Forced rating systems from employee and supervisor perspectives

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Data description sheet (JAR Data Policy)

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Item 1: Data handling and analysis

Eddy Cardinaels and Christoph Feichter handled the data and conducted the analysis. Both authors have full access to all data used in this study.

Item 2: Data generation

We conducted the main experiment between November 28-7 December 2018 with Students from Maastricht University using zTree software (Fischbacher 2007). One (or both) of the co-authors was present in the laboratory for every session. To analyze the cortisol level in the saliva of the participants, we used the service from the Dresden LabService GmbH. We received the results from the cortisol measurement on December 12, 2018.

We conducted the additional online experiment with Prolific workers on April 27-30, 2020 using Qualtrics. Via Prolific we can assure that all participants take part in the study only once.

A detailed description of our experiments is provided in the paper and the full transcript of the experimental materials can be found in the attachment to this data sheet.

Item 3: Proprietary data

Not applicable.

Item 4: Experimental materials

The experimental materials and procedures to collect the data are attached as a separate file.

Item 5: Step-by-Step description to derive at the final dataset and code for primary analysis

Main experiment

After our sessions were finished, we combined all observations and PEQ items from ztree, using the Join *.sbj Files command in z-tree as well as Microsoft Excel to get one combined dataset including all observations. We then imported that dataset to STATA. From there, we generated a separate Excel file to filter the ideas that the independent assessment committee had to rate with respect to the creativity. After gathering the creativity ratings of the independent assessment committee, we matched these rating to the observations in our main data file. We also matched the Cortisol levels – which were provided to us in an Excel Sheet from Dresden Lab service – to our main data file in STATA. Finally, we calculated the Flesch-Kincaid index using the R package textstat_readability.R with the help of a research assistant. After calculating the Flesch-Kincaid index in R, we matched it back to STATA. This resulted in the final dataset used to analyze the data. The code for calculating the variables, as well as the analysis of the data can be found in a separate .do file.

Additional online experiment

We downloaded the employee data from Qualtrics to an Excel file and imported it to STATA. We excluded observations who did not finish the experiment or participants who failed to answer the screening questions to be eligible for participation (e.g. participants needed to be older than 18 years, have time to focus for 20 minutes to work on the experiment, and solve a captcha). For all other participants that completed the full survey, we exported the number of sliders solved and the creative ideas submitted to an Excel file, to prepare the Qualtrics survey for supervisors. In this survey,

supervisors had to rate the employees performance in groups of three either on the creative or slider task according to the respective compensation scheme (forced versus free rating). The rating of the supervisors took place in Qualtrics, and we used that information to calculate the payout for each participant. Additionally, in a separate Qualtrics survey, we let the creativity of the ideas rate by an independent assessment committee, which consisted of a different set of prolific workers. After gaining the creativity ratings for each idea, we again downloaded the file from Qualtrics to an Excel file. We then brought back the creativity ratings from the independent assessment committee as well as the supervisor rating to our STATA file using the person specific identifier. This is the final dataset used for analyzing the data. The code for calculating the variables used in the analysis, as well as the main analysis, can be found in a separate .do file.

Item 6: Assurance of data maintenance

We assure that one of the authors will maintain the data and programs for a period of 6 years.