

# Does Observation of Others Affect People's Cooperative Behavior? An Experimental Study on Threshold Public Goods Games\*

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## Abstract

This paper investigates whether observation of others affects people's behavior in the context of two threshold public goods games, the no rebate rule game and the utilization rebate rule game. In both rebate rules, subjects can get a benefit from the public good if their group can collect enough contributions to the public good. The difference between the two rules is how the excess amounts of contributions are distributed among people: the excess amounts of contributions are not distributed among people in the no rebate rule, while they are distributed among people equally in the utilization rebate rule. In spite of this difference, the two rules have the same Nash predictions. To see the effect of observation of others' actions, we ran three observational treatments under the two rebate rules. In one treatment, subjects could convey their individual contribution to other group members if they would like to reveal it. Although adding such a revelation stage does not change the equilibrium prediction, subjects in the utilization rebate rule cooperated significantly more than when they could not reveal their individual contribution to others. However, such positive effect was not clearly found in the no rebate rule. These experimental results show that the effect of observation of others can be different depending on games, even though the theoretical predictions of the games are similar. Also the results imply that the free-rider problem can be solved when people can use a reputation building strategy effectively.

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