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Experiencing floods has only marginal effects on individual pro-environmental cognitions and behavior

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Abstract

Climate change-induced disasters such as floods are becoming more common and may shape citizens' pro-environmental cognitions and behaviors. However, evidence on the effects of first-hand disaster experience remains mixed, partly due to methodological limitations that hinder causal inference. We addressed this issue in a quasi-experimental study comparing individuals affected and unaffected by the 2021 floods in Germany (N = 398) before and after the event. Using propensity score matching and Bayesian mixed models, we estimated the causal effects of flood experience on various pro-environmental responses. Results indicated only marginal effects overall. While affected individuals showed small increases in outcomes such as personal norms to act against climate change and political participation, they did not differ from unaffected individuals on most other measures. We discuss implications for understanding pro-environmental responses and for climate change mitigation strategies.