-anxiety and environmental knowledge (-0.478\*\*) and coping strategies (-0.564\*\*) indicate that as the levels of eco-anxiety rise, a person may feel less informed and use fewer good coping mechanisms. While a positive correlation with engagement in environmental activism (0.482\*\*) suggests that higher levels of eco-anxiety may themselves serve as motivators to greater involvement in environmental initiatives.

### 4.4. Multiple Regression Analysis

A multiple regression analysis was conducted to assess the impact of the independent variables on the dependent variables—mental health status and behavioral changes. The independent variables included levels of eco-anxiety, social support, environmental knowledge, coping strategies, demographic factors, and engagement in environmental activism.

Table 4					
Variable	Unstandardized Coefficients (B)	Standardized Coefficients (β)	t	Sig.	
(Constant)	1.230		3.832	0.000	
Eco-Anxiety	0.345	0.450	7.667	0.000	
Social Support	-0.215	-0.240	-4.135	0.000	
Environmental Knowledge	0.285	0.300	6.951	0.000	
Coping Strategies	-0.134	-0.150	-2.792	0.006	
Age	-0.059	-0.070	-2.786	0.006	
Engagement in Environmental Activism	0.194	0.220	3.464	0.001	

This table 4 reports the results of multiple regression analysis in terms of the impacts of independent variables on dependent variables. The expected change in a dependent variable is reported for each one-unit change in an independent variable by representing it with unstandardized coefficients (B) while standardized coefficients have their contribution in terms of relative importance. The analysis revealed significant prediction of mental health status through eco-anxiety, signifying that those who have a higher level of report a worse mental health outcome. Social support, too, was negatively associated with the mental health status (B = -0.215, p < 0.001). This indicates that those who had lower social supports faced greater challenges regarding their mental

health. Lastly, participation in environmental activism was positively associated with the status of mental health. Its B-value was 0.194 and with p < 0.001, suggesting that activist participation in environmental issues has a positive association with the status of mental health.

## 5. Discussion

A sizeable correlation between the levels of eco-anxiety and mental health results and behavioral changes has been identified in the data analysis of this study; hence, it further contributes to the literature on psychological responses to climate change. One of these phenomena is specifically referred to as eco-anxiety, that is, a chronic fear of an impending environmental doom (Cianconi et al., 2020). This relationship between perceived eco-anxiety and social support has been discovered with significance: the relationship is strongly negative, suggesting that individuals with high levels of eco-anxiety lack the necessary level of social support, r = -0.612, p < 0.01. This relationship is in line with previous studies that demonstrate social support as a buffer to psychological distress caused by environmental factors (Sims et al., 2020).

The findings also indicated that ecological anxiety has a negative correlation with the variable of environmental knowledge (r = -0.478, p < 0.01) as well as with coping skills (r = -0.564, p < 0.01). This suggests that scores based on perceived levels of ecological anxiety are high for those individuals who, in their turn, feel that they do not know much about ecological issues and who do not utilize adaptive coping skills. This is further confirmed by the multiple regression result where higher levels of eco-anxiety significantly predict a poor mental health status (B = 0.345, p < 0.001). This thus confirms Hypothesis 1, whereby high levels of eco-anxiety account for increased mental health problems or issues with anxiety and depression.

Indeed, earlier researches have documented similar trends in earlier literatures and have based the fact that individuals who develop ecological anxiety are actually the ones with the highest extents of anxiety, depression, and existentialist anxiety (Canady et al., 2011). For instance, (Sarrasin et al., 2022) found that children who experienced environmental despair had the most extreme distress linked to eco-anxiety attacks and thus subject an individual to anxieties more largely. The findings of the current research tend to corroborate such findings, where there is a dire need for a consideration of an acknowledgment of eco-anxiety as an essential psychological issue within the capacity of mental health.

Analysis has also revealed that the level of eco-anxiety is associated with behavior change, both negatively and positively. It was observed that there is a positive association between the level of eco-anxiety and assuming environmental activist pursuits (r = 0.482, p < 0.01). This means that people who have high levels of eco-anxiety are more active in activities for the promotion of environmental causes. That can be considered related to Hypothesis 2, which was defined such that people who suffer from anxiety regarding their environment also change their behavior, including being more aggressive in environmental activism.

Studies show that environmental anxiety may inspire individuals toward action in other areas of environmentalism, increasing activity engagement in environmental practices and local activism (Pihkala, 2022). For example, the sensitively aware climate-change concerned persons will become involved in campaigns, clean-ups within the environment, and policies enforcing solutions related to environmental degradation. This then shows that eco-anxiety, though viewed negatively can also be considered a positive catalyst in behavioral change.

On the other hand, the outputs of the analytical process revealed that there is an association of higher levels of eco-anxiety with avoidance behaviors; indeed, there exists a strong negative correlation between these factors and coping strategies (r = -0.564, p < 0.01). This suggests that people experiencing overpowering eco-anxiety become unable to talk about environmental concerns because of helplessness and hopelessness. Such behavior (Cianconi et al., 2020) named "eco-paralysis" when individuals became alienated from the discourse about the environment and stopped talking due to the psychic burden their concerns represented for them.

These avoidance behaviors can feed into feelings of isolation and powerlessness, creating a self-perpetuating vicious cycle that prevents effective coping and engagement with ecological challenges. These two dynamics in response to eco-anxiety-increased activism and avoidance-make human behavior multidimensional while coping with climate change. Such implications suggest how it is important to understand the undercurrent forces that govern human behavior in response to eco-anxiety since these have implications on both mental health outcomes and environmental engagement.

Coping strategies emerged as an essential element of the analysis. How such a mechanism is managed gives significant insights regarding how social support and environmental knowledge play crucial roles in light of reducing the impacts of eco-anxiety. Correlation analysis results showed that the higher levels of social support had lesser levels of eco-anxiety; r = -0.612, p < 0.01. This means that people who have strong social networks are more capable of dealing with their environmental concerns. It also resonates with the literature arguing that it is the social support that drives people toward resilience in the challenge of climate change issues (Righetti et al., 2020).

Environmental awareness was positively related with the coping strategies, r = 0.301, p < 0.01. An interesting relationship is that of those who show a greater consciousness toward ecological issues would be better capable of coping with their eco-anxiety. This is something interesting because it mirrors the empowering results of environmental education as established earlier. More knowledge may raise feelings of agency and control in life (Sims et al., 2020). Educating the masses on environmental issues also help equip them with tools to then use in addressing their concerns, creating a sense of community and collective action, thus reducing feelings of isolation.

The outcomes suggest a need for interventions that enhance environmental awareness and provide social support to improve coping skills in affected populations and reduce negative consequences of eco-anxiety. Awareness and support for action toward environmental issues might serve to better mental health outcomes and encourage proactive behavior among affected populations. The multiple regression analysis brings out effective coping strategies as the most salient feature. Negative correlation between

The multiple regression analysis brings out effective coping strategies as the most salient feature. Negative correlation between coping strategies and mental health status (B = -0.134, p = 0.006) establishes that those individuals who have adequate coping mechanisms will be able to bring about better mental health outcomes. The same could be reinforced by Hypothesis 3, which

suggested that coping strategies, particularly problem-focused coping, mediates the relationship between eco-anxiety and the mental health outcome.

In general, all three hypotheses presented here have been supported with data analysis. All relationships among eco-anxiety, mental health outcomes, and behavioral change are deeply interdependent in that what affects eco-anxiety may have practical implications on one's mental health and behavioral change and coping mechanisms; effective ones like those that come from social support and environment-based knowledge are important elements in the process. This study contributes toward an even deeper understanding of the issue of eco-anxiety and its implications for mental health, providing pathways for future research and intervention strategies in working toward addressing this emerging psychological concern.

To administer effective treatment for eco-anxiety and related psychological disorders, it is necessary to develop community-based interventions that help to promote social support and education regarding environmental issues. In most instances, as these interventions enhance the patient's coping mechanisms and promote proactive environmental activism, they also affect health in society and build a healthier future.

### 6. Conclusion

Thus, in this study, the research has given importance to presenting the serious mental health impact and behavioral changes resulting from eco-anxiety by emphasizing the sense of urgency to deliver the appropriate intervention. According to it, research has described eco-anxiety as ongoing worry about the environmental crisis and its implications for the future, which has been correlated with high levels of anxiety and depression in those affected persons. Based on the research, persons facing a more prominent level of eco-anxiety often report and live in isolation, being overwhelmed, and feeling helpless, all of which is expected to lead to negative mental health outcomes. The analysis has brought to light the critical relationships of eco-anxiety with a number of factors: social support, environment knowledge, and coping strategies. Specifically, it follows that individuals who experience lower levels of social support and have lower environmental knowledge have higher levels of eco-anxiety. More importantly, the data revealed that eco-anxiety can lead to positive behavioral changes such as enhancement in environmental activism, and negative responses such as avoidance behaviors which negatively contribute to engagement with ecological issues.

#### 6.1. Implications

Recognition of eco-anxiety in clinical settings is important because, with such recognition, support for the individual bothered by eco-anxiety may be tailored. Mental health professionals should be trained to identify symptoms of eco-anxiety and to design interventions that include coping strategies, social support mechanisms, and environmental education. Solving eco-anxiety in therapeutic practice can help practitioners support individual adaption to stressors caused by climate change while helping them increase their resilience.

Mental health considerations need to be brought into the mainstream by policymakers and included in their environmental policies. Initiatives that seek to promote both ecological sustainability and mental well-being further policymaking as climate change continues to affect mental health. This may even include funding for mental health services as an effort to cope with the case of eco-anxiety, as well as their inclusion in climate policy and community resilience planning discussions by mental health professionals.

#### 6.2. Recommendations

Some of the significant recommendations that should be executed to effectively address the issues of eco-anxiety are as follows:

- A special program for individuals with eco-anxiety should be designed by the mental health services offering them psychoeducation about eco-anxiety, teaching them coping strategies and therapeutic support provided in groups. The initiative may be founded by trained mental health professionals with an insight into the specific aspects of eco-anxiety.
- Communities should set up projects that encourage social interaction and collective action toward environmental issues. For example, community gardens, clean-up events, and local advocacy groups become places where people come together to connect with others who share such concerns. Such projects help overcome feelings of being isolated, but then also arm the participants with the appropriate action toward environmental sustainability.
- Republican education campaigns need to give the public information on how to cope with eco-anxiety effectively. Workshops, online resources, and community seminars should give people the space to foster their knowledge of this issue and handling practical tools for coping with feeling towards the crisis. In this way, the public will be sufficiently equipped for better handling of mental health impacts of climate change.

#### References

- Allen, K.-A., Kern, M. L., Rozek, C. S., McInerney, D. M., & Slavich, G. M. (2021). Belonging: A review of conceptual issues, an integrative framework, and directions for future research. *Australian journal of psychology*, 73(1), 87-102.
- Ali, A., & Şenturk, İ. (2019). Justifying the impact of economic deprivation, maternal status and health infrastructure on under-five child mortality in Pakistan: An empirical analysis. *Bulletin of Business and Economics (BBE)*, 8(3), 140-154.
- Audi, M. (2022). Income Inequality and Health Across the Mediterranean: A Panel Data Analysis. *Journal of Business and Economic Options*, 5(2), 23-28.
- Audi, M., & Ali, A. (2016). A causality and co-integration analysis of some selected socio-economic determinants of fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
- Audi, M., & Ali, A. (2017). Socio-Economic Development, Demographic Changes and Total Labor Productivity in Pakistan: A Co-Integrational and Decomposition Analysis (No. 77538). University Library of Munich, Germany.
- Audi, M., & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. Archives of Business Research, 5(11).
- Bányai, F., Griffiths, M. D., Király, O., & Demetrovics, Z. (2019). The psychology of esports: A systematic literature review. *Journal* of gambling studies, 35, 351-365.
- Beck, A. T. (1993). Cognitive therapy: past, present, and future. Journal of consulting and clinical psychology, 61(2), 194.

Canady, B. E., Rivera, M., Gerdes, J., Ford, A., Johnson, K., & Nayak, N. (2011). Cultural roadmap: Developing cultural learning strategies during internship. *Training and Education in Professional Psychology*, 5(1), 30.

Chalquist, C. (2009). Ecotherapy: Healing with nature in mind.

- Chou, D. T., Abelama Neto, E., Thomas, I., Martin, A., & Benoit, L. (2023). Climate awareness, anxiety, and actions among youth: a qualitative study in a middle-income country. *Brazilian Journal of Psychiatry*, 45, 258-267.
- Cianconi, P., Betrò, S., & Janiri, L. (2020). The impact of climate change on mental health: a systematic descriptive review. *Frontiers in psychiatry*, *11*, 490206.
- Clayton, S., Manning, C., & Hodge, C. (2014). Beyond storms & droughts: The psychological impacts of climate change. American Psychological Association and ecoAmerica. In.
- Foster, J. D., & Campbell, W. K. (2007). Are there such things as "narcissists" in social psychology? A taxometric analysis of the Narcissistic Personality Inventory. *Personality and Individual Differences*, 43(6), 1321-1332.
- Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American scientist*, 91(4), 330-335.
- Hart, R. (2020). Positive psychology: The basics. Routledge.
- Léger-Goodes, T., Malboeuf-Hurtubise, C., Mastine, T., Généreux, M., Paradis, P.-O., & Camden, C. (2022). Eco-anxiety in children: A scoping review of the mental health impacts of the awareness of climate change. *Frontiers in Psychology*, 13, 872544.
- Malboeuf-Hurtubise, C., Léger-Goodes, T., Herba, C. M., Bélanger, N., Smith, J., & Marks, E. (2024). Meaning making and fostering radical hope: applying positive psychology to eco-anxiety research in youth. *Frontiers in Child and Adolescent Psychiatry*, *3*, 1296446.
- Malizia, A., Filograna, L., Sbordone, F. P., Ciccarese, G., Carbone, A., Carreri, B., Ryan, C. P., Ludovici, G. M., Chierici, A., & Manenti, G. (2021). Response of a Radiology Department to the SARS-CoV-2 Pandemic: The Experience of the Hospital "Policlinico Tor Vergata" in Rome. *International journal of environmental research and public health*, 18(10), 5255.
- McCaffery, J., & Boetto, H. (2024). Eco-emotional Responses to Climate Change: A Scoping Review of Social Work Literature. *The British Journal of Social Work*, bcae129.
- Mehmood, A., Siddique, H. M. A., & Ali, A. (2022). Impact of Health on Worker Productivity: Evidence From South Asia. *Bulletin* of Business and Economics (BBE), 11(2), 1-8.
- Moratis, L., & Melissen, F. (2022). Business Schools, Leadership and Sustainable Development Goals. Routledge.
- Olausson, U. (2011). "We're the ones to blame": Citizens' representations of climate change and the role of the media. *Environmental Communication: A journal of nature and culture, 5*(3), 281-299.
- Pearson, A. R., White, K. E., Nogueira, L. M., Lewis Jr, N. A., Green, D. J., Schuldt, J. P., & Edmondson, D. (2023). Climate change and health equity: A research agenda for psychological science. *American Psychologist*, 78(2), 244.
- Pihkala, P. (2020a). Anxiety and the ecological crisis: An analysis of eco-anxiety and climate anxiety. Sustainability, 12(19), 7836.
- Pihkala, P. (2020b). Eco-anxiety and environmental education. Sustainability, 12(23), 10149.
- Pihkala, P. (2022). Eco-anxiety and pastoral care: Theoretical considerations and practical suggestions. *Religions*, 13(3), 192.
- Righetti, F., Sakaluk, J. K., Faure, R., & Impett, E. A. (2020). The link between sacrifice and relational and personal well-being: A meta-analysis. *Psychological Bulletin*, *146*(10), 900.
- Sarrasin, O., Henry, J. L., Masserey, C., & Graff, F. (2022). The relationships between adolescents' climate anxiety, efficacy beliefs, group dynamics, and pro-environmental behavioral intentions after a group-based environmental education intervention. *Youth*, 2(3), 422-440.
- Sims, L., Rocque, R., & Desmarais, M.-É. (2020). Enabling students to face the environmental crisis and climate change with resilience: inclusive environmental and sustainability education approaches and strategies for coping with eco-anxiety. *International Journal of Higher Education and Sustainability*, 3(2), 112-131.
- Travis, J., Kaszycki, A., Geden, M., & Bunde, J. (2020). Some stress is good stress: The challenge-hindrance framework, academic self-efficacy, and academic outcomes. *Journal of educational Psychology*, *112*(8), 1632.