
Different Feedback Designs in a Real Effort Principal Agent Experiment

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Abstract

The aim of this experiment is to analyze behavior within a principal-agent setting with real effort task and moral hazard. We used the computerized real effort sliders task developed by Gill and Prowse (2009) with an exogenous fixed-wage for the agent. According to treatments, the principal can send to the agent a feedback. Each treatment corresponds to a specific feedback design: the Baseline Treatment without feedback (BT); free feedback (Message Treatment, MT); costly feedback for both (Punishment Treatment, PT); alternative feedback (punishment or (exclusive) message) (Alternative Treatment, AT). The question is whether the interaction of these feedbacks improves efficiency. Thanks to laboratory data, we test our hypothesis in an agent-based model with parameters from Fehr and Schmidt (1999, inequality aversion model) and Fehr and Gächter (2000, cost function). We found deviation between theoretical results and observed laboratory one: Message improves principal payoff with respect to BT while we expected no effort from agents in both treatments. In addition, there is no significant difference of effort level between MT and PT. However, similarly to experimental findings in Public Good Game, we highlight that the channels combination of feedback (AT) leads to higher effort at a lower cost than when used separately. We also emphasize the importance of the feasibility knowledge of the task. Indeed when principal can run blank tasks, they are less demanding but react more strongly to extreme effort. Very low effort implies negative message (MT, CT) or high monetary self-sacrifice punishment (PT) and important effort leads to positive message.

Keywords: behavioral economics, communication, feedback, fixed wage, punishment

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