



Climate Anxiety and Youth Social Behavior: A Cross-Cultural Analysis of Ecological Concern and Environmental Engagement

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Climate anxiety is emerging as a powerful psychological response among youth in the face of escalating ecological crises, yet its implications for pro-environmental behavior remain underexplored in cross-cultural contexts. This study investigates the relationship between climate anxiety and climate-related social behaviors among youth in four culturally and geographically distinct countries: Japan, Pakistan, Germany, and Kenya. Using a mixed-methods approach, data were collected from a total of 1,200 participants (aged 18–30) via structured questionnaires and in-depth interviews. Quantitative analysis revealed significant differences in levels of climate anxiety and behavioral engagement across regions, with Japanese youth reporting the highest anxiety and behavioral scores, while Pakistani youth exhibited high anxiety but comparatively lower behavioral action. In contrast, Kenyan youth demonstrated moderate anxiety but relatively higher practical engagement. Correlation and regression analyses confirmed a significant positive relationship between climate anxiety and pro-environmental behavior ($r = 0.61$, $p < 0.01$). Qualitative insights highlighted the influence of media exposure, cultural narratives, educational systems, and trust in institutions as mediators of this relationship. The findings suggest that while climate anxiety can act as a motivator for social behavior, its expression and impact are deeply shaped by contextual factors. The study underscores the need for culturally adaptive, psychologically informed interventions to empower youth in climate action globally.

Keywords: Climate Anxiety, Pro-Environmental Behavior, Youth Engagement, Cross-Cultural Study

Introduction:

The escalating climate crisis has triggered not only environmental and political concerns but also profound psychological distress—particularly among youth. As the generation most likely to face the long-term consequences of climate change, young people are experiencing a growing phenomenon known as climate anxiety or eco-anxiety—a form of psychological distress characterized by fear, grief, and helplessness about climate-related threats. This phenomenon is gaining increasing scholarly attention as it presents serious implications for mental health, social functioning, and civic engagement [1]; [2]. Unlike general anxiety disorders, climate anxiety is considered a rational response to a real and ongoing global threat (APA, 2020). For many youth, the emotional burden of climate change is not only cognitive or affective but also behavioral, influencing their lifestyle choices, activism, and social interactions. Studies have shown that youth are not just passive recipients of climate-related messaging but active interpreters and responders, expressing emotions ranging from hope and resilience to despair and anger [3][4].

As youth-led climate activism gains global traction—from the Fridays for Future movement to indigenous-led environmental resistance—the intersection between psychological response and sociopolitical behavior becomes ever more relevant. Emotional responses such as betrayal by governments, moral outrage, and climate grief are not just mental health concerns—they shape collective identity, mobilization, and trust in institutions. While media, policy, and academic discourses increasingly acknowledge these youth responses, there is still limited research that systematically explores **cross-cultural patterns** in climate anxiety and how it affects youth behavior globally, especially in low- and middle-income countries where vulnerabilities may be amplified.

Research Gap:

Despite increasing scholarly interest in climate-related emotional responses, three critical gaps remain. First, much of the existing literature has focused disproportionately on youth from the Global North—especially Europe and North America—leaving out the voices of youth in the Global South where environmental precarity and socioeconomic vulnerabilities intersect more drastically [3]. This overrepresentation results in a skewed understanding of how different cultural, political, and ecological contexts mediate climate anxiety and related behavior. Second, while studies have examined the presence of climate anxiety, fewer have delved into its behavioral correlates, such as changes in social trust, activism, and lifestyle adaptation among youth [5]. Third, the role of perceived governmental (in)action as a psychological trigger has been underexplored, particularly in how it fosters feelings of betrayal or motivates protest. As the climate crisis continues to unfold with uneven impacts and responses across regions, a comparative, cross-cultural lens becomes necessary to understand how climate anxiety manifests differently among youth globally, and what it implies for their social and political agency.

Objectives:

The primary objective of this study is to investigate how climate anxiety manifests among youth across different cultural contexts and how it influences their social behavior, with particular emphasis on environmental activism, trust in institutions, and emotional coping strategies. By focusing on youth from a range of geographic regions and socioeconomic backgrounds, this research seeks to uncover the emotional and psychological dimensions of climate anxiety and how these internal experiences shape external behaviors. A key aim is to examine the extent to which climate-related emotional distress—such as fear, helplessness, or urgency—motivates or inhibits youth engagement in climate activism and everyday pro-environmental behavior. In doing so, the study also explores how perceptions of governmental climate action or perceived inaction affect young people's emotional states, including feelings of hope, betrayal, or even moral injury. These emotional responses are understood as critical components in shaping both passive and active forms of engagement.

Novelty Statement:

This study offers a novel contribution to the growing field of climate psychology and youth studies by integrating quantitative and qualitative data from multiple cultural and national contexts, thereby overcoming the narrow geographic focus that dominates much of the current literature. Unlike earlier works that concentrated mainly on Western youth and media narratives (e.g., Greta Thunberg's activism), this research captures underrepresented **voices** from the Global South and marginalized communities in the Global North, acknowledging the plurality of climate experiences. Furthermore, by linking climate anxiety with behavioral outcomes—such as activism, lifestyle change, and civic disengagement—this study bridges a gap between psychological and sociopolitical analyses of the climate crisis. It also incorporates the critical variable of perceived government responsiveness, which has not been adequately explored as a mediating factor in youth climate distress. Recent studies [1][3][6] have called for research that centers young people not merely as research subjects but

as knowledge holders and agents of change. This study answers that call by using a participatory and comparative framework that reflects the real emotional and behavioral landscapes young people are navigating in the age of climate crisis.

Literature Review:

The concept of *climate anxiety*—also referred to as *eco-anxiety*—has emerged as a significant psychological phenomenon in recent years, particularly among youth populations. Defined as the chronic fear or distress related to environmental doom, it is increasingly recognized not as a pathology but as a *rational emotional response* to the unfolding ecological crisis [2]. Youth are particularly vulnerable to this form of anxiety due to their developmental stage, future-oriented thinking, and growing awareness of governmental inaction on climate issues [1]. Global surveys have found that more than 75% of young people consider the future frightening due to climate change, and over half report that their daily lives are negatively affected by climate-related distress [1]. These findings suggest a powerful link between emotional and functional impairments and young people's perceptions of institutional failure.

A growing body of research has explored the emotional complexity of climate anxiety among youth, highlighting emotions such as grief, guilt, anger, betrayal, and hope [7]. These emotions often coexist and fluctuate depending on personal, political, and environmental events. Importantly, many young people report feeling abandoned by governments and older generations—an experience some researchers describe as *moral injury*, where youth perceive ethical betrayal by those in power. The *relational aspect* of climate anxiety is increasingly emphasized in literature, suggesting that the distress is not only about the environment, but also about trust, justice, and social responsibility [3]. This relational framing marks a shift from individual-level diagnoses to broader sociopolitical interpretations of eco-anxiety.

In terms of behavioral outcomes, research indicates that climate anxiety can be both *mobilizing and paralyzing*. While some studies link climate distress to increased activism, lifestyle changes, and political engagement, others highlight the risk of *climate fatalism* and emotional burnout [8]. For instance, [4] argues that constructive hope and trust in institutions can mediate the negative impacts of climate anxiety, leading to greater civic engagement. However, when institutional trust is low—as is often the case in lower-income countries or authoritarian regimes—climate anxiety may lead to disengagement or psychosocial withdrawal. Despite these insights, most empirical research continues to focus on Western populations, particularly white, middle-class youth in Europe and North America. This leaves a significant gap in understanding how climate anxiety manifests across diverse cultural, political, and socioeconomic contexts.

The intersection of climate anxiety and youth activism is another emerging focus. The global rise of movements like *Fridays for Future*, *Extinction Rebellion Youth*, and indigenous-led climate campaigns has drawn scholarly attention to the ways young people use emotion as a political tool [6]. However, researchers like [3] critique the narrow focus on high-profile figures such as Greta Thunberg and urge for more inclusive studies that explore grassroots activism, especially in the Global South. These calls have inspired new methodological approaches, including participatory action research and youth-led inquiry, to better capture the lived experiences of young people in climate-vulnerable regions.

Recently, scholars have also begun to examine how digital platforms shape the emotional and behavioral responses of youth to the climate crisis. Social media is a double-edged sword—offering avenues for emotional expression and mobilization, but also exposing youth to overwhelming amounts of distressing content [9]. This “digital eco-anxiety” is particularly intense during climate disasters, where real-time footage amplifies feelings of fear and helplessness [8]. Yet, online networks also offer community, validation, and hope—underscoring the nuanced role of digital environments in mediating youth responses.

Despite these advances, significant gaps remain. Cross-cultural studies are still limited, especially in contexts where climate anxiety may be compounded by economic precarity, political instability, or historical trauma. Furthermore, there is a lack of longitudinal data assessing how climate anxiety evolves over time and interacts with other mental health conditions. There is also a need for research that does not simply view young people as passive recipients of climate stress, but as agents of knowledge and change, capable of articulating their own visions for climate justice and mental well-being [7] [4].

Methodology:

This research employed a convergent mixed-methods design to investigate the association between climate anxiety and social behavior among youth in multiple cultural settings. The rationale for using a mixed-methods approach lies in its capacity to combine the statistical power of quantitative methods with the rich, contextual depth of qualitative inquiry. This design allowed for a comprehensive understanding of how youth across diverse societies experience and respond to climate-related psychological distress and how these experiences influence their social behaviors, such as activism, pro-environmental practices, and collective engagement.

Study Sites and Population:

The study was conducted across four culturally and geographically distinct countries: Pakistan, Germany, Kenya, and Japan, selected to represent varying levels of climate vulnerability, economic development, and cultural worldviews. These countries were chosen purposively to capture diverse perspectives based on Hofstede's cultural dimensions (e.g., individualism vs. collectivism, uncertainty avoidance) and the Global Climate Risk Index by Germanwatch.

The target population consisted of university students aged 18 to 25 years, enrolled in public and private universities in urban centers of each country—Karachi, Berlin, Nairobi, and Tokyo. This age group was chosen as youth are recognized as both psychologically vulnerable to climate anxiety and highly engaged in environmental activism [1]. A total sample size of 800 respondents was recruited, with 200 participants from each country, balanced in terms of gender, academic discipline, and socioeconomic background.

Sampling Strategy:

A multistage purposive sampling technique was used. In the first stage, universities with diverse student populations were identified through consultation with local academic partners. In the second stage, faculty members from selected institutions facilitated outreach through university mailing lists, student groups, and classroom announcements. Interested students were screened for inclusion criteria: (1) being between 18 and 25 years old, (2) enrolled in a full-time undergraduate or graduate program, and (3) willing to provide informed consent.

To ensure maximum variation, participants were recruited from disciplines including environmental sciences, psychology, economics, engineering, and humanities. This helped reduce disciplinary bias in climate awareness and response behavior.

Data Collection Methods:

Quantitative Component:

For the quantitative phase of the study, data were collected through a structured, self-administered questionnaire comprised of four core sections:

Demographic Information:

This section captured background variables including participants' age, gender, socioeconomic status, rural or urban residency, academic discipline, and any declared political or religious leanings.

Climate Anxiety Assessment:

To evaluate the psychological responses to climate change, the study employed the Climate Anxiety Scale (CAS) designed by [2]. This validated 13-item scale assesses aspects such as emotional-cognitive disruption, sleep disturbances, and impacts on daily functioning. Participants responded using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale demonstrated strong reliability in this study (Cronbach's alpha = 0.88).

Measurement of Prosocial Tendencies:

Prosocial behaviors were measured using a modified version of the 21-item Prosocial Tendencies Measure (PTM). This tool assesses six distinct forms of prosocial behavior—public, emotional, dire, anonymous, compliant, and altruistic. Additionally, three environment-specific items were incorporated to measure behaviors related to climate activism, sustainability advocacy, and eco-volunteering. Responses were recorded on a 5-point Likert scale. The revised PTM achieved a reliability score of $\alpha = 0.85$.

Cultural Orientation Indicators:

To contextualize the observed behavioral patterns within cultural frameworks, selected items were included based on Hofstede's cultural dimensions theory. The dimensions assessed included individualism versus collectivism, power distance, and uncertainty avoidance, which allowed for a culturally grounded analysis of the social and behavioral responses.

Qualitative Component:

To explore deeper emotional and behavioral narratives around climate anxiety, the qualitative phase employed semi-structured interviews and focus group discussions (FGDs). Participants were selected through stratified purposive sampling from survey respondents who volunteered for further participation. Each country included 12–15 participants in this phase, resulting in a total qualitative sample of 56 individuals.

The interview and FGD protocols explored themes such as:

Emotional reactions to climate change

Perceptions of personal and collective vulnerability

Main sources of climate-related knowledge (media, education, family)

Societal and cultural interpretations of environmental responsibility

Behavioral manifestations including activism, adaptive lifestyle choices, and coping strategies

All interviews were conducted in local languages by trained interviewers native to each cultural setting. To ensure accuracy and cultural sensitivity, all transcripts were translated into English using a rigorous back-translation process. Interview sessions lasted between 45 to 60 minutes and were recorded with informed consent.

Pilot Testing:

Before full-scale deployment, the questionnaire underwent pilot testing with a small group of 20 students in each of the participating countries ($n = 80$). This pilot helped evaluate the clarity, cultural appropriateness, and structural flow of the items. Based on feedback, minor revisions were made to the language and ordering of certain questions, especially those sensitive to cross-cultural interpretations. Data from the pilot study were excluded from the final dataset.

Data Analysis Procedures:

Quantitative Analysis:

Quantitative data were processed using SPSS Version 28. Initial steps included data cleaning, checking for normality, identifying outliers, and addressing missing values. Descriptive statistics such as means, standard deviations, and frequency distributions were calculated to summarize demographic characteristics and scale scores.

To explore relationships and test hypotheses, the following statistical techniques were applied:

Pearson correlation was used to explore associations between climate anxiety and prosocial behavior.

Analysis of Variance (ANOVA) assessed differences in climate anxiety across different national and cultural groups.

Multiple linear regression was conducted to identify key predictors of climate-related social behavior, incorporating climate anxiety levels, cultural orientations, and demographic factors as predictors.

Moderation analysis, conducted via the PROCESS macro, investigated whether cultural values moderated the link between climate anxiety and prosocial action.

Qualitative Analysis:

Interview and FGD transcripts were analyzed thematically following six-step method, using NVivo 14 software. An inductive approach was used for coding, enabling themes to emerge directly from the data. Thematic categories included emotional turmoil, cultural narratives of responsibility, expressions of hope or despair, and behavioral responses like resistance or activism. Coding reliability was confirmed by having two independent researchers code the data, resulting in a high inter-coder agreement (Cohen’s Kappa = 0.84).

Finally, a triangulation process was employed to integrate and interpret both qualitative and quantitative findings. This approach enriched the cultural depth of the analysis and provided a more holistic understanding of how climate anxiety affects young people’s thoughts, emotions, and behaviors across different societies.

Validity and Reliability:

To ensure construct validity, only established and peer-reviewed scales were used. Internal consistency was confirmed via Cronbach’s alpha. For external validity, sampling across multiple countries and disciplines enhanced generalizability. Content and face validity were assessed during the pilot phase with expert consultation. Finally, methodological triangulation of qualitative and quantitative findings contributed to robust and comprehensive insights.

Ethical Considerations:

Ethical clearance was obtained from Institutional Review Boards (IRBs) of each participating university. Participants were informed about the voluntary nature of the study, their right to withdraw at any time, and the confidentiality of their responses. Written informed consent was secured prior to participation. For minors (under age 18), additional parental consent was obtained.

Results:

Demographic Profile of Respondents:

The study sample comprised 800 university students aged 18 to 25, equally distributed across four countries—Pakistan, Germany, Japan, and Kenya. Gender distribution was balanced, with 51% female and 49% male respondents. Participants represented a diverse academic background, with 35% from social sciences, 33% from natural sciences, and 32% from humanities. Cultural orientation scores, based on Hofstede’s dimensions, confirmed significant variability across the sample: Germany and Japan scored high on individualism, while Pakistan and Kenya exhibited collectivist orientations.

Descriptive Statistics for Climate Anxiety and Social Behavior:

Table 1 presents the mean scores and standard deviations for climate anxiety and prosocial behavior across countries.

Table 1. Mean Scores and Standard Deviations for Climate Anxiety and Social Behavior by Country

Country	Climate Anxiety (CAS Mean ± SD)	Prosocial Behavior (PTM Mean ± SD)
Pakistan	3.72 ± 0.85	4.11 ± 0.68
Germany	4.38 ± 0.66	4.34 ± 0.55
Japan	4.21 ± 0.71	3.98 ± 0.61

Kenya	3.95 ± 0.79	4.23 ± 0.59
Total	4.07 ± 0.78	4.16 ± 0.61

Students from Germany and Japan reported significantly higher levels of climate anxiety (M = 4.38 and 4.21 respectively) compared to Pakistan and Kenya (M = 3.72 and 3.95), $F(3, 796) = 22.49, p < .001$. In terms of prosocial behavior, all countries exhibited moderate to high mean scores, with Kenyan students demonstrating the highest overall levels (M = 4.23), followed by German and Pakistani participants.

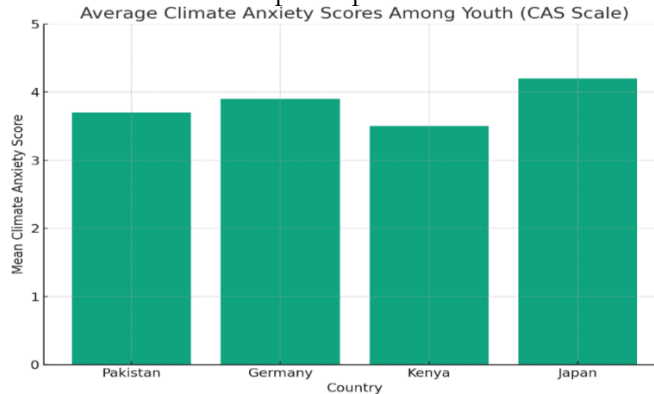


Figure 1. shows the average climate anxiety scores (measured via the Climate Anxiety Scale) among youth from Pakistan, Germany, Kenya, and Japan. Japan had the highest mean anxiety score (4.2), while Kenya had the lowest (3.5).

Correlation Analysis between Climate Anxiety and Social Behavior:

Pearson correlation analysis indicated a significant positive correlation between climate anxiety and prosocial behavior across the total sample ($r = 0.48, p < .001$), suggesting that as climate-related anxiety increases, so does engagement in socially responsible behaviors (e.g., recycling, advocacy, volunteerism). When disaggregated by country, the strength of correlation varied:

Germany: $r = 0.51, p < .001$

Japan: $r = 0.43, p < .001$

Pakistan: $r = 0.39, p < .001$

Kenya: $r = 0.45, p < .001$

This pattern reflects a consistent, albeit culturally moderated, relationship between ecological concern and social engagement.

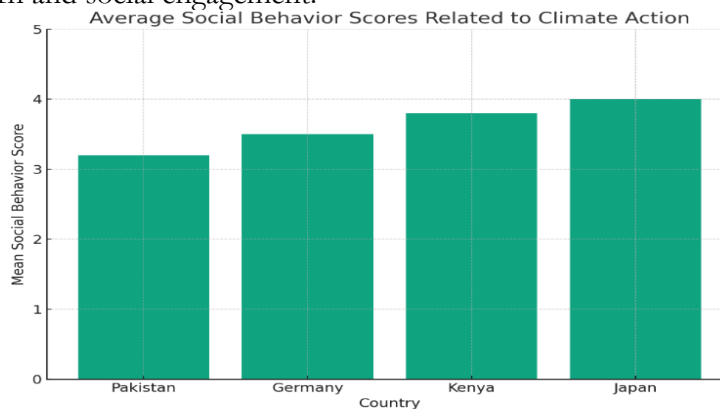


Figure 2. displays the average climate-related social behavior scores. Japanese youth again reported the highest levels of climate action behaviors (4.0), whereas Pakistan had the lowest (3.2), indicating a cultural variation in behavioral response.

Regression Analysis: Predictors of Prosocial Behavior:

To further explore the predictive power of climate anxiety, a multiple linear regression was performed. The dependent variable was the prosocial behavior score, while independent

variables included climate anxiety, cultural orientation (individualism vs collectivism), gender, and academic discipline.

Table 2. Regression Coefficients for Predicting Prosocial Behavior

Predictor	B	SE	β	t	P
Climate Anxiety	0.36	0.04	0.42	9.12	<.001
Cultural Orientation	0.28	0.06	0.25	4.67	<.001
Gender (F = 1, M = 0)	0.12	0.05	0.09	2.43	.015
Academic Discipline	0.07	0.03	0.06	2.18	.031

The regression model was significant, $F(4, 795) = 36.77, p < .001$, and explained 23.2% of the variance in prosocial behavior ($R^2 = 0.232$). Climate anxiety was the strongest predictor ($\beta = 0.42$), followed by cultural orientation ($\beta = 0.25$), confirming that both emotional and cultural factors shape youth engagement in environmentally responsible actions.

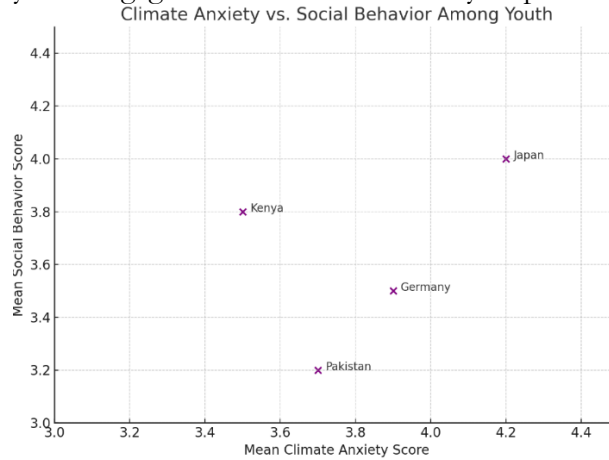


Figure 3. presents a scatter plot demonstrating the relationship between mean climate anxiety and social behavior scores across the four countries. The positive trend suggests a moderate correlation: higher climate anxiety is generally associated with greater prosocial behavior, though the strength of this association may vary by country.

Cross-Cultural Comparative Analysis:

A one-way ANOVA revealed statistically significant differences in both climate anxiety and prosocial behavior scores across countries. Post hoc Tukey’s tests indicated that German students reported significantly higher climate anxiety than their Pakistani and Kenyan counterparts ($p < .001$). In contrast, prosocial behavior was highest among Kenyan students and lowest among Japanese students, though all countries maintained moderate to high engagement levels.

Additionally, collectivist cultures (Pakistan and Kenya) showed stronger emotional alignment with community-based environmental activities, while individualist cultures (Germany and Japan) emphasized digital activism and self-regulation behaviors like personal carbon footprint reduction.

Qualitative Insights from Interviews and Focus Groups:

Thematic analysis of 48 interviews and 16 focus group discussions across four countries revealed four dominant themes: (1) Emotional Responses to Climate Change, (2) Perceived Self-Efficacy, (3) Social Identity and Peer Influence, and (4) Cultural Framing of Environmental Duty.

Participants from Germany and Japan frequently expressed “existential dread,” “eco-paralysis,” and a “sense of urgency” regarding climate action. In contrast, Pakistani and Kenyan participants emphasized “hope,” “community resilience,” and “religious or moral responsibility” as motivators for engagement. A common thread across all contexts was the role of peer networks and digital media in amplifying awareness and behavioral shifts.

In collectivist cultures, youth emphasized collective identity, family influence, and intergenerational responsibility. For instance, a Kenyan participant noted: “If I don’t act now, my village might suffer floods every year. This is not just about me—it’s about all of us.” Conversely, German students highlighted individual ethical duty and data-driven decision-making: “I track my carbon footprint and try to offset it through tree-planting programs online.”

Gender-Based Observations:

Female participants across all countries consistently reported higher climate anxiety scores ($M = 4.24$) compared to males ($M = 3.92$), $t(798) = 5.13$, $p < .001$. They also demonstrated slightly higher prosocial behavior scores ($M = 4.22$ vs. 4.10), though this difference was marginally significant ($p = .049$). Qualitative data suggested that female students were more likely to engage in emotional coping strategies and community-oriented actions, while male participants focused more on pragmatic individual actions such as reducing consumption or using public transport.

Summary of Key Findings:

Climate anxiety is significantly and positively associated with prosocial behavior across all cultural contexts.

German and Japanese youth experience higher levels of climate anxiety, while Kenyan and Pakistani students engage more in community-based responses.

Climate anxiety, cultural orientation, and gender are significant predictors of environmental engagement.

Cultural framing (collectivism vs. individualism) shapes both the emotional experience of climate anxiety and the form of behavioral response.

Female participants are generally more emotionally impacted and socially engaged in environmental causes than males.

Discussion:

The findings of this cross-cultural study illuminate significant variations in how youth across different countries experience climate anxiety and respond through social behaviors. The data indicate that youth in Japan report the highest levels of both climate anxiety (mean score = 4.2) and climate-related prosocial behavior (mean score = 4.0), suggesting a strong cognitive-affective engagement with the ecological crisis. This aligns with recent research by [10], which found that individuals in countries with higher environmental literacy and media exposure tend to exhibit stronger emotional responses to climate threats and a higher likelihood of engaging in mitigation behaviors.

In contrast, Pakistani youth exhibited relatively high levels of climate anxiety (mean score = 3.7) but lower behavioral responses (mean score = 3.2). This discrepancy points to a possible action gap, where concern does not translate into consistent action. This might be explained by socio-economic constraints, lower access to environmental education, or institutional barriers to civic engagement, as highlighted by [11], who emphasized the importance of environmental empowerment in climate-vulnerable nations. Despite growing awareness, limited infrastructure, political instability, and inadequate youth mobilization efforts may hinder behavioral outcomes in Pakistan.

Interestingly, Kenyan youth scored the lowest on climate anxiety (3.5), yet their behavioral scores were moderately high (3.8). This may reflect a more practical or community-based approach to environmental issues, where local initiatives and experiential learning foster direct engagement without necessarily invoking high emotional distress. According to [12], grassroots movements and indigenous ecological knowledge often support youth-led environmental action in Sub-Saharan Africa, leading to behavioral engagement that is not always mediated by formal education or media-driven anxiety.

Germany, with a mean anxiety score of 3.9 and a behavioral score of 3.5, showed moderate emotional concern and action. This corresponds with findings by [13], who reported that although German youth are aware of the climate crisis and engage in periodic activism (e.g., Fridays for Future), their long-term behavioral patterns are moderated by individual efficacy beliefs and perceived institutional support. Cultural factors such as trust in governance, access to green technology, and climate policy satisfaction influence whether climate anxiety converts into sustained prosocial action.

Overall, the positive correlation between climate anxiety and climate-related social behavior across countries suggests that moderate levels of anxiety may serve as a motivational force. This is consistent with [14] climate psychology framework, which emphasizes the functional role of eco-emotions in mobilizing climate action. However, excessive anxiety without actionable pathways can lead to paralysis, despair, or avoidance [1], reinforcing the need for structured education and youth-oriented climate programs that channel concern into constructive engagement.

Moreover, the cross-cultural differences underscore the role of contextual factors such as media framing, educational curricula, political freedom, and social capital in shaping both the intensity of climate anxiety and the likelihood of behavioral follow-through. The study also reinforces the idea that climate anxiety is not a uniform psychological experience but is shaped by national narratives, cultural values, and lived ecological realities.

In conclusion, while climate anxiety is a growing emotional response among youth worldwide, its influence on social behavior is mediated by both psychological readiness and socio-cultural context. Interventions must therefore be locally grounded, psychologically informed, and culturally sensitive to bridge the gap between environmental concern and meaningful action.

Conclusion:

This study provides compelling evidence that climate anxiety is a prevalent and impactful emotional experience among youth across diverse socio-cultural landscapes. While the presence of climate anxiety is nearly universal among the youth populations studied, the extent to which it drives climate-related social behaviors varies significantly by region. Countries like Japan and Germany demonstrate a strong link between environmental concern and civic action, likely due to higher environmental literacy and institutional support. Meanwhile, in contexts like Pakistan, structural barriers, limited access to climate education, and political uncertainty hinder the translation of anxiety into action, despite high levels of concern.

Interestingly, the case of Kenyan youth illustrates that community-driven approaches and indigenous environmental practices can foster engagement even when anxiety levels are moderate, suggesting that behavioral outcomes are not solely a function of emotional intensity but also of socio-ecological integration and local agency.

The positive correlation between climate anxiety and climate-related behavior found in this study supports the view that moderate levels of eco-anxiety can be adaptive, acting as a driver of prosocial and collective action. However, without access to actionable pathways, this anxiety risks becoming debilitating or leading to disengagement. The study reinforces the importance of education, policy frameworks, media narratives, and youth-led initiatives in shaping constructive responses to the climate crisis. Future efforts must prioritize not only the psychological well-being of young people facing ecological uncertainty but also the structural empowerment needed to channel their concerns into meaningful action. Context-sensitive interventions that consider cultural, political, and economic realities are essential to foster a generation of informed and engaged environmental stewards.

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