

## Amendment to analysis plan

Deversi, Marvin et al. 2018, January 02. "Consequences of cooperation: Linking cooperative behavior and outcomes in a large-scale experiment." AEA RCT Registry, AEARCTR-0002596.

<https://www.socialscienceregistry.org/trials/2596/history/24637>

--

### *Changes in the selection procedure*

As announced in the first analysis plan, we are conducting a second wave of experiments with about 400-500 employees from the company taking place from 02/06/2019 to 21/06/2019. In the selection procedure of these new experiments, we excluded non-headcount-relevant employees (which are mainly working students and external consultants).

### *Changes in the experimental design*

We add another public good game task after the first one (not announced to participants). Here, the MPCR of the public good randomly varies between 0.3 and 1.2 reflecting higher and lower costs of contributing, respectively. Herewith we offset the typical social dilemma tradeoff. Participants should not contribute with an MPCR of 0.3, but should put their whole endowment into the public good if the MPCR is 1.2. In a strategy method, participants state their unconditional contribution, their contribution schedule, and their beliefs about others' contributions. This part of the experiment is payout relevant for randomly selected 1/3 of the participants.

This time we administer the elicitation of social norms (coordination games on vignettes) in a within subject design fashion (descriptive and injunctive norms). We implemented three vignettes: two from the first experiments that showed very stark between-subject differences for descriptive and injunctive norms, and a new one that addresses the exploitation of cooperative employees in team work.

In the survey part, we add a question on general work satisfaction.

### *Statistical analysis of the new experimental data*

The data from the previous experiments showed a substantial heterogeneity in cooperation types as defined by Fischbacher et al. 2001, Fischbacher and Gächter (2010), and Kocher et al. (2015). We use an alternative operationalization that resembles these types but is more practical to use in statistical testing and multivariate regression analysis. We define three types: (1) Net-givers that give on average less than 5 tokens in the public good, (2) Matchers that give on average exactly 5, and (3) Net-takers that give on average more than 5. In addition, we also use the OLS slope from the regression of the contribution schedule on the conditional contributions as a measure of the degree of conditional cooperation (or the degree of reciprocity).

It turned out that our major outcome variables for the individual predictions were the number of appreciation awards received, salary increase, and the value of received monetary awards. The conditional

contributions (or types) and beliefs about others' unconditional cooperation were best in predicting outcome variables. Performance evaluations that we pre-specified as outcome variables in the first analysis plan had many missing values. Until now we were not able to identify where these missings stem from. So far, slicing the data with respect to the bonus scheme, seniority, or production function (cloud or customer-based solutions) shows significant heterogeneities.

The main regression specification (with the outcome variables as dependent variable) that we used so far is:

Mean conditional contribution
Reciprocity
Belief
Seniority
Male
Education
Company performance pay
Individual performance pay
Complementarity of efforts
Team cooperation
Constant
Job function FE
Career level FE
Degree of leadership responsibilities FE