

# Foggy Climates and Eco-Anxiety: A Descriptive Analysis

Soumya Thankam Varghese<sup>1,\*</sup>, Md. Kamrul Hasan<sup>2</sup>, Jona Angeline<sup>3</sup>

<sup>1</sup>Jindal Institute of Behavioural Sciences, O. P. Jindal Global University, India

<sup>2</sup>Department of English, United International University, Bangladesh

<sup>3</sup>Department of Psychology, Hindustan Institute of Technology and Science, India

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**Abstract** Eco-anxiety, a growing area of concern in the realm of mental health, is exacerbated by various environmental factors. One such factor, often overlooked, is the prevalence of foggy climates. These conditions, characterized by limited visibility and persistent grey skies, can have significant impacts on mental clarity and overall well-being. This descriptive study aims to explore the intricate relationship between eco-anxiety and foggy climates. This research delves deeply into personal experiences and reflections documented in a diary, providing an understanding of how foggy weather conditions influence mental states. Using descriptive approach, the study analyzes reflective diary entries on the individual's emotional and cognitive responses to high foggy climates. The findings reveal a direct correlation between prolonged exposure to foggy climates and heightened eco-anxiety. The participant's diary entries frequently mention a sense of cognitive fog, characterized by difficulty in concentrating, reduced mental clarity, and a pervasive feeling of unease. The lack of visibility due to fog is noted as a significant contributor to these experiences, amplifying feelings of uncertainty and environmental dread. This study concludes that foggy climates can significantly exacerbate eco-anxiety, leading to cognitive challenges and emotional distress. By providing a detailed account of one individual's experience, this research adds a personal dimension to the broader discourse on eco-anxiety. It emphasizes the importance of considering local climate conditions in mental health assessments and interventions. The study's reliance on a single participant limits the

generalizability of the findings. However, it opens avenues for further research involving larger, more diverse populations to validate and expand upon these insights. Mental health practitioners should consider environmental factors, such as foggy climates, when addressing eco-anxiety in their patients. Developing coping strategies tailored to specific climate-related stressors can enhance resilience and mental well-being. Raising awareness about the impact of foggy climates on mental health can foster community support and promote environmental changes to mitigate these effects. Public health initiatives that include climate considerations can better address the holistic needs of individuals affected by eco-anxiety.

**Keywords** Cognitive Fog, Eco-Anxiety, Foggy Climate, Mental Clarity

## 1. Introduction

With growing worries about climate change, it's clear that the environment and our mental health are connected [1][2]. Eco-anxiety - feeling anxious or distressed about ecological threats is getting more attention. Eco-anxiety refers to the negative emotional responses experienced due to ecological crises. It encompasses feelings of unease and distress in reaction to significant environmental changes [3]. But how exactly do environmental factors and personal experiences come together? It's complicated. Our

surroundings and personal histories blend together to deeply affect how we see the world and interpret things [4]. Severe storms, pollution, or destruction of nature can take a psychological toll on us [5][6]. Past traumas or cultural lenses also shape how we perceive environmental threats [7]. These forces intermix to impact our mindsets, how we handle stress, and what support we can access. Socio-economics, geography and other socio demographic factors further complicate things. Where we live and our income affect our environmental resources and community ties. Those with less means often shoulder an unequal burden. To foster well-being and resilience amid ecological crises, we must understand how environmental issues and personal experiences mesh together. This allows more holistic solutions that consider individuals' unique needs and contexts. By bridging the gaps between people and the planet, we can build a healthier society for all.

This diary study looks closely at one person's eco-anxiety during foggy weather. By analyzing their reflective journal entries, the researchers want to understand how limited visibility from fog contributes to their eco-anxiety and feeling mentally foggy. Focusing on one individual's subjective experiences allows a deep dive into the interactions between the environment and mental well-being. The findings could give personal perspective on the psychological impacts of climate issues and help develop resilience when facing ecological uncertainty. Overall, this research aims to shed light on the intimate bond between the individual and the climate by exploring how foggy days uniquely affect one person's eco-anxiety and mental clarity. The personal insights gleaned may enlighten the broader conversation surrounding the mental health toll of our changing environment. There are research articles discussing about climate induced anxiety and depression among people [8][9]. Research by Mocellin [10] conducted in the polar regions during the winter connects anxiety and extreme cold weather.

Being part of a small, isolated team in the polar winter would be an incredibly stressful situation. The endless expanse of white snow can initially be a beautiful and serene sight for those who appreciate it. However, over time, this isolation can lead to feelings of anxiety. As social beings, humans thrive on connection and the presence of others, even if they are not directly interacting. The mere proximity of others provides a sense of comfort and support. When severe weather conditions prevent people from seeing others, it becomes challenging for them to feel connected to their social circles. This invisibility and isolation can amplify feelings of loneliness, and being alone in such harsh weather conditions can trigger anxiety.

Both ongoing tendencies to worry (trait anxiety) and in-the-moment fears (state anxiety) are likely heightened in these situations [11]. The extreme cold, months of darkness, and lack of contact with others can increase everyone's general, underlying anxiety. These unfamiliar and harsh conditions are outside most people's comfort zones. On top of that, specific incidents like equipment failure, weather

changes, and the inherent dangers of the icy landscape could spike members' anxiety temporarily. Limited daylight and social interaction also don't help matters. Understanding the complex interplay between the team's ongoing worry levels and situation-specific fears is key. This allows tailored solutions that help reduce anxiety and protect mental health in this challenging environment. With the right support, the team can overcome isolation and adversity as they work together towards their goals through the polar winter.

This research is an endeavor to explore the intricate connection between foggy climates and eco-anxiety through the lens of personal journaling. By delving into the diary entries of a participant, the study seeks to uncover how the winter fog, with its pervasive grayness and damp chill, acts as a catalyst for anxiety. These subjective reflections, captured during the cold months, reveal the complexity of emotions and feelings that often go unnoticed in the day-to-day experiences of the participant. As the participant chronicles their experiences, the fog becomes more than just a weather phenomenon; it transforms into a mirror reflecting deeper anxieties about environmental changes and an uncertain future. This introspective process allows the participant to engage in a dialogue with their inner self, providing insights into how seasonal weather patterns can profoundly impact mental well-being and trigger eco-anxiety. By understanding these personal narratives, the research aims to shed light on the link between foggy climate and eco-anxiety, trying to offer a more nuanced perspective on the emotional toll of environmental shifts.

Biophilia hypothesis by Wilson contends that people have evolved to live in natural settings [12] and the existential perspective states that disturbances to these settings—such as growing pollution, fog, or erratic weather patterns—can cause psychological anguish as well as a lack of purpose and authenticity [13]. According to the psychoanalytic model, the risk of climate change sources two types of climate anxiety namely "apocalyptic" fears (fears of death, annihilation, and extinction); and complex feelings related to loss, grief, dependency, and guilt [14][15] for already incurred losses and those that will happen in the future like pre-traumatic stress, anticipatory mourning, and solastalgia [16][17]. The Biophilia model is supporting the idea that humans have an innate affinity for nature and life-like processes. This connection to nature is essential for our mental and emotional well-being. Wilson argues that our natural affinity for life—biophilia—is the essence of our humanity and binds us to all other living species.

## 2. Method

This is a preliminary descriptive study aimed at an in-depth exploration based on a single subject's experience. The descriptive study is particularly suited for this research as it provides a comprehensive understanding of complex

phenomena within real-life contexts. This will serve as an exemplar or a prototype to spark curiosity about the possible connection between ecological changes and human behavior. In this research, personal reflections of the participant serve as the object of study, offering detailed insights into the assumed link between foggy climate and eco-anxiety.

The primary data for this study comprise the diary notes of the participant, which document the emotional and psychological responses during the winter season for two consecutive years. These diary entries provide a rich, subjective account of the participant's experiences, capturing the nuances of their emotions and reflections on how the foggy climate triggers anxiety [18]. The subject was journaling in their natural environment, which was affected by foggy weather conditions. The descriptive method is justified in this research due to its capacity to offer a detailed, context-specific understanding of the participant's experiences. Primarily, the diary entries were used as the primary data for the research. The participant was encouraged to respond to prompts such as how they felt when they woke up to a foggy morning with less visibility, describe any additional changes in emotions or thoughts, and any specific impacts on their daily activities and interactions. By focusing on a single participant's experiences, the research can delve deeply into personal reflections and emotional responses, providing a nuanced perspective on how foggy climates contribute to eco-anxiety in the context of seasonal change. This method also allows for the exploration of the participant's lived experiences in their natural environment, making the findings more relevant and applicable.

### 3. Dairy Analysis

The changing seasons have always affected Emily. She has been struggling with low motivation, fatigue, and disrupted sleep-wake cycles over the past few months. She reports feeling lethargic upon waking, even after sleeping for 8+ hours, and has difficulty getting out of bed in the mornings. Emily also endorses decreased interest and pleasure in normally enjoyable activities, stating that mundane tasks like grocery shopping and cleaning feel exhausting and overwhelming. She notices her symptoms worsening as the days get shorter and darker during winter. The lack of natural sunlight gives Emily the perception that it is perpetually early morning or evening, and she has trouble adjusting her circadian rhythms. She tends to sleep and wake later than intended, often well into the afternoon. Emily also endorses increased appetite and food cravings, particularly for carbohydrates. Emily's symptoms have made it difficult for her to maintain social relationships and obligations at her job. She called out of work few times over the past month due to an inability to get out of bed and a profound lack of motivation. Emily isolates herself at home and engages in prolonged sedentary behaviors like

watching TV and scrolling on her phone. Her symptoms have been present nearly every day over the past two months and are impairing her ability to function. But as winter settles in, so does a deep despair. In each foggy, dark morning, Emily's heart sinks as she looks out her window. A sense of dread washes over her like the dense fog obscuring the world outside. The cold and gloom of winter seep into Emily's mind and body, leaving her exhausted and joyless. Once simple tasks now feel impossible, the fog magnifying her loneliness and isolation. To Emily, the fog represents the haze clouding her thoughts, hiding any glimpses of hope or light. She worries the sun will never break through again, making the promises of spring feel distant and hollow. Emily felt a pervasive sense of heaviness and gloom, as if the fog outside was not only clouding her surroundings but also enveloping her mind. She described it as a feeling like there was a thick, impenetrable veil between her and the rest of the world. This fog seemed to dull her senses, making everything appear muted and distant. On particularly cold and foggy days, Emily often felt as though the chill was seeping into her very bones. She would wrap herself in layers of blankets, but the cold seemed to penetrate through, leaving her feeling frozen and immobile. She likened herself to a statue, incapable of movement or action, trapped in a state of inertia. The foggy mornings were the worst for her. As she gazed out of her window, the dense fog made her feel disoriented and disconnected from reality. It was as if time had stopped, and the world was stuck in a perpetual state of twilight. The lack of visibility outside mirrored the mental fog she felt inside, making it difficult for her to think clearly or find motivation.

Emily's sense of hopelessness grew as the days passed without a glimpse of the sun. She felt as though the fog was suffocating her, closing in and making it hard to breathe. This feeling of being trapped in an endless cycle of darkness and cold intensified her anxiety and despair. Despite her best efforts to push through, simple tasks became monumental challenges. The fog magnified her feelings of isolation, and she struggled to connect with others or find joy in activities she once enjoyed. The promise of spring felt like a distant dream, and Emily worried that the sun might never break through the fog again.

These vivid descriptions of Emily's experiences highlight the profound impact that the foggy winter climate had on her mental and emotional well-being, further emphasizing the intimate connection between environmental conditions and psychological health. Emily's depression and anxiety feed on one another. The bleak fog stirs up melancholy, while its uncertainty triggers anxious foreboding. Feeling trapped in this perpetual darkness leaves Emily on edge, unable to escape her inner turmoil. But Emily knows this feeling won't last forever. She focuses on self-care and support from loved ones until the fog lifts and the light returns. The winter may be dark and cold, but it cannot mute life's underlying rhythms

forever. Brighter days always dawn again. Emily just needs to hold on through this difficult season, one step at a time. She started journaling and it provides Emily with a therapeutic outlet to process her feelings during this difficult time. Putting her thoughts down on paper helps Emily identify and work through her emotions in a productive way. Writing about her experiences gives Emily clarity and perspective. She is able to pinpoint exactly what is triggering her depression and anxiety. Journaling also enables Emily to track her moods and symptoms day-to-day. Recognizing patterns in her writing helps her identify causes and find solutions. The act of journaling is calming and meditative for Emily. Slowing down to write helps soothe her anxious mind. Expressing herself creatively through journaling allows Emily to let go of ruminating thoughts. She feels a sense of relief after pouring out her emotions into her journal. Journaling gives Emily a judgment-free space to organize her thoughts and feelings. She does not have to censor herself or worry about being evaluated. This is immensely comforting during turbulent times. Writing provides an emotional release that lightens the burden on Emily's psyche. Overall, integrating journaling into her self-care routine provides Emily with a valuable coping mechanism to manage depression and anxiety. It brings structure, insight, and comfort during the long, foggy winter days.

## 4. Discussion

Overall, integrating rising global temperatures associated with climate change is causing an increase in heat-related illnesses and deaths worldwide [19]. Extreme heat events place substantial stress on the cardiovascular and respiratory systems, leading to heat cramps, heat exhaustion, heatstroke, and exacerbations of pre-existing conditions like heart disease and asthma [20]. Those most vulnerable to heat-related mortality include the elderly, young children, outdoor laborers, and those living in urban heat islands without adequate cooling or hydration resources. In addition to the physical health effects, climate change is also taking a toll on mental wellbeing through multiple pathways. Experiencing natural disasters, which are increasing in frequency and severity due to climate change, can lead to post-traumatic stress, anxiety, depression, and other issues. The major trends while reading the experiences were seasonal changes, nature deprivation, and feelings of anxiety or depression. The major influences mentioned as problematic by the participant were circadian rhythm disruptions, sensory deprivation, social isolation, and emotional despair. These patterns are arguably connected to disruptions in nature and their consequences as an imbalance in well-being. The foggy weather disrupts her connection to the natural world, obscuring the sunlight and limiting her sensory experiences. This disruption can lead to feelings of isolation, disorientation, and a sense of being cut off from the

restorative benefits of nature.

Wilson argues that our natural affinity for life—biophilia—is the essence of our humanity and binds us to all other living species. For Emily, the lack of visibility and the cold, gloomy weather prevent her from experiencing this connection, exacerbating her feelings of lethargy, hopelessness, and anxiety. The fog acts as a barrier, both physically and mentally, making it difficult for her to engage with the natural elements that typically provide comfort and stimulation.

By understanding Emily's experiences through the framework of biophilia, we can see how the disruption of her connection to nature during the foggy winter months contributes to her eco-anxiety and depressive symptoms. This perspective highlights the importance of maintaining a strong bond with the natural world for mental and emotional well-being, and it underscores the need for strategies to help individuals like Emily restore this connection, even in challenging environmental conditions

### 4.1. Understanding the Nature of Eco-Anxiety

Rising temperatures themselves have also been linked to detrimental impacts like aggressive behaviors, violence, suicide, and changes in personality traits [21]. Beyond the direct effects, just being aware of and concerned about climate change and its consequences can negatively impact mental health. Several terms have emerged to describe climate-related psychological distress, including solastalgia (distress caused by environmental change near one's home), climate grief (mourning ecological losses), climate anxiety (worry about climate impacts), and others [22]. Eco-anxiety has been reported in various contexts, such as the fear of contributing to climate change, feeling powerless to support climate advocacy efforts, and experiencing uncertainty about how to respond to the adverse effects of ecological changes. This growing concern reflects the psychological impact that environmental issues have on individuals and communities.

### 4.2. Eco-Anxiety Associated with Foggy Climate

Rates of reported mental health issues related to climate change awareness are rising, particularly among youth. Sources of distress include feelings of loss, helplessness, fear, anger, and guilt. Chronic climate-related worry can develop into anxiety disorders or depression. Trauma from climate disasters can leave lasting scars. Uncertainty, dread about the future, and lack of control are common themes underlying the psychological burden [23].

In the case of Emily, the lack of sunlight exposure has induced conflict and lowered her motivation levels. Research indicates that anxiety plays a significant role in influencing motivational variations. Rather than stemming solely from pathological causes, it is increasingly understood that ecological conditions significantly contribute to the development of anxiety and related

distress. Factors such as extreme weather events, environmental degradation, and climate change can create a persistent sense of unease and apprehension. These ecological stressors disrupt the natural environment, which in turn affects individuals' mental health and well-being. Understanding the impact of these environmental conditions on anxiety is crucial for addressing the broader implications of ecological crises on human psychological health [24].

### 4.3. Psychological Effects of Eco-Anxiety

Poor day light exposure caused by dense fog can disrupt circadian rhythms and lead to lower serotonin levels, which are linked to depression and anxiety. The suprachiasmatic nucleus (SCN) is the primary oscillator in humans, responsible for regulating our circadian rhythms. From early in evolution, indolamines have played a crucial role in transducing light signals into cells and organisms, enabling them to adapt to environmental changes. This ancient mechanism is still preserved in humans today, where melatonin, a key indolamine, is synthesized primarily in the pineal gland. Melatonin serves as the central hormone in our internal clock circuitries, signaling changes in seasons and helping to regulate our sleep-wake cycles and other physiological processes. Through this intricate system, our bodies can maintain synchronization with the natural world, highlighting the deep connection between human biology and the environment [25].

The constant grayness and gloominess of foggy days may contribute to feelings of sadness and despair. With reduced visibility from fog, Emily may feel physically and emotionally disoriented. Not being able to see very far can trigger anxiety about the uncertainty of what lies ahead. Fog creates a sense of being lost in an ominous landscape. The fog and cold makes Emily less inclined to go outdoors or interact with others, increasing isolation and loneliness which exacerbates depression and anxiety symptoms. The inability to get out and about freely adds to her feelings of being trapped. With fog disrupting Emily's daily rhythms and sense of time, she may struggle with maintaining structured routines and productivity which provides a sense of control. Disruptions in sleep-wake cycles can worsen mood issues. Emily associates the mental foggy she feels from depression and anxiety with the physical fog around her. The weather mirrors and reinforces her inner turmoil and obscures any sense of clarity about the future. Emily may have a seasonal pattern to her depression that is triggered or aggravated by winter weather and lack of sunlight during this time of year. The fog may serve as a harbinger of seasons of struggle.

## 5. Conclusions

In conclusion, this study highlights the profound impact that environmental factors like weather can have on mental health in susceptible individuals. For Emily, the onset of

pervasive fog during winter months seems to exacerbate symptoms of anxiety and depression. The lack of sunlight, feelings of isolation and disorientation, disruption of daily rhythms, and the fog's symbolic representation of her inner turmoil converge to profoundly worsen her mood and anxiety. While Emily feels alone in her experience, the connections illuminated between foggy weather patterns and her mood symptoms are unlikely to be unique. This study underscores the importance of considering environmental influences when assessing and treating mental health issues like seasonal affective disorder. Creating individualized treatment plans to help patients like Emily manage weather-related triggers will be essential. Further research is warranted to better understand the interplay between specific weather phenomena like fog and various mood disorders. With climate change anticipated to increase the frequency of extreme weather that may affect mental wellness, from heat waves to polar vortices, understanding these connections will only grow in importance in order to support the psychological as well as physical health of society. Emily's experience provides a poignant example of how our mental welfare is intrinsically linked to the environments we inhabit.

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