

Eco-Anxiety and Climate Change Perceptions in Relationship to Mental Health

Onkar Dhoble and Neeraj Panwar
CHRIST (Deemed to be University) Delhi NCR

The detailed relationships between eco-anxiety and mental health in emerging adults are examined in this study. Participants (N = 200) were between 18 and 24, and a correlational research design was used. This study explores the relationship between three variables, eco-anxiety, mental health, and climate change, using Spearman rank analysis, and the analysis focuses on identifying the strength of these variables. There is a strong negative correlation between eco-anxiety and mental health, and there is a negative correlation between mental health and CCP score, which explains that higher eco-anxiety could lead to higher eco-anxiety in individuals and people with low mental health with adverse climate change perceptions. This study aims to give psychoeducation about eco-anxiety and its harsh effects.

Keywords: Eco-Anxiety, Climate Change Perception, COVID-19 anxiety, Mental health, Young Adults.

“Climate justice demands that the little carbon space we still have, developing countries should have enough room to grow,” as stated by Hon’ble Indian Prime Minister Shri Narendra Modi, indicating the significance of concern related to climate change. The idea became a mass movement as he called for people’s participation and collective efforts in combating climate change (P.T.I 2023). Awareness of climate change and its actions can bring many emotions, such as guilt and anger, which adds to eco-anxiety (Pihkala, 2020). Moreover, the DSM-V and ICD-11 list Eco-anxiety as a subtype of anxiety disorder. Currently, there is no mental health diagnosis of eco-anxiety, as it is not considered a pathological problem. However, some people who are experiencing eco-anxiety still feel distress that can limit their daily activities and lead to severe depressive and anxious symptoms (Jones et al., 2012; Doherty, 2018; Pihkala, 2018; Kaplan, 2020; Rosen, 2020). However, it means that increased anxiety about the climate might have different

psychological impacts on people. Individuals claim to have experienced intense fear as a result of feeling inadequate due to climate change.

Eco-anxiety and mental health

Studies have shown that pondering over environmental issues and climate is ingrained in anxiety (Rusting & Hoeksema, 1998). Climate change also adversely impacts children’s and young adults’ psychological, spiritual, and physical health. Climate change perceptions relate to how people think climate change threatens valued entities, such as close others, nature, or the national economy (cf Kellstedt et al., 2008; Paek & Hove, 2017). The youth’s mental health is most affected by climate change (Mishra et al.2017). However, they do suggest a link between eco-anxiety and adverse mental health outcomes, mainly in younger generations (Boluda-Verdu et al., 2022), as they have perfunctory thinking about climate (Prasadh & Suresh, 2016)

Authors have also expressed their concern that while young people want to communicate eco-anxiety openly through their engagement with climate change initiatives, the vast global nature of climate change leads them to believe that their sustainable living measures are inconsequential (Verlie, 2019; Boulianne et al., 2020). Hickman et al. (2021) argued that current narratives surrounding young people and eco-anxiety burden the individual. Several authors have found that engaging in behaviours to lessen the effect of climate change is an effective way for individuals to manage their anxieties about the time ahead and change their feelings in a more positive light (Gunasiri, Wang, & Watkins, 2022, Sanson, Van Hoorn, & Burke, 2019). Most of the well-established climate-related impacts on general health are linked with a higher incidence of mental health issues, as mental health conditions are common among those experiencing cardiovascular disease (Lin et al., 2019). Individuals who perceive the actions of environmental issues and associated dangers are likely to experience higher levels of eco-anxiety (Ojala et al., 2021; Pihkala, 2020)

Eco-anxiety and Climate Change Perception

Climate change perceptions are associated with how people think climate change pressurises valued entities, such as close others' nature (Kellstedt et al., 2008; Paek & Hove, 2017). People are likely more inclined to adapt if they believe climate change is real, caused by human behaviour, or adverse consequences (Valkengoed et al., 2024). There are three types of climate change perceptions—perception of its reality, causes, and consequences could thus influence people's engagement in adaptation actions. Research has shown that stronger climate change perceptions are associated with more support for information-seeking about increased greenhouse gases

(Bateman & O'Connor, 2016; Brügger et al., 2015; Mildemberger et al., 2019; van Valkengoed et al., 2022, 2021). However, the extent to which people believe climate change will have negative consequences was not associated with installing measures to protect the home against coastal flooding and hurricanes (Javeline et al., 2019). In the present research, the relationship between climate change perceptions and adaptation behaviour is mediated by perceptions of specific climate-related risks (cf. Sjöberg, 1999). Studies show that even when people perceive specific climate-related risks, they may not always take action to protect themselves against these risks (e.g., Bamberg et al., 2017; van Valkengoed & Steg, 2019a; Wachinger et al., 2013). This study will focus on finding how eco-anxiety affects mental health and climate change perceptions. After exploring previous literature, young adults in India will be explored.

Method

Research Design

A correlational research design was used for the dissertation according to the study's identified research problem: to determine the strength, direction and natural relationship between eco-anxiety with mental health and climate change perception.

Participants

The target population for the research is individuals from 18 to 24 years old, and the sample size consists of 174 individuals. The sampling technique that was used was convenience sampling.

Table 1. Summary of demographic information about the participants (N = 174)

Category	Sub-category	Number	Percentage
Age	18-20	52	29.88%
	21-22	70	40.22%

Gender	23-24	52	29.88%
	Male	26	14.94%
	Female	145	83.33%
	Non -Binary	3	1.72%
Occupation	School	15	8.62%
	Undergraduate	97	55.74%
	Graduate	62	35.63%

Measures

Hogg's eco-anxiety scale(EA) (Hogg & Stanley, 2021): HEAS-13 is a 13-item scale with high reliability and validity and a unique four-dimensional structure. The items are responded to on a Likert scale ranging from 0 to 3, with 0 corresponding to not at all and three corresponding to nearly every day. The scale has the highest possible score of 39. and reliability of Cronbach's alpha: 0.92, $p < 0.001$. And even the same questions regarding climate change would be asked to know the perceptions which the young adults have

Mental Health Inventory (MHI) -38 (Veit, & Ware)(1983). Items are scored on a six-point scale (1-6) except for items 9 and 28, which are scored on a five-point scale (1-5). The raw score range is 38–226, with higher scores on the Mental Health Index indicating less psychological distress and greater psychological well-being. The items comprising the many subscales and global scales may be reverse-scored depending on the measured underlying construct (Veit & Ware, 1983). The reliability of the MHI has a Cronbach Alpha of 0.94.

Climate change perception scale (Deng et al., 2017): A six-item scale with a seven-point Likert-type response scale ranging from 1 = strongly disagree to 7 = strongly agree was administered to assess the climate change perception. The possible range of scores lies between 7 to 42, where the high score indicates that for people who are willing

to take necessary action towards climate change, the reliability ranges from 0.750 to 0.917, which exceeds the cut-off of 0.7 Thus, the design of the scale is reliable.

Procedure

The research idea was suggested before getting permission from IRB. Later, permission was obtained to make sure the research was done ethically. People were asked for their permission using a form. Participants were asked approached to ask if they wanted to help with the research. Data were collected online from 185 people who filled out the forms, but some were removed because they didn't fit the study's requirements, finally leaving 174 total participants. Data were collected online using Google Forms. Ethical rules were followed throughout the process to make sure everyone's rights were respected. After collecting the data, it was analyzed to find out important information for the research.

Results

The study aims to study how eco-anxiety affects mental health and climate change perceptions in young adults. To know how these variables relate to each other and what the nature of these variables is. The data was not usually disturbed, and non-parametric correlation analysis and Spearman rank analysis was used.

Table 2. Descriptive statistics and correlations for measures

Measure	Mean	SD	MH	EA	CCP
MH	139.00	26.60			
EA	14.50	08.90	-0.34***		
CCP	36.90	07.54	-0.26***	-0.14	

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$
 MHI = Mental Health Index; EA = Eco-anxiety ; CCP = Climate change perceptions

The results revealed a strong and statistically significant negative correlation

between MHI and EA ($r = -0.34, p < 0.001$), indicating that heightened eco-anxiety is associated with lower mental health scores. A was observed between MHI and CCP Scores ($r = 0.26, p < 0.001$), which explains that individuals with higher mental health scores tend to hold more positive climate change perceptions. The negative correlation between eco-anxiety and ccp Scores was relatively weaker ($r = -0.14, p = 0.069$), implying that higher environmental anxiety may be linked to less favourable climate change perceptions.

Discussion

People have talked about global warming on various platforms for over two decades. Some environmentalists like Sunderlal Bahuguna and T Shobeendran lost their lives working toward the protection and spreading awareness about the long-term consequences of the worldwide warming outbreak of COVID-19 in the early months of the year 2020, drawing the attention of researchers to explore the phenomenon of climate change anxiety (Clayton, & Karazsia, 2020) later on in 2021 hogg proposed a similar concept termed as eco-anxiety (Hogg & Stanley, 2021) experienced in response to the ecological crisis (Pihkala, 2020) multiple researchers as addressed the concern of climate change and eco-anxiety with various other kinds of anxiety such as general anxiety (Spitzer, Kroenke, Williams, & Löwe, 2006), pandemic anxiety and covid-19 anxiety (Silva et al., 2020). Such a trend is a clear indication that anxiety in any form if experienced, leads to poor mental health (Clayton, 2020)

However, talking about anxiety related to the environment is not often spoken about by people, but in Subconsciousness, people think about the environment. Changes. In other words, when natural calamities such as drought, earthquake, flood, landslides or volcanic eruption occur, people are forced

to consider whether the development is protecting or destroying the environment. The irony is that such ecological changes occur globally throughout the year but do not stimulate a large community to cooperate and work to protect the environment. One of the significant milestones was also taken in 2015 by proposing 17 sustainable developmental goals, one of which is goal no 13, which addresses climate action. This could be one of the primary reasons most people find it challenging to take time and consider climate change seriously.

Likewise, the present study indicated that people with poor mental health were found to be high on eco-anxiety and have negative perceptions towards climate change. Another proper reason for such findings could be the increased attention people pay to social media and the spread of information through various platforms such as Instagram, Twitter, and Facebook. People are more concerned about their perspectives, personal likes and dislikes and how their followers have appreciated them. Anyone who makes some effort to spread information about the negative consequences of climate change is even overlooked on social media. The research also helps to create awareness about the significance of mental health. Though it is at a very primary level, it makes an impact.

Conclusion

This study explored the relationship between three variables: eco-anxiety climate change perception about mental health, in which findings were that. People are to be psycho-educated about eco-anxiety and how it affects mental health and climate change pereceptions of the people. People have a fundamental understanding of the seriousness of this issue, and they should be more informed by keeping themselves updated.

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- Weinstein, N. D., Rothman, A.

Onkar Dhoble, Student, Department of Psychology, CHRIST (Deemed to be University), Delhi NCR, Email: dhobleonkar09@gmail.com,

Neeraj Panwar Ph.D, Assistant Professor, Department of Psychology, CHRIST (Deemed to be University), Delhi NCR, Email: neeraj.panwar@christuniversity.in