



CLIMATE ANXIETY AMONG CENTRAL ASIAN YOUTH

Robiya Ramazonova,
2nd-year student of the
Psychology at the UzJMCU
Tel: (93) 509-96-76

Abstract: Climate anxiety, characterized by chronic worry and distress about environmental degradation, is increasingly prevalent among youth worldwide. This psychological response to climate change not only affects mental health but also influences behavioral engagement with environmental issues. This paper synthesizes global findings on climate anxiety, its psychological impacts, and its potential to motivate pro-environmental behavior. The discussion highlights the urgent need for region-specific studies in Central Asia and emphasizes the importance of educational, psychological, and community interventions to support youth resilience. Understanding and addressing climate anxiety in this region is essential for promoting both mental well-being and sustainable environmental action.

Keywords: Climate anxiety, youth mental health, Central Asia, environmental stress, pro-environmental behavior, ecological grief, psychological resilience.

Introduction

Sigm Climate anxiety, also known as eco-anxiety, refers to the chronic fear, stress, and emotional distress that individuals—particularly youth—experience in response to climate change and its predicted impacts. This phenomenon has become an important area of study within environmental psychology and mental health due to its growing prevalence across the world. Young people are especially susceptible because they face the uncertainty of living in a future heavily shaped by environmental degradation, resource depletion, and increasingly severe weather events [1]. The sense of helplessness, frustration, and even anger that climate change induces can have profound psychological effects on the youth, affecting their mental health, academic performance, and social relationships.

Central Asia is uniquely vulnerable to climate change impacts, including the shrinking of glaciers in the Tien Shan and Pamir ranges, desertification in areas like Uzbekistan and Turkmenistan, and the drying of critical water bodies such as the Aral Sea. These ecological crises exacerbate existing socio-economic challenges, including poverty, food insecurity, and water scarcity, making the psychological burden on Central Asian youth even more pronounced. Yet, research specifically examining climate anxiety in this region is limited. The broader global studies suggest that in areas facing acute environmental stress, youth are likely to experience heightened levels of climate-related anxiety and distress [2].

Moreover, beyond personal mental health impacts, climate anxiety can influence youths' social and political behaviors. In many cases, it has been linked to increased engagement in environmental activism, sustainability initiatives, and climate policy advocacy [3]. Platforms like social media have amplified these concerns, enabling young people to connect, share their experiences of climate anxiety, and mobilize for collective action. However, not all youth respond to climate anxiety through activism; some may feel paralyzed by the perceived enormity of the crisis, leading to feelings of despair or hopelessness [5].

Methods

To examine climate anxiety among Central Asian youth, a mixed-methods research design can be employed, combining quantitative surveys with qualitative interviews. One of the primary tools for quantitative assessment is the Climate Change Anxiety Scale (CCAS), a validated psychometric instrument designed to measure the emotional and functional dimensions of climate anxiety among adolescents and young adults [2]. This scale typically includes items that assess feelings of fear, sadness, and powerlessness regarding climate change, as well as the impact of these emotions on daily functioning.

In addition to the CCAS, socio-demographic questionnaires are used to gather information about participants' age, gender, education level, and personal exposure to climate-related events such as droughts or floods. A social-ecological framework guides the study design by considering multiple layers of influence, including individual psychological factors, family and peer support, school environment, community attitudes, and national policies [1]. This framework helps to contextualize how broader social systems either mitigate or exacerbate the psychological effects of climate change on youth.

Qualitative interviews can supplement survey data by exploring young people's personal narratives, perceptions of climate risks, coping strategies, and motivations for environmental activism. This approach ensures a comprehensive understanding of not only the prevalence of climate anxiety but also its psychological, social, and cultural dimensions specific to Central Asia. Data collected can be analyzed using statistical methods for the quantitative portion, and thematic analysis for the qualitative data, providing a nuanced and regionally relevant insight into climate anxiety among youth.

Results

The findings from global research on climate anxiety among youth provide a comprehensive understanding of the psychological and behavioral impacts of climate change, offering important implications for Central Asian youth. While direct studies on climate anxiety in Central Asia are limited, global patterns indicate that young people are particularly vulnerable to psychological stress caused by environmental crises. Climate anxiety is characterized by persistent feelings of fear, sadness, helplessness, and frustration regarding the future of the planet. These emotions arise not only from the growing visibility of climate change impacts but also from the perception that governments and institutions are failing to take sufficient action to address the crisis.

Data from multiple countries highlight that climate anxiety is prevalent among adolescents and young adults. For instance, a large-scale Canadian study found that approximately 75.8% of adolescents expressed concern about climate change, and nearly half (48.7%) experienced symptoms of climate anxiety, including ongoing worry, difficulty concentrating, and functional impairments in daily life [2]. Similar patterns were observed in Kenya, where over 60% of surveyed high school students reported cognitive-emotional distress related to climate change, and 63% indicated functional impairments that affected their routines and responsibilities [3]. These findings suggest that the psychological impacts of climate change are both significant and widespread among young populations.

Age plays a role in the experience of climate anxiety, with younger adolescents, particularly those aged 13 to 17, showing higher levels of anxiety than older youth [3]. This could be due to developmental factors, such as less mature coping mechanisms or greater sensitivity to existential threats. The educational environment also influences these experiences; students attending day schools, compared to those in boarding schools, reported higher levels of functional impairment linked to climate anxiety, potentially due to differences in environmental education or community support systems.

A crucial aspect of the climate anxiety discourse is the relationship between psychological distress and pro-environmental behavior. Several studies indicate that moderate levels of climate anxiety can motivate youth to engage in positive environmental actions, such as recycling, reducing personal carbon footprints, or participating in climate activism. A study conducted across two countries revealed a generally linear relationship between climate anxiety and pro-

environmental behavior, meaning that as anxiety increases (up to a certain point), so does the likelihood of engaging in environmentally friendly actions [4]. This relationship is further moderated by environmental efficacy—youth who believe that their actions can make a difference are more likely to transform their anxiety into constructive behavior, while those who lack this belief may experience emotional paralysis or withdrawal.

Social media platforms have become significant spaces for young people to express and navigate their climate anxiety. Platforms like YouTube allow youth to share personal stories, coping strategies, and calls to action concerning climate change. A qualitative analysis of youth-generated YouTube content demonstrated that social media not only serves as an outlet for emotional expression but also as a platform for political engagement and community-building among climate-concerned youth [5]. These online interactions can foster a sense of solidarity and collective identity, which may alleviate some of the psychological burdens associated with climate anxiety.

Nevertheless, not all outcomes of climate awareness are positive. In some cases, heightened knowledge and exposure to the dire realities of climate change can exacerbate feelings of hopelessness. A study from Turkey comparing climate activists to non-activists found that activists, despite their engagement, reported higher levels of both climate anxiety and hopelessness [6]. This suggests that without adequate psychological support and coping mechanisms, even activism may not fully buffer against the negative emotional impacts of climate distress.

The development of psychometric tools like the Climate Change Anxiety Scale (CCAS) and its Short Form (CCAS-S) has enabled more accurate measurement of climate anxiety among adolescents [2]. These scales assess both emotional symptoms (like fear and sadness) and functional impairments (such as sleep disruption and concentration difficulties), providing a comprehensive framework for understanding the depth of climate anxiety in youth. Importantly, validation studies in diverse cultural contexts, including the Philippines and Slovenia, confirm the reliability of these instruments across different populations [7][8]. These tools could be particularly useful for assessing the state of climate anxiety among Central Asian youth in future studies.

Beyond emotional and behavioral impacts, climate anxiety is also associated with cognitive effects, such as impaired attention, memory, and decision-making abilities. A comprehensive review found that ongoing exposure to environmental stress and the mental strain of anticipating ecological disasters can negatively influence the cognitive development of adolescents [9]. This not only affects their academic performance but may also hinder their capacity for future planning and personal development.

Furthermore, when climate anxiety is compounded by other global crises, such as the COVID-19 pandemic, the psychological toll can intensify. Research from the Caribbean illustrated that distress from the pandemic indirectly heightened climate-related distress, thereby contributing to elevated levels of generalized anxiety among youth [10]. This intersection of multiple stressors may also be relevant to Central Asian youth, who face environmental challenges alongside socio-economic and political uncertainties.

Scholars have also conceptualized climate anxiety through the lens of grief and loss. The term "ecological grief" describes the mourning process for current and anticipated environmental losses, including biodiversity loss, disappearing landscapes, and the erosion of cultural heritage tied to nature [11]. This grief can be both tangible and intangible, leading to what is termed "disenfranchised grief," where individuals' sorrow is not openly acknowledged or validated by society.

Discussion

The findings from global research on climate anxiety among youth provide critical insights that are highly relevant to understanding the potential experiences of Central Asian youth. The widespread presence of climate anxiety among adolescents across diverse regions suggests that this psychological phenomenon is not confined to specific geographies but is rather a global

response to the universal threat of climate change. However, the absence of direct, empirical studies in Central Asia highlights a significant gap in the literature that must be addressed to develop tailored interventions for this region.

One of the key points emerging from the existing studies is that climate anxiety is both a psychological burden and a potential catalyst for positive change. Many studies have shown that when youth perceive they have the power to make a difference—through activism, sustainable practices, or education—their anxiety can be transformed into constructive pro-environmental behavior [4]. This suggests that fostering a sense of agency and empowerment among youth is a vital strategy in managing climate anxiety. For Central Asia, where environmental challenges like water scarcity and desertification are acute, incorporating climate education that emphasizes practical solutions and community engagement could help reduce feelings of helplessness among young people.

The role of social and cultural context is also significant. Social-ecological models demonstrate that family support, educational opportunities, and community attitudes all shape how youth experience and cope with climate anxiety [1]. In Central Asia, where traditional family structures and community bonds remain strong, leveraging these support systems could be key to building resilience against climate-related stress. At the same time, the potential for feelings of isolation or denial in communities less aware of climate issues must be considered, as these factors can exacerbate psychological distress.

Moreover, the dual nature of activism revealed in studies, particularly in Turkey and the Philippines, underscores the importance of psychological support for youth engaged in environmental advocacy [6][7]. While activism can empower, it can also lead to burnout and hopelessness if individuals feel their efforts are insufficient in the face of a vast and complex crisis. This balance between empowerment and psychological well-being should be carefully managed through access to mental health resources, peer support networks, and programs that celebrate incremental environmental successes.

Another critical insight is the intersectionality of climate anxiety with other global crises, such as the COVID-19 pandemic, which compounds psychological burdens on youth [10]. For Central Asian youth, who may also face economic instability, political uncertainty, or educational disruptions, the compounded stressors could intensify the impacts of climate anxiety. This suggests a need for integrated mental health strategies that address multiple forms of distress simultaneously.

Furthermore, the conceptual framing of climate anxiety as a form of grief or "ecological grief" [11] provides a deeper understanding of the emotional layers associated with environmental loss. Recognizing this grief can inform more empathetic approaches in education, counseling, and policy-making. In Central Asia, where many communities are closely tied to the land and natural resources, such emotional frameworks could resonate deeply and provide culturally sensitive pathways to support youth mental health.

Conclusion

In summary, climate anxiety is a growing psychological concern among youth globally, driven by the intensifying impacts of climate change and the perceived lack of effective solutions. Existing research clearly demonstrates that while climate anxiety can impair mental health and daily functioning, it also holds the potential to motivate positive environmental behavior when combined with a sense of personal and collective agency. Although data specific to Central Asian youth remains scarce, the region's vulnerability to climate risks suggests that similar or even heightened levels of climate anxiety may exist.

To address this challenge, it is essential to develop localized research initiatives that assess the mental health impacts of climate change on Central Asian youth. Additionally, educational programs that build environmental awareness, foster resilience, and emphasize actionable solutions are critical. Supporting youth through family, community, and mental health services will also play a pivotal role in transforming climate anxiety into empowered, proactive

engagement. Ultimately, understanding and addressing climate anxiety is not only a matter of mental health but also a necessary step toward cultivating a generation equipped to lead the region toward a more sustainable future.

References

1. Becht, A., Spitzer, J., Grapsas, S., van de Wetering, J., Poorthuis, A. M. G., Smeekes, A., & Thomaes, S. (2024). Feeling anxious and being engaged in a warming world: Climate anxiety and adolescents' pro-environmental behavior. *Journal of Child Psychology and Psychiatry*, 65(3), 278–290.
2. Crandon, T. J., Scott, J. G., Charlson, F., & Thomas, H. J. (2022). A social–ecological perspective on climate anxiety in children and adolescents. *Nature Climate Change*, 12(2), 123–131.
3. Ediz, Ç., & Yanık, D. (2023). The effects of climate change awareness on mental health: Comparison of climate anxiety and hopelessness levels in Turkish youth. *International Journal of Social Psychiatry*, 69(8), 157–166.
4. Literat, I., & Kligler-Vilenchik, N. (2023). Climate anxiety as a lens into young people's political expression on YouTube. *AoIR Selected Papers of Internet Research*, 23(1), 1–18.
5. Moyanov, I., Tajetdinova, S., Kamalova, G., & Davronova, D. S. (2024). Climate crisis: Effects on youth mental health and cognitive functioning. *E3S Web of Conferences*, 58, 02001. EDP Sciences.
6. Mutua, P. M., Kauti, M., Mwangangi, L., & Nzilani, M. S. (2023). Assessment of climate change anxiety in high school youths of Kwale County, Kenya. *African Journal of Climate Change and Resource Sustainability*, 2(1), 15–28.
7. Pihkala, P. (2024). Climate anxiety, maturational loss, and adversarial growth. *The Psychoanalytic Study of the Child*, 77(1), 369–388.
8. Plohl, N., Mlakar, I., Musil, B., & Smrke, U. (2023). Measuring young individuals' responses to climate change: Validation of the Slovenian versions of the Climate Anxiety Scale and the Climate Change Worry Scale. *Frontiers in Psychology*, 14, Article 1297782. Frontiers Media.
9. Seon, Q., Greaves, N., Campbell, M., Anderson, S., Henry, P., Augustus, E., ... & Maharaj, S. B. (2024). Exploratory empirical model of combined effects of COVID-19 and climate change on youth mental health. *Nature Mental Health*, 1(1), 45–60.
10. Simon, P. D., Pakingan, K. A., & Aruta, J. J. B. (2022). Measurement of climate change anxiety and its mediating effect between experience of climate change and mitigation actions of Filipino youth. *Educational and Developmental Psychologist*, 39(1), 17–27.
11. Wu, J., Long, D., Hafez, N., Maloney, J., Lim, Y., & Samji, H. (2023). Development and validation of a youth climate anxiety scale for the Youth Development Instrument survey. *International Journal of Mental Health Nursing*, 32(1), 45–59.