

Abstract

This paper re-examined the efficacy and endowment effects in a public goods dilemma (PGD) on the basis of the framework of $\text{Efficacy} = \text{Endowment} \times \text{Efficiency}$. Efficiency is the impact of a unit of endowment on PG provision. Endowment is the amount of resource of a person that can contribute to a PG. And efficacy is the total impact of a person's contribution on PG provision. We used a student group project scenario to simulate a continuous contribution PGD. Future interaction possibility, group member's time and speed were between-subject factors and participant's time and speed were within-subject factors. Results showed that cooperation behaviors are primarily driven by (a) our own endowment and (b) group members' efficiency. Three-way interactions of own endowment \times own efficiency \times future interaction possibility on the amount of time, proportion of time and the number of pages contributed were also found.