

## NEW FUTURES FELLOWSHIP PROJECT

# CLIMATE + HEALTH

To What Extent does Climate-Induced Displacement Trigger a Cascade of Mental Health Consequences Amongst Global Youth, And What Actions Can Be Taken to Improve Their Mental Health Outcomes?

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**Project Overview:**

This paper aims to increase youth awareness of the mental health impacts of climate-induced displacement and to suggest solutions for mitigation of climate eco-anxiety in young generations.

**Keywords:**

Climate Induced Displacement, Youth and Intergenerational Justice, Mental Health, Climate Resilience

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# To What Extent does Climate-Induced Displacement Trigger a Cascade of Mental Health Consequences Amongst Global Youth, And What Actions Can Be Taken to Improve Their Mental Health Outcomes?

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## Executive Summary

As our changing climate eludes the grasp of human control and climate-induced displacement forces unplanned migration of global populations, climate-related eco-anxiety poses risks to mental health and human wellbeing. Young generations are among those most exposed to the long-term consequences of the current climatic changes and are deeply concerned about climate-induced migration trends. The risks and effects of climate change on human mental health are intensifying rapidly, yet research on the relationship between climate-induced displacement and youth mental health is lacking in the social anthropology space.

The aim of this paper (literature review) is to increase youth awareness of the mental health impacts of climate-induced displacement and to suggest solutions for mitigation of climate eco-anxiety in young generations. The study was carried out to answer the following questions:

1. What are the mental health consequences triggered by climate-induced displacement and its interlinking climate-driven effects?
2. What are the strategies and practices for building resilience among youth who have faced or will face climate-induced displacement?

Based upon review of numerous peer-reviewed papers, policy documents, and institutional reports serving as context, this paper recommends more comprehensive, inclusive, and specialized actions to mitigate mental health risks associated with climate-induced displacement, including:

- Creation of more youth forums as a platform for youth to voice their realities and give voice to underrepresented groups, thereby creating youth empowerment with intergenerational accountability, transparency, and urgency,
- Development of mental health friendly 'safe spaces' to create community in response to climate-induced displacement and its impacts on mental health,
- Drafting of a curriculum for climate sensitivity training that incorporates impacts and responses on mental health.

**Keywords:** *Climate Induced Displacement, Youth (and Intergenerational Justice), Mental Health, Climate Resilience*

## 1. Climate Change as a Driver of Population Displacement

It is projected that between 200 and 700 million climate refugees will be displaced, internally and externally, by 2050 (Alvarez 2016; Parenti 2015). One billion children are at extreme risk of climate change impacts, affecting nearly half of the world's children's well-being and access to human rights (UNICEF, 2022). Increased climate migration has made it clear that movement of people will inevitably be an adaptation strategy for climate change.

Migration in the context of climate change is often a multi-causal phenomenon, with multiple drivers intersecting adaptation decisions for migration/displacement including such factors as: excessive heat, water scarcity, agricultural drought, need for livelihood diversification, flooding, sea level rise, and extreme weather (Ginnetti, 2020). Children and young people are least responsible for current climatic changes, and yet are among the most vulnerable to its effects, as shown by research of the International Organization for Migration (2022).

Recent IPCC reports have documented the connection between climate change and climate-driven migration on the social and environmental determinants of human health, such as clean air, safe drinking water, adequate food, and safe shelter (IPCC, 2022).

Climate-induced displacement may lead to the disturbance of existing social ties, with potentially adverse consequences for migratory populations as well as their family members who remain in places of origin. Through protective processes of resource sharing (i.e. social capital) and emotional support, social bonds are associated with population health. In destination cultures, displaced populations may also experience significant social exclusion and marginalization. (Torres & Casey, 2017). Given the strong empirical support for the link between social ties and mental health outcomes, climate-induced displacement may have a significant influence in amplifying the pre-existing condition of depression (Harper, Cunsolo & Clayton, 2022).

The WHO concludes that climate change-induced displacement poses serious risks to mental health and well-being, from emotional distress to anxiety, depression, grief, and suicidal behavior (WHO, 2022). However, there are gaps in knowledge as to what extent climate-induced displacement triggers a cascade of mental health consequences among affected populations.

With future climate change expected to induce population displacement far above current levels, the risks and impacts of climate change on mental health are rapidly accelerating. However, forward-looking analysis and research on the nexus of climate-induced migration and mental health among young people remains underexplored (Kalin, 2018; Hayes et al., 2018). Figure 1 is a conceptual illustration that highlights the pathways through which people are exposed to health risks from climate drivers, as well as potential repercussions for mental health and wellbeing.

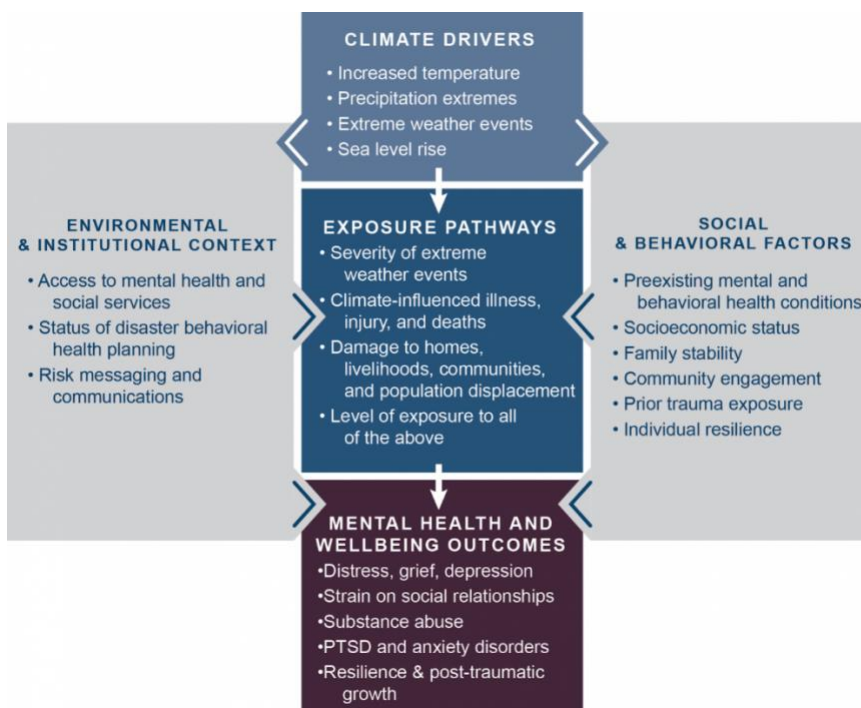


Figure 1: Conceptual illustration on climate change and mental health. Source: Dodgen et al. (2016)

## 2. Climate-Stress as a Driver of Mental Health Consequences and Eco-Anxiety

Global studies show that youth worry about climate change and place it as the most important issue in society today. In a recent study by Hickman et al (2021), a full 84% of 10,000 global youth across ten countries expressed moderate to intense feelings of worry about climate change. This anxiety, worry and fear is known as *eco-anxiety*, a phenomenon that is understudied and has many dimensions, all of which grow in a forced displacement and migratory environment (Panu, 2020).

As climate change intensifies, climate refugee numbers increase dramatically along with public awareness of distressing mental health symptoms that are frequently categorized under the umbrella term of "eco-anxiety" (Baudon & Jachens,

2021). It is crucial that strategies and practices for addressing eco-anxiety among climate refugees and associated effects are clarified and communicated. Eco-anxieties among the displaced global youth can be understood by taking into account the interplay between individual factors, the physical environment and the influence of micro- (family, peers), meso- (school, community), exo- (government, media) and macro- (culture) systems (Crandon et al. 2022).

While eco-anxiety is not currently considered a mental illness, the realities of climate change and the failures of governments to mitigate climatic shifts in heat, drought, and extreme weather represent long-term concerns. Mental health problems therefore have an increased likelihood of occurring, particularly for more vulnerable populations who have little control over their environments, such as children, youth, and those in unstable environments such as those facing forced displacement (Hickman et al., 2021).

It is widely understood that children are vulnerable to the longer-term effects of toxic stress, yet there is a deficit of empirical information concerning youth affected by climate migration (Borba et al, 2016). Figure 2 depicts a conceptual trajectory for climate-related mental health consequences.

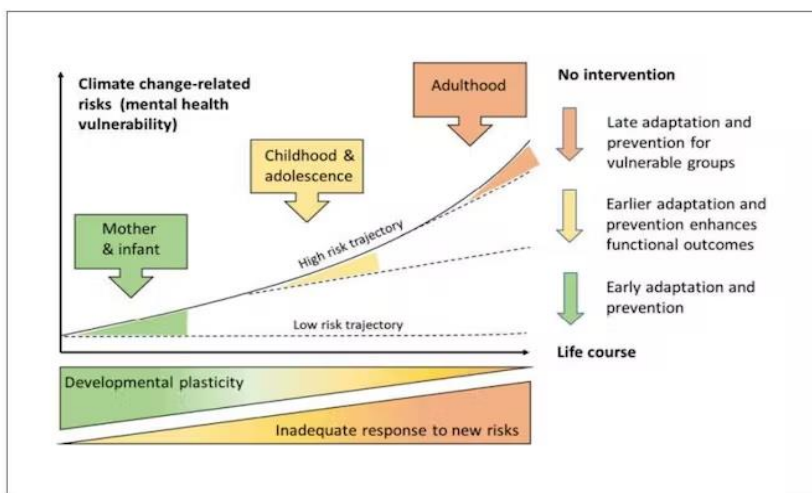


Figure 2: The trajectory of climate-related mental health consequences. Source: The Conversation Africa, 2022)

### 3. Climate-Induced Displacement and Eco-Anxiety as Drivers for Building Youth Resilience

Building resilience to change and climate-induced displacement among youth will require deep understanding of the psychosocial impacts of vulnerability along with adequate mental health resources to address climate anxiety behaviors. The goal of climate/eco anxiety interventions should not be to eliminate negative emotions, but rather to facilitate healthy processing of emotions, reduce stress and functional impairment, and foster resilience. Summarized below are recommended strategies to build resilience among young people affected by climate-induced displacement and its associated mental health consequences.

#### A. Safe Spaces

This paper recommends the promotion and creation of mental health friendly safe spaces in cities taking in climate refugees and displaced youth where anybody can come forward to express their emotions. This recommendation intends to exemplify how intergenerational justice can be tangibly implemented on a localized scale, globally. A safe space is a platform, or dedicated area, where people can share personal stories and thoughts free from stigma and judgment.

Within safe spaces there are several mental health promoting activities that could be implemented, including hosting groups for climate change related mental wellbeing dialogues that are formed for specific communities; or climate change awareness groups where eco-anxieties and sadness can be shared. Such groups would be able to enhance social support and reduce feelings of isolation. According to Comtesse et al (2021) the 'cognitive restructuring' of such overwhelming feelings of responsibility for climate loss could be harnessed to regain a sense of control. Safe spaces also provide the

security and atmosphere to be able to focus on self-management. Time could be dedicated to learning how to cope with adaptation and increase general wellbeing.t

Safe spaces can be particularly successful, in the context of youth, when activities implemented can be sustained over longer periods of time, and are integrated with community structures such as schools, religious centers, and established social networks (Raslan, Hamlet and Kumari, 2021). For youth, incorporating local, inclusive cultural practices in safe spaces will help connect new realities to pre-displaced life and remove language barriers; safe space interactions that include art, computational skills, and beginner language lessons have been demonstrated effective (Betancourt and Fazel, 2018). Such inclusive practices can bring together formerly taboo topics into public discourse [e.g., mental health consequences of climate change and ways to mitigate them].

## B. Education – Climate Sensitivity Training

This paper recommends within educational environments the creation of climate sensitivity training that includes mental health as its backbone, so staff can better provide support for youth who have been through climate change-induced displacement and better prepare those at risk for future climate change migration. Pihkala (2020) who studied the relationship between eco-anxiety and education, advises that teachers (and other educators) make a conscious effort to provide role models who positively cope with eco-anxiety and to practice self-reflection to keep their negative emotions and attitudes outside of the classroom.

Schools, and centers of education, are where the majority of global youth spend most of their time. Such spaces hold the responsibility to ensure the wellbeing of their students, which includes (or should include) having effective responses to climate change related mental health effects. School systems have the power to harness collective action, because if harnessed correctly, eco-anxiety is a proven motivator for climate activism (Ojala, 2012). Pihkala (2020) argues that finding ways to participate in preventing/mitigating climate change enables stress alleviation and reduction in anxieties. Collective action is recommended over individual action to bypass feelings of isolation, helplessness and despair. Schools must recognize and act upon ensuring building emotional resilience into the curriculum. It is a cornerstone of individual wellbeing and resilience to cope with eco-anxiety, solastalgia and climate grief. Importantly, schools should not just focus on academic skills, but about empowering young people to face the challenges in the ‘real’ world.

There are several benefits for addressing mental health issues that are triggered by climate change-induced displacement. Figure 4 below presents some of the co-benefits for implementing the above strategies.

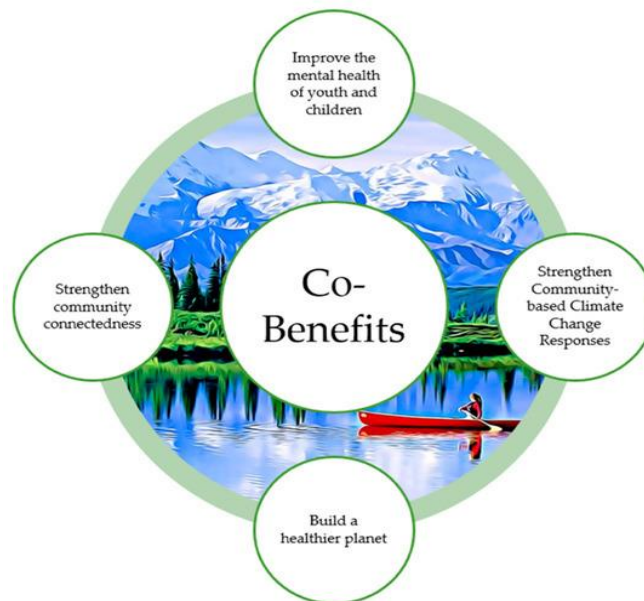


Figure 4: Co-benefits of addressing mental health and climate change. Source: Gislason et al. (2021)

## 4.0 Recommendations and Conclusion

This paper recommends more comprehensive, inclusive, and specialized remedies and policies that take into account the mental health issues associated with climate-induced displacement as explained below;

1. Placing greater emphasis on the importance of **youth forums** as a platform for youth to voice their realities and demand action from political leaders/actors. By removing political performances stigmas surrounding youth advocacy and mental health. The ultimate goal is to create youth empowerment with intergenerational accountability, transparency and agency.
2. Directly recommending the promotion of **mental health friendly safe spaces**, creation of climate sensitivity training that incorporates impacts and responses on mental health. This recommendation aims to show how intergenerational justice can be tangibly implemented on a localized scale, globally.

#### ***Future Directions Recommended for Future Work:***

- Integrate youth-centered climate change considerations into National Adaptation Plans (NAPs) for mental health to better prepare for and respond to climate crises,
- Strengthen global commitments to the Sustainable Development Goals (SDGs), by incorporating the function and significance of youth forums for mental health and climate change in SDG 3 (Good Health and Wellbeing), SDG 13 (Climate Action), and SDG 16 (Peace, Justice, and Strong Institutions).

“I don’t want you to be hopeful. I want you to panic.  
I want you to feel the fear I feel every day. And then I want you to act.”  
- Greta Thunberg (Teenage Climate Activist)

## **5.0 Case Studies**

### **Case Study: Stressors Related to Border Controls and Intensified Security**

An often overlooked deterrent to population migration is the intensification of border security to limit transboundary migration (Thomas & Gosink, 2021). At the US/Mexico border, an estimated 21,000 guards, ten drones, watch towers, and ground motion sensors provide 24/7 security vigilance. In Europe, barbed wire, navy boats, and large walls serve as obstacles to migrating populations. Border fortified technologies are also seen in India, along the border of Bangladesh, an area prone to climate related events, where nearly 2900 km of fences prevent border passage, with certain areas electrified (Hayes et al. 2015).

The mental stress, fatigue and segregation caused by these borders triggers a cascade of further mental distress, rooted in anxieties and fear. For those who cross successfully, the psychological impact continues further, exacerbated by extreme isolation, ill-treatment and a series of other factors. Many academics, policy advisors and social impact workers have spoken out in contempt of the disturbing nature of border control methods, increasingly so in areas more vulnerable to climate change (Mountz et al. 2012). Some argue that they are representing a global apartheid that reinforces a narrative of racism and classism (Thomas & Gosink, 2021; Hayes et al. 2015).

For young people, migration should provide opportunities such as better education, skill diversification and job prospects. However, displacement driven by climate related circumstances generally leads to few opportunities for safe and legal movement across borders (UNICEF, 2022). As discussed in the introduction of this paper, the majority of climate displacement occurs internally; however, there are no laws in place to protect the rights of those who have been displaced as a consequence of environmental changes. Consequently, there are many children and young adults left with no place to go and equipped with the least resources to cope. In 2020 alone, 9.8 million children were estimated to have been internally displaced as a result of weather-related extreme events (UNICEF, 2020). The mental health effects of this kind of forced migration are not understood,

understudied, and lack effective responses, which is more than detrimental to the children and young adults undergoing environmental displacement. Furthermore, children are exposed to maltreatment and witness and experience the atrocities that take place on migration journeys, which can trigger anxiety, depression, developmental issues and in some cases PTSD which will be discussed later in this chapter.

When forced migration/displacement occurs as a result of climate change, it is most likely as a consequence to a change in the physical landscape (UNICEF, 2020). Whether it be a result of extreme-weather-events or failing agricultural systems the result is always that a place with special meaning is rendered inhabitable. This creates an added burden on the mental health of those forced to migrate.

### **Case Study: Effects of Cyclones in Mozambique**

In 2019, the Mozambiquan provinces of Sofala and Cabo Delgado, were hit by Cyclones Idai and Kenneth. Following years of war and drought (2014-2015), Mozambique experienced the synergistic effects of anthropogenic and natural disasters which led to displacement of thousands of people both within and outside the country. Many of the displaced population, particularly children lacked the access to nutritious food needed for healthy, cognitive development thereby affecting their adolescence. Some researchers express concern that without strategies to address mental health within climate refugee communities, incidences of severe mental health consequences may increase (UN Migration, 2019).

### **Information Point: Intergenerational Justice**

Intergenerational justice, in line with the United Nations, is the notion that the current generations have a duty towards future generations in acting on climate change caused by previous generations (UNICEF, 2009). Such justice is argued to be the underlying motivation of the surge in climate activism, where protesters hold governments and policy makers accountable for continued climate change (Cannon, 2019).

### **Information Point: Syrian Refugee Crisis**

Using the Syrian Refugee crisis as an example - as a result of the stress of forced migration, mental health disorders including post-traumatic stress disorder (PTSD) are at an elevated risk. Depression, Anxiety and PTSD are the most commonly reported psychological disorders of Syrian Refugees with prevalence ranging from 20–44.1%, 19.3–31.8% and 23.4–83.4% respectively (Peconga & Høgh Thøgersen, 2020; Cratsely, Brooks & Mackey, 2021). After examining similarities between refugees of war and refugees of climatic disaster, it is determined that these statistics are likely to be similar for those escaping climate related disasters, particularly youth.

### **Eco-Therapy in safe spaces.**

It is imperative for researchers to focus on developing methods of reducing mental health risks that are associated with climate grief and other eco-emotions (Comtesse et al, 2021). Whilst some people experiencing climate grief will be able to adapt to the changing climate and function well, many others will need psychosocial support. Eco-therapy is one way to provide this support. It is rooted in building positive emotions with regard to the environment, whilst simultaneously strengthening or re-creating one's connection with nature. Eco-Therapy combines mental health and physical health with nature and is proven to assist in the healing of those with mental health disorders and uses activities that everybody can participate in to improve their general wellbeing. Some methods of eco-therapy include eco-art, gardening, outdoor exercising, meditation and spending time in greenspace. This therapy is grounded by numerous studies that have found

spending time in greenspace can increase positive emotions and reduce anxious thoughts. It is important for a therapist and/or facilitator to lead the sessions, to ensure a safe space is maintained.

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