

# The Behavioural Mechanisms of Habit Formation: Evidence from a Field Experiment on Water Conservation

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## **Abstract**

An increasing body of literature documents that temporary interventions have an impact on behavior well after they are over. This has been taken as evidence that individuals form habits. But previous studies are unable to test for the underlying behavioral mechanism: do individuals form habits through a habit stock (Becker and Stigler, 1979) or because the stimulus trains individuals to automatically maintain a certain behavior (Wood and Runger, 2016; Camerer et al., 2018)? Distinguishing between the two mechanisms is important, because they have different policy implications. We test the two competing models in a novel experiment in the context of resource use. We use a powerful intervention (real-time feedback) to shift behavior, and vary the intensity of exposure to the stimulus across experimental conditions and time. Our results reject the habit-stock model and strongly favor the view that habits result from automatic control of behavior.