How Psychologists Ought Stop Climate Change: Twelve Fast, Vetted, Ways to Refine Global-Warming Attitudes

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Psychology should do more to safeguard Earth's biomes. Toward that safeguarding, our experiments demonstrate a dozen different brief (usually under-five-minute) "hunks" of scientific information that increase acceptance that anthropogenic Global Warming (GW) is occurring and concerning (e.g., Ranney & Velautham, 2021). These interventions reduce denial among conservatives and liberals alike (i.e., without polarization). Some stimuli involve videos, temperature (vs. stock-market) graphs, climate statistics (even mixed with misleading statistics), and texts explaining either GW's physical-chemical mechanism or why climatologists deserve trust (e.g., Ranney & Clark, 2016; Senthilkumaran, Velautham, & Ranney, 2023). (Our public-outreach site, <u>HowGlobalWarmingWorks.org</u>, offers such examples.) Other interventions involve sea-level rise, climate change's effects, supra-nationalistic statistics, CO₂'s cognitive harms, and ways to also boost hope about climate change (e.g., Kihiczak & Ranney, 2023; Ranney et al., 2019). Our convincing information (perhaps even Ranney's 13-word haiku; e.g., Ranney, et al., 2016, etc.) plausibly improves judgments/decisions about political candidates and policies.

Bio:

Prof. Michael Ranney studies explanations and understandings—and how to improve them. His work fosters the incorporation of challenging information (e.g., on global climate change; see HowGlobalWarmingWorks.org). He and his collaborators study reasoning involving supportive and contradictory relations, while generating curricula. methods, and software designed to improve rational thinking. Ranney's work on epistemic representations/reorganizations exhibits the fragmentary nature of knowledge—in diverse realms such as physics, biology, abortion, and immigration. He often examines ruminations and policy-making involving socially crucial rates and statistics. Ranney's main training was in diverse parts of Psychology but recruited broader fields: His first publications were in Applied Physics and Materials Science, and he also-majored in Microbiology. Before coming to Cal, he was a Postdoctoral Fellow in Cognitive Science at Princeton University (working with philosophers, etc.). Prior to switching to climate change cognition, Ranney already researched numeracy, animal learning, algebra recognition, artificial intelligence, science education, environmental psychology, journalism education, social psychology, intelligent tutoring systems, and cognition about evolution. He created RTMD theory, plus the EPIC procedure and its Numerically Driven Inferencing (NDI) paradigm.