Abstract
This study introduces a methodology that builds a cultural profile of subjects using survey questionnaires, then uses the results to predict variations in behavior in controlled computer-mediated experiments across a range of conditions. 156 subjects were provided with pretest surveys, which were used to generate measures for each subject along grid and group, two very prominent and general cultural dimensions drawn from social/cultural anthropology. Grid was hypothesized to induce enforcement of social norms of reciprocity, and group to induce altruism towards other individuals. These subjects were then placed in incentivized computer-mediated repeated interactions involving ten rounds of a social dilemma-inducing Voluntary Contribution Mechanism (VCM) within teams of four. Treatments were varied according to whether team membership were shuffled between stages, whether information was provided on team member’s contribution, and by whether clustering of particular types were arranged through certain algorithms. New algorithm differs from regular VCM in such a way that the grid/group characteristics of individuals affect group membership. Overall, it was shown that the clustering of high groupness individuals produces higher output. Punishment generates the same level of contributions among cultural types. Clustering of high-gridness with low-groupness produces higher level of punishment and lower output than random assignment. Visibility of only high-groupness individual’s contributions within the team produced similar performance with random-visibility. In line with predictions, control group outperforms the experimental group when low-gridness individuals are assigned to punish others. The assignment of high-gridness individuals into norm enforcer’s role produces lower contributions but the same efficiency as the random schedule. Punishment levels were no different across sorted and unsorted groups. Our results of assurance game show that high groupness subjects select Pareto optimal payoff choice than low groupness ones. High gridness individuals choose non-risky payoff choice. The size of the group negatively affects coordination on Pareto optimal outcome. It is thus demonstrated that general cultural dimensions can be used to predict differences in behavior under widely varying conditions.