Attainment of future carbon sequestration via a climate game in the Chinese collectivistic society

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Abstract

Theories on evolution of cooperation assume that interacting individuals can change their strategies under different expected payoffs depending on the social situations. The willingness to invest into partners and to cooperate may therefore shift in the collectivistic Eastern Asia as opposed to Western countries partly because of cultural differences, especially within a public good game setup. An experiment was implemented looking at the willingness of young Chinese subjects to mitigate the consequences of climate change in a country severely affected by air pollution. Following a design already implemented in Germany (Jacquet et al 2013, Nat. Clim. Change), we set up a public good game in which groups of six students had to reach a minimum investment threshold to be able to save funds for a reforestation project to curb climate change. Differently from the German model whose subjects did not manage to reach the threshold, five out of eight Chinese groups were effective at investing for this cause. A Social Value Orientation questionnaire we presented the subjects with established why we are confronted with a variance in cooperation interests across different cultures. In the Far East, in fact, collectivistic values allowed for the emergence of this type of environmentally driven cooperation.

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