

Prompts for the research project:

Between responsibility and reciprocity
- contributions of experimental corruption research

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The six prompts shown below have been written to instruct GPT-4 on the coding of post-experimental questions that were collected among experimental subjects of the project. Since, to the best of our knowledge, we are the first to employ GPT-4 for such a task, we subjected our approach to some rules. Owing to the blackbox nature of GPT-4, we consider these rules to be helpful in assuring that our findings are robust.

An excel-file was assembled in July 2023 with subjects' answers sorted alphabetically. Information on the treatment was not included in this file. GPT-4 was then employed to read first draft versions of the prompts, followed by the selected sequences of the 729 associated answers of subjects in the role of Estimators. Likewise, for prompts that refer to subjects in the role of the Auditor, the respective prompt was submitted to GPT-4, followed by selected sequences of the 728 respective answers. For each of the six prompts, a process of finetuning was initiated. This was a back-and-forth process where categories assigned by GPT-4 were checked by Johann Graf Lambsdorff for correctness. In case a designated category was unsatisfactory, the prompt was adjusted, checked on individual answers and amended until the results appeared satisfactory across the complete range of answers. This process was carried out while being blind to the treatments. Prompts and categories could not be adjusted, consciously or unconsciously, to influence differences across treatments. We acknowledge that some responses provide clues to the underlying treatment. However, these clues are far from obvious and often ambiguous. They are unlikely to have played a role in the process, also because any adjustment would have affected all remaining answers equally, including those not belonging to a suspected treatment.

On Sep 14, 2023, the prompts were sent to the other two researchers to check for consistency and clarity in writing. Afterwards, this document with all six prompts was freezed on Sep 16 2023. Afterwards GPT-4 was employed to assign categories to each of the studentical answers according to these prompts. Starting Sep 17, 2023, information on treatments will be added to the excel-file. This will allow to determine whether assigned categories differ across treatments.

As a final rule, we hereby publish the prompts, which were run with temperature=0. We will also publish the complete excel-file with all answers and the categories chosen by GPT-4. This permits a replication of your findings. Those who seek to replicate will observe that intra-rater reliability is high but not perfectly at 1.

Estimator Transfer

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Estimator“ (Schätzer; penilai; Tasador) in the subsequent game:

As an Estimator, the student played with Auditors (Prüfer; pemeriksa; Examinador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Auditors, the Estimator is asked to explain her choice of transfer in the first stage. These explanations belong to either of six categories:

- 1) No precise description;
- 2) I did not make large transfers above 8 because this reduced my income; a large transfer was costly without inducing a benefit for me; acceptance of a transfer less than 8 would be to my benefit;
- 3) I sometimes made large transfers above 8 but the auditors did not reward me. Large transfers do not influence the Auditor to judge my guess more leniently and award the prize; Giving only 8 is better;
- 4) I sometimes offered large transfers above 8, hoping the Auditor would accept and be pleased. I wanted to share income fairly even if this had no influence on the award of the prize;
- 5) I sometimes made large transfers above 8 and hoped the Auditor would accept my guess, judge my guess more leniently and award the prize as a gift to me in return;
- 6) I sometimes made larger transfers above 8. My strategy was to make the Auditor worry that after acceptance the failure to award would induce me to take revenge and request a review. Anticipating this risk of a review should then force the Auditor to award the prize.

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the six categories. If the explanation differs between the beginning of the experiment in the first rounds and the end in the final rounds, focus on the end of the game. Your answer should be either 1, 2, 3, 4, 5 or 6.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3, 4, 5 or 6.

Estimator Review

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Estimator“ (Schätzer; penilai; Tasador) in the subsequent game:

As an Estimator, the student played with Auditors (Prüfer; pemeriksa; Examinador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Auditors, the Estimator is asked to explain her choice of requesting or not requesting a review in the third stage. These explanations belong to either of five categories:

- 1) No precise description;
- 2) I mostly did not request a review because that was costly to me;
- 3) I sometimes requested a review out of curiosity. I wanted to see how well I performed in the guessing of objects, irrespective of whether I was awarded the prize or not;
- 4) I sometimes requested a review when I was withheld the prize to observe whether my guess was really bad;
- 5) I sometimes requested a review when I was withheld the prize in order to embarrass and punish the Auditor;

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the five categories.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3, 4 or 5.

Auditor Accept

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Auditor“ (Prüfer; pemeriksa; Examinador) in the subsequent game:

As an Auditor, the student played with Estimators (Schätzer; penilai; Tasador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Estimators, the Auditor is asked to explain her choice of accepting or rejecting the transfer in the first stage. These explanations belong to either of four categories:

- 1) No precise description;
- 2) I rejected all transfers below 8 and accepted all above 8;
- 3) I expected some fairness, for example a transfer of 10 or above, and rejected unfair transfers;
- 4) I sometimes rejected transfers above 8 and accepted only transfers of 10 or more when I was worried about a risk of a review and punishment;

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the four categories.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3 or 4.

Auditor Award Dutifulness vs reciprocity

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Auditor“ (Prüfer; pemeriksa; Examinador) in the subsequent game:

As an Auditor, the student played with Estimators (Schätzer; penilai; Tasador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Estimators, the Auditor is asked to explain her choice of awarding or not awarding the prize in the second stage. These explanations belong to either of five categories:

- 1) No precise description;
- 2) I did not care about the transfer; the guess was crucial; I awarded the prize when the guess was accurate and close to my own within the limits;
- 3) The guess was important and I was more tolerant if the transfer was large and stricter when the transfer was below 8;
- 4) I did not care about the guess; I awarded the prize when the transfer was large and withheld the prize when the transfer was small;
- 5) Withholding the prize might be risky and induce a review; awarding the prize was the safe choice;

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the five categories.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3, 4 or 5.

Auditor Award Strictness vs tolerance

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Auditor“ (Prüfer; pemeriksa; Examinador) in the subsequent game:

As an Auditor, the student played with Estimators (Schätzer; penilai; Tasador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Estimators, the Auditor is asked to explain her choice of awarding or not awarding the prize in the second stage. These explanations belong to either of five categories:

- 1) No precise description;
- 2) I preferred to withhold the prize; my decision was rather to the Estimator's disadvantage; I was rather strict when judging the guess; my intention was to be unfair, to reciprocate unfair transfers and this way displease or educate the Estimator;
- 3) I preferred to award the prize; my decision was rather to the Estimator's advantage; I was rather lenient and tolerant when judging the guess; my intention was to be fair, to reciprocate fair transfers and this way to please or encourage the Estimator;
- 4) I neither preferred to award nor to withhold the prize; I cared about the number of objects mentioned in the guess and tried to be fair and accurate according to the rules; I made a balanced decision with regard to the transfer, being tolerant when the transfer was high and strict when it was low.
- 5) I have no motivation whether to award or withhold the prize; I care about other issues such as my income or utility.

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the five categories.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3, 4 or 5.

Auditor Review

You are a professor in experimental and behavioral economics. One of your students obtained the role of the „Auditor“ (Prüfer; pemeriksa; Examinador) in the subsequent game:

As an Auditor, the student played with Estimators (Schätzer; penilai; Tasador) across three stages. In the first stage, the Estimator can transfer between 0 and 20 taler (Taler; UMEs; koin) to the Auditor. The Auditor can accept the transfer, in which case it is implemented. The Auditor can alternatively reject the transfer, in which case a revised division is implemented: The Estimator gets 12 and the Auditor gets 8. Accepting a large transfer greater than 8 increases the income of the Auditor. In the second stage, the Estimator must engage in a task of guessing the number of objects in a picture and the Auditor must decide whether the Estimator did well in the task and is awarded a prize of 20 or is not awarded the prize. In the third stage, both can request a review at a cost of 1 that might induce a punishment to either the Estimator or the Auditor. After playing this game 16 times with different Estimators, the Auditor is asked to explain her choice of requesting er not requesting a review in the third stage. These explanations belong to either of four categories:

- 1) No precise description;
- 2) I did not request a review. There was no benefit in requesting a review;
- 3) I sometimes requested a review out of curiosity or to check the truth or to confirm whether my decision to award the prize was right
- 4) I sometimes requested a review to embarrass or confront or educate the Estimator

You will be given the student's number and afterwards the student's explanation, submitted in local language (English, German, Indonesian or Spanish). Your task is to assign the Estimator's explanation to one of the four categories.

Create a two-column CSV with columns separated by semicolon. In the first column you write the student's number. In the second column you submit your answer 1, 2, 3 or 4.