



“Psychology Works” Fact Sheet: Climate Change and Anxiety

Experiencing Anxiety Related to Climate Change

Climate change is a “long-term change in the average weather patterns that have come to define Earth’s local, regional, and global climates.”¹ Because of the uncertainty and severity of climate change, people are seeking treatment for negative feelings related to climate-related events and the future of our planet. These negative feelings may include a sense of powerlessness and hopelessness about the current and future state of the natural environment, one’s own quality of life in relation to climate-related events, and about general human health and wellbeing.

What Contributes to Anxiety Related to Climate Change?

Feelings of anxiety about the state of the Earth’s climate can be experienced before, during, and after a climate-related event²:

Before a Climate-related Event

Warnings of climate-related events, such as hurricanes, storms, and wildfires, can cause acute worry about personal safety, the safety of loved ones, and/or the safety of homes and other property. Worry may also be experienced when people consider the possibility of impending and serious environmental problems—in the body of environmental psychology literature, this is known as *habitual ecological worrying*³. Individuals experiencing this type of worry may cope better by adopting pro-environmental attitudes and actions. Sometimes this form of worry can become less constructive if it is associated with feelings of loss, helplessness, frustration, and an inability to improve the situation. In the environmental psychology literature, this is known as *eco-anxiety*.⁴

During a Climate-related Event

Human mental health can be significantly affected during a rapid climate-related event. Victims of these events may quickly and unexpectedly lose property and belongings. Some may also lose family members and friends to disasters caused by climate change. Human mental health can also be impacted by climate-related events that occur gradually over time. For example, those who live in areas of the world where

¹ <https://climate.nasa.gov/resources/global-warming-vs-climate-change/>

² Gifford, E., & Gifford, R. (2016). The largely unacknowledged impact of climate change on mental health. *Bulletin of the Atomic Scientists*, 72, 292-297.

³ Verplanken, B., & D. Roy. (2013). ““My worries are rational, climate change is not”: Habitual ecological worrying is an adaptive response.” *PLoS ONE*, 8 (9), e74708.

⁴ Rabinowitz, P. M., & A. Poljak. (2003). “Host-environment medicine: A primary care model for the age of genomics.” *Journal of General Internal Medicine*, 18 (3), 222–227.





climate change has significantly affected landscapes and livelihoods tend to report a deep sadness, or *solastalgia*, about environmental change.

After a Climate-related Event

When a loss of friends and family, community, homes and belongings, employment, and economic certainty occurs because of a climate-related event, the results can be far-reaching and long-lasting. Outcomes may include depression, post-traumatic stress disorder (PTSD), grief, despair, aggression, interpersonal difficulties, substance abuse, and even suicide. In some cases, individuals may develop a condition called the *climate change delusion*,⁵ characterized by a belief that one's actions, no matter how insignificant, will have a serious negative effect on those suffering through climate-related events.

Who is Most Vulnerable?

Gifford and Gifford (2016) reference studies indicating that anxiety related to climate change tends to strongly affect children, older adults, individuals with pre-existing mental health conditions, and people with fewer economic resources. For example:

- Children with anxiety about climate change may experience symptoms such as low mood, anxiety, nightmares, flashbacks, social withdrawal, and difficulty being separated from caregivers. These symptoms have been shown to be more severe in children than adults and may persist later in life.
- Older adults can be more physically vulnerable to changes in the climate around them, and are sometimes less able to employ effective coping mechanisms, such as pro-environmental behaviours, during times of distress.
- People with fewer economic resources may also be more vulnerable to climate-related events as a result of their living conditions, employment conditions or status, a lack of access to resources, goods and services, and inability to engage in pro-active eco-conscious behaviours.
- Individuals living in countries with fewer resources available to protect people against the ramifications of climate-related events may become more severely affected by climate change.

How can Psychologists Help People who are Experiencing Anxiety about Climate Change?

Psychologists have the knowledge and expertise to help people process the negative effects of climate change on mental health, as well as to encourage effective and positive behavior.⁶

⁵ National Wildlife Federation. (2011). The psychological effects of global warming on the United States and why the U.S. mental health care system is not adequately prepared. National Forum and Research Report, February 2012. https://www.nwf.org/pdf/Reports/Psych_Effects_Climate_Change_Full_3_23.pdf.

⁶ <https://www.theguardian.com/environment/2020/oct/08/anxiety-climate-crisis-trauma-paralysing-effect-psychologists>





Psychological Practice and Services

Although some people may cope with their concerns about climate change by engaging in some form of climate-related activism (e.g., avoiding the use of single-use plastics, recycling, using less water, and so on), others may cope by disengaging or worrying excessively. Psychological therapies can help individuals experiencing anxiety about the climate to gain control over their worries, decrease their anxiety, and improve their overall quality of life. Therapies that can be effective are:

- Cognitive re-evaluation therapy to help correct thinking patterns that cause and increase worry
- Problem-solving training to learn better ways to solve everyday problems
- Exposure therapy to help confront and control, rather than avoid and be controlled by, fear
- Progressive relaxation to help decrease some of the physical symptoms of anxiety.⁷

For children, youth and young adults who have experienced a climate-related event or are experiencing anxiety about the climate, psychologists working in schools, colleges, and universities are available for support in school and academic settings.

Psychological Science

Psychological research can provide answers to existing and emerging climate-related questions. Whether the focus is to change destructive behaviors, like minimizing the use of motor vehicles, or to embrace beneficial actions, like using public transit, psychological research is key to understanding how people think about the environment and economic issues.⁸

Advocacy

Individuals, organizations, and all levels of government have a critical role to play in both understanding and addressing the relationship between climate change, health, the economy, and the behaviour of individuals. Effective responses to climate change will require promoting behavioural change at the individual and collective levels. Environmental psychologists can assist organizations and government in the development of education programs and public policies that overcome the discrepancies between what people understand about climate change and their everyday behaviours related to the environment.⁹ For those experiencing anxiety and other mental health issues, appropriate funding for mental health services at all levels of society is important.

⁷ https://cpa.ca/docs/File/Publications/FactSheets/PsychologyWorksFactSheet_GeneralizedAnxietyDisorder.pdf

⁸ <https://cpa.ca/docs/File/Government%20Relations/Canadian%20Psychological%20Association's%202020%20Pre-Budget%20Submission.pdf>

⁹ <https://cpa.ca/docs/File/Government%20Relations/Canadian%20Psychological%20Association's%202020%20Pre-Budget%20Submission.pdf>





Knowledge Mobilization

To increase awareness of climate change as well as promote more responsibility and behaviour change on the part of Canadians, understanding how people process information and make decisions is important. Accurate and consistent information about climate change should be provided to individuals by trusted and knowledgeable organizations in an encouraging manner. Messages should be motivating and focus on the positive outcomes of prevention strategies, rather than be discouraging or frightening.

For More Information:

More information on the intersections between psychology and climate change can be found in these references:

- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist* 66, 290–302.
- Steg, L., & Vlek, C. (2008). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29, 309-317.

You can consult a registered psychologist to find out whether psychological interventions might be helpful for you. For the names and locations of provincial and territorial psychological associations, please visit <http://www.cpa.ca/public/whatisapsychologist/PTassociations/>

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