

Emotions, climate change, and risk: A systematic review of the literature

Researchers in different fields (sociology, psychology, communication) have studied how emotions affect the way that climate change risks are understood, communicated, and acted on. However, there has been little work that brings together insights from these different fields. In this article, we identify trends, debates, and opportunities to better understand emotion in climate risk perception and communication.

Research Questions

1. How are emotions studied in climate change risk perception and risk communication research?
2. What role does emotion play in risk perception before, during, and after a climate event?

Highlights of Findings

- **Positive emotions** (e.g. hope) are more effective than negative at motivating people to seek out information and at conveying clear messages about risks. Appeals to fear motivate people to act, but only when people feel their actions will successfully mitigate future climate impacts.
- **Personal experience** with climate impacts may produce negative (e.g. worry) or positive (e.g. sense of control) emotions. The importance of these emotions diminishes over time, so the more recent an event (e.g. flooding) is, the more people are likely to be concerned about climate risks.
- Emotions are shaped by different **cultures and worldviews**. Cultures that value individual action produce less emotion and less desire to act (e.g. wildfire evacuation) than cultures that value community.
- Some studies have found that women show more negative emotions in response to climate events than men, but men who are parents have stronger emotional responses than men who are not.
- **Targeting messages to specific audiences** triggers memories of personal connections to climate hazards, which can improve public education and promote preventative actions. **Visual images** also create emotional responses to climate threats, even for people skeptical of the causes of climate change.

Management/Policy Implications

Understanding the influence of emotions is important for developing management responses to climate change impacts, where engaging with the public and encouraging adaptation action is important. The findings point to the need for targeted communication about climate risks that reflects local experiences, values, and concerns.

Future Research

Future research could benefit from more interdisciplinary work that explores the role of specific emotions in risk perception before, during, and after climate-related events. There is also a need for research on emotions and climate risk perception and communication in the Global South.

For more information: Contact the study team for a copy of the article (nicole.klenk@utoronto.ca).

Salas Reyes, R., Nguyen, V., Schott, S., Berseth, V., Hutchen, J., Taylor, J., & Klenk, N. A research agenda for affective dimensions in climate change risk perception and risk communication. *Frontiers in Climate*. Forthcoming.