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Reducing personal climate risk to reduce personal climate anxiety

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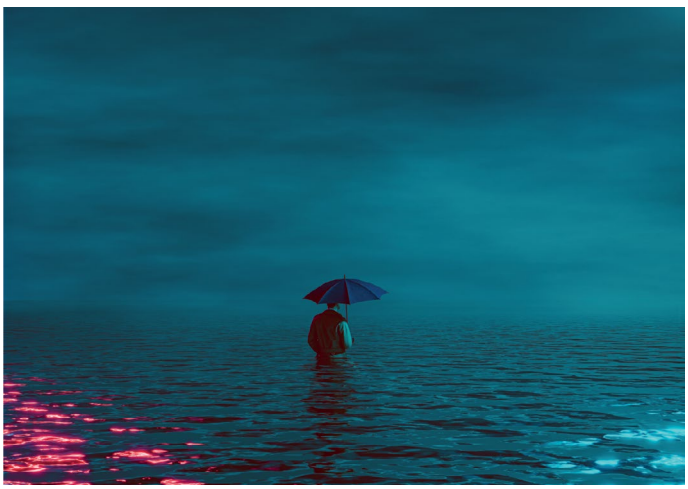
Climate anxiety, reflecting concerns about the negative impacts of climate change, is growing. Planning and action on individual specific climate risks could be a way to reduce personal climate anxiety.



Personal climate anxiety is a real, individual response[1,2] that stems from worry about negative ongoing and future climate change impacts[3]. Climate anxiety is magnified by present-day weather and climate experiences. For example, regional climate anxiety was present before the summer of 2021, but increased markedly due to the 2021 western North American heatwave and wildfires[4]. Media messaging of a looming climate crisis[5] can fuel climate anxiety. For example, due in particular to traditional and social media reframing[6], the aspirational 1.5 °C global warming threshold — a goal that physical, socioeconomic and infrastructure constraints have now rendered unlikely[7] — is transmuting from a driver of change to an instigator of anxiety. Taken collectively across society, climate anxiety driven by personal concern for ongoing and future impacts and amplified by media framing now permeates the Anthropocene zeitgeist[8].

Personal climate anxiety is a climate impact in its own right, and accepting this is necessary to manage it at the individual level. However, this first step can be challenging, because it can trigger powerful defensive psychological responses, including mental transfer of responsibility for solutions to others, fatalism and even climate change denial[9,10]. Overcoming these psychological defences involves a journey that in many ways mirrors the challenges of accepting other uncomfortable personal issues such as addiction, trauma and loss.

Beyond personal acceptance comes the most important stage of the climate anxiety experience: reducing the anxiety itself. It is this solutions-focused 'treatment' stage that we, as climate services providers and communicators in regular contact with anxiety-stricken individuals, are most keenly interested in. In particular, in this Comment, we would like to address a barrier to climate anxiety reduction that emerges as a common motif of most current climate anxiety reduction methods: that is, they are dominated by psychological, symptom-based anxiety reduction ('coping') approaches rather than methods to remove the actual cause of anxiety. Examples of bias towards coping rather than cure are common. For example, in a meta-study of five major themes for eco-anxiety reduction treatments[11], four themes (80%) reflected coping methods, rather than initiatives to reduce anxiety root causes. Similar bias is found in psychology guidance[1], and in numerous examples within the general public discourse[12].

However, prioritizing coping over root cause reduction is sub-optimal, and maybe even counterproductive to long-term personal mental health. This is because without a primary attempt at reducing the underlying driver — impacts from climate change — anxiety symptoms will always return, strengthening anxiety-enhancing neural pathways and biochemical responses[13]. Natural consequences of this feedback loop are entrenched fatalism, paralysis and apathy[3] that are precursors of both climate anxiety and its natural partner, anticipatory climate grief[14]. Clearly, coping methods are necessary to treat residual effects. But if the intention is to reduce long-term individual climate anxiety, research suggests that coping methods alone should not form the primary basis for personal climate anxiety management plans.

To reframe treatment of personal climate anxiety away from symptomatic coping and towards a strategy that addresses root causes, it helps to consider what these root causes actually are. Anxiety is foundationally a "suite of [...] affective, cognitive and behavioural challenges in response to uncertainty about a potential future threat"[13]. Key to this definition is the term 'uncertainty', which relates to risk. For example, an individual may be anxious at risk of future financial loss due to evolving market uncertainty (financial anxiety), or the risk of future illness (health anxiety) due to uncertain emerging health trends (for example, COVID-19). These examples — and established anxiety research[15] — highlight the perception of uncontrollable risk as a fundamental anxiety driver. The schema linking risk to anxiety applies directly to climate anxiety as well. An individual may develop personal climate anxiety when informed that they live on a flood plain that could in future become more at risk of severe flooding due to climate change. Another individual may develop personal climate anxiety after learning that climate-change-driven drought increases might risk their future food security. A third individual may feel generally anxious due to perceived global proximity to risky climate thresholds, without a clear mental construct of what the specific impacts may be to themselves or their community.

Based on linkages between anxiety, uncertainty and risk established by cognitive science, we argue that personal climate anxiety

is most effectively and sustainably reduced by prioritizing planning and action to reduce personal climate risks. Comparing climate anxiety to health anxiety around COVID-19 clarifies this argument. The counterfactual case where one prioritizes psychological, symptomatic methods for COVID-19 anxiety[16] as the first line of defence while neglecting to plan and expeditiously undertake available COVID-19 risk reduction exercises such as social distancing, mask wearing and vaccination[17] is self-evidently a poor plan, because it doesn't prioritize attempts to reduce the core anxiety-causing risk itself. Instead, the intuitively correct first step in reducing COVID-19 anxiety is to start planning and undertaking available physical COVID-19 risk reduction actions before turning to psychological, symptomatic treatments as secondary methods to treat residual anxiety. This lesson should apply to personal climate anxiety as well: because personal climate anxiety is at least partially proportional to personal climate risk, planning and — as soon as is practical — actioning personal climate risk reduction steps should be a priority if the goal is personal climate anxiety reduction.

Actions to reduce risk to uncertain future climate conditions is the essence of climate adaptation. By self-initiating personal adaptation actions to reduce climate risk by controlling personal climate vulnerability, we contend that individuals will decrease their climate anxiety in a way that psychological coping treatments can only provide temporarily. Personal adaptation actions alone are unlikely to entirely remove climate risk and for many intrinsically vulnerable individuals, all personally available actions may only trivially reduce actual risk. However, anxiety research reveals that "perceived capability to wield control over aversive events" is a potent anxiety reduction method — remarkably, even in lieu of any material reduction in the underlying risk[15]. In the climate anxiety context, this means that even starting to plan personal climate adaptation actions is a powerful tonic for sustainably reducing climate anxiety, as is the actual adaptation action — even when the actual climate risk reduction is minor.

In practice, personal climate adaptation planning and action can be very simple. Reflecting on the examples provided above, the individual concerned about future floods could carry out a plan to move valuable personal items to higher shelves to avoid flood damages[18]. The individual concerned about future drought-related food security could start learning and applying urban garden techniques[19]. And the individual concerned with climate impacts generally could undertake a climate risks and vulnerability screening to more tangibly prioritize most effective climate risk reduction steps. Each of these actions are personally attainable, concrete and responsive to each individual's life experiences. Clearly, none alone reduces an individual's climate risk completely, nor does it directly address risks to others. However, each provides a perceived level of personal risk reduction and, via the relationships between risk, self-efficacy and anxiety[13,15], of personal climate anxiety reduction as well. Indeed, personal climate anxiety reduction might be the most notable 'success story' of these individual climate adaptation initiatives.

Personal action as a means to reduce climate anxiety is not an entirely neglected concept — for example, one of five major themes of personal eco-anxiety interventions is "encouraging clients to take action"[11]. However, in this example — and mirrors of this example in popular media and guidance — we find that 'action' predominantly refers to advocating for general institutional climate resilience, and/or reducing personal and institutional greenhouse gas emissions. These altruistic actions are commendable and necessary to avoid serious climate-change-derived damages. However, they are arguably less effective on a 'per unit of effort expended' basis than personal risk reduction if reducing personal climate anxiety is the immediate goal. This is because their outcomes contribute to individual climate resilience only to the extent that society as a whole also contributes: something that is well outside of most individuals' circle of influence. So while citizen participation in mitigation and institutional adaptation efforts is critical, in the specific context of reducing personal climate anxiety, an arguably more effective recommendation is to plan and undertake personal- and/or household-level climate-risk-reduction-framed climate adaptation[20]. It is this self-perception of control over one's own situation that anxiety research highlights as a particularly influential lever when it comes to personal anxiety management.

Especially when supported by residual, psychological anxiety coping steps and augmented by support for broader climate adaptation and mitigation initiatives, cognitive science suggests that planning and undertaking personal climate adaptation is a climate-anxiety-reducing action with a high return on personal investment. It should be more prominently highlighted as part of solution-focused climate outreach and communications. And we think that it should play a much more central role in climate anxiety research, treatment and the public climate anxiety discourse.

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Competing interests

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