

A systematic literature review on mental models of climate change

Department: Sustainable Development

Research group: Innovation studies

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Project description

Are you curious how people think about climate change and how this shapes their behaviour?

An increasing amount of literature in environmental psychology explores people's perception of climate change – pursuing questions such as public understanding and knowledge about climate change, risk perceptions, attitudes, and behavioral engagement, or lack thereof, towards climate change. This project deals with people's understanding of climate change, conceptualized as mental models about climate change. Mental models are perceptions of a system, and include causal beliefs about a particular system. A mental model of climate change shows, for example, what people think are the causes of climate change (See Figure 1).

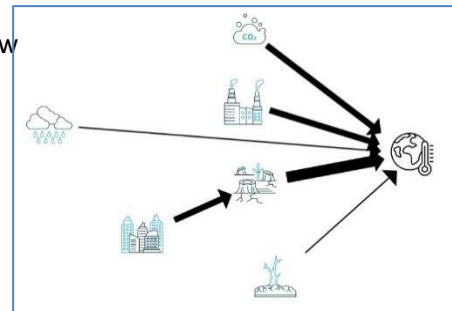


Figure 1: example of a mental model of climate change

Scholars have highlighted that mental models of climate change have great potential for eliciting enduring behaviour change, but an overview of the current state of the art of this body of literature is missing. This project will create such an overview through a systematic literature review. The systematic literature review will show us what the common beliefs are that people have about climate change and when and how these beliefs translate into pro-environmental behaviour.

In this exciting project, we will conduct the first systematic literature review on climate change mental models. You will be reviewing state-of-the-art research on climate change mental models by assisting in an international team with renowned mental model experts. The main tasks will be to help with developing a coding framework, reviewing the literature and coding relevant articles into this coding framework. At the end of the project, you will be an expert in conducting systematic literature reviews, climate change mental models, and know all about how mental models shape behaviour. You are also very welcome to contribute to writing the paper for publication.

Job requirements

We are looking for a motivated student who wants to gain experience in conducting a literature review in the field of environmental psychology. The applicant does not need prior experience or knowledge in this research field. Experience with systematic literature searches will be an advantage. Willingness to acquire these skills is a prerequisite.

Relevant literature

Bostrom, A., O'Connor, R. E., Böhm, G., Hanss, D., Bodi, O., Ekström, F., ... & Sælensminde, I. (2012). Causal thinking and support for climate change policies: International survey findings. *Global Environmental Change*, 22(1), 210-222. <https://doi.org/10.1016/j.gloenvcha.2011.09.012>

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van den Broek, K., Negro, S., & Hekkert, M. (2024). Mapping mental models in sustainability transitions. *Environmental Innovation and Societal Transitions*, 51, 1-10. Article 100855.
<https://doi.org/10.1016/j.eist.2024.100855>

Goldberg, M. H., Gustafson, A., & Van Der Linden, S. (2020). Leveraging social science to generate lasting engagement with climate change solutions. *One Earth*, 3(3), 314-324.