

Delayed gratification hurts climate change cooperation

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Time is a huge impediment when it comes to working together to halt the effects of climate change, new research suggests.

A study published today in the journal *Nature Climate Change* reveals that groups cooperate less for <u>climate change mitigation</u> when the rewards of cooperation lay in the future, especially if they stretch into future generations.

"People are often self-interested, so when it comes to investing in a cooperative dilemma like climate change, rewards that benefit our offspring – or even our future self – may not motivate us to act," says Jennifer Jacquet, a clinical assistant professor at New York University's Environmental Studies Program, who conducted the research while a postdoctoral fellow working with Math Prof. Christoph Hauert at the University of British Columbia.

"Since no one person can affect climate change alone, we designed the first experiment to gauge whether group dynamics would encourage people to cooperate towards a better future."

Researchers at UBC and two Max Planck Institutes in Germany gave study participants 40 Euros each to invest, as a group of six, towards climate change actions. If participants cooperated to pool together 120 Euros for climate change, returns on their investment, in the form of 45 additional Euros each, were promised one day later, seven weeks later, or were invested in planting oak trees, and thus would lead to climate



benefits several decades down the road – but not personally to the participants. Although many individuals invested initially in the long-term investment designed to simulate benefits to <u>future generations</u>, none of the groups achieved the target.

"We learned from this experiment that even groups gravitate towards instant gratification," says Hauert, an expert in game theory, the study of strategic decision-making.

The authors suggest that international negotiations to mitigate <u>climate</u> <u>change</u> are unlikely to succeed if individual countries' short-term gains are not taken into consideration.

More information: Intra- and intergenerational discounting in the climate game, <u>DOI: 10.1038/nclimate2024</u>

Provided by University of British Columbia

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