Appendix A Instructions and decision screens

A.1 Welcome screen

Welcome

The study you are participating consists of two independent parts. You will receive instructions about the second part after having finished the first part.

Please enter your Prolific ID in the next page and then you can start with Part 1.

A.2 Part 1

A.2.1 Matrix task explanation

Your task is the following.

In each round, you will see two matrices on the screen. Each matrix has 10 rows and 10 columns and is filled with randomly generated numbers. Your task is to find the largest number in each of the matrices and then to add them up. You will obtain a bonus for each correct answer. The details about how the bonus is calculated are given in the next page. After entering your answer, irrespective of whether your answer is correct or incorrect, a new round will begin with a new pair of matrices.

You will be given 10 minutes **in total** to solve as many matrices as possible.

At the top of the screen you will see three pieces of information:

(1) the remaining time,

(2) how many of your answers were right,

(3) how many were wrong.

A.2.2 Matrix task example

You can see an example below.

12	51	43	53	52	89	22	36	88	62
79	40	35	3	64	69	49	77	18	26
26	24	33	71	2	83	45	3	14	18
36	57	36	85	5	2	49	83	44	53
57	54	68	81	31	36	74	2	72	49
51	15	84	66	88	87	34	7	18	52
19	79	55	49	23	33	24	81	71	16
8	62	37	80	6	16	68	24	5	61
38	67	89	71	38	31	52	16	72	41
90	73	10	46	0	85	6	65	15	34

74	8	88	18	70	40	23	13	34	76
70	72	18	69	39	45	30	16	48	63
57	78	75	52	39	73	62	18	79	51
20	4	5	39	20	19	19	21	38	15
57	54	68	81	31	36	74	2	72	49
51	15	84	66	88	87	34	7	18	52
19	79	55	49	23	33	24	81	71	16
8	62	37	80	6	16	68	24	5	61
38	67	89	71	38	31	52	16	72	41
90	73	10	46	0	85	6	65	15	34

The largest number on the left matrix is 89 and the largest number on the right matrix is 90. The correct answer for this pair of matrices is 89 + 90 = 179.

A.2.3 Matrix task payoff explanation

The bonus for each correct answer will be either £0.20 or £0.05. Specifically, 25% of the participants (50 out of 200) will receive £0.20 for each correct answer and the remaining 75% (150 out of 200) will receive £0.05 per correct answer.

[No-competition treatment] The 50 participants obtaining the bonus of £0.20 will be **randomly selected** at the end of the data collection. All other participants will receive £0.05 per correct answer.

[Competition treatment] The 50 participants obtaining the bonus of £0.20 will be selected **based on their performances**. When the data collection is over, all participants will be ranked based on the number of correct answers. Participants in the top 25% (the best 50 participants) will receive £0.20 for each correct answer. All other participants will receive £0.05 per correct answer.

A.2.4 Belief elicitation

You gave X correct answers. If we rank all 200 participants in the study based on how many correct answers they gave, how many do you think have correctly solved more matrices than you?

A.3 Part 2

A.3.1 Die task explanation

In this part you will be asked to roll a 6-sided die. If you have a die available, please get it. If you don't have a die, you can open a new tab and google "roll a die" and use the google widget to roll the die.

A.3.2 Die task payoff explanation

In this part you will receive an additional bonus between £0.10 and £0.60. Your bonus will be determined by the die-roll outcome you report. The table below presents the payoff based on the die-roll outcome.

Die roll outcome	Payoff
1	£0.10
2	£0.20
3	£0.30
4	£0.40
5	£0.50
6	£0.60

A.3.3 Die task decision screen

Please roll the die now and report the outcome.

What is the outcome of the die?

◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ 6

A.4 Demographics elicitation

Thank you for participating in this survey. Please fill in some basic demographic information. You will see your final payment on the next page.

Please indicate your age.

Please indicate your gender.

◯ Male

◯ Female

◯ Non-binary/ Third gender

◯ Prefer not to say

Please indicate your marital status.

◯ Single

◯ In a relationship

◯ Married

◯ Widowed

◯ Divorced/Separated

Please indicate your education level.

◯ Less than high school

◯ High school graduate

◯ Technical/vocational training

◯ Bachelor degree

◯ Master degree

◯ Doctorate degree

Please indicate your employment status.

◯ Employed full time

◯ Employed part time

◯ Unemployed

◯ Retired

◯ Student

A.5 Payment screen

This page will summarise how your payment is calculated.[5]

[Both treatments] For completing the survey: You will receive £1.30.

[No-competition treatment] Bonus of Part 1: You correctly solved X matrices. We remind you that the bonus for each correct answer is randomly assigned (there is a 25%chance to receive £0.20 per correct answer and 75% chance to receive £0.05 per correct answer). Hence, your payment from Part 1 will be either X×0.20£ or X×0.05£ depending on the random draw.

[Competition treatment] Bonus of Part 1: You correctly solved X matrices. We remind you that the payment for each correct answer is based on your performance compared to the performance of the other participants (the best 25% of the participants will receive 0.20£ and the remaining 75% of the participants will receive 0.05£ per correct answer). Hence, your payment from Part 1 will be either X×0.20£ or X×0.05£ depending on your ranking.

[Both treatments] Bonus of Part 2: You reported a die outcome of R. You will receive £0.10 times your report, so R×0.10£.

Your total payment will be either (1.30+X×0.20+R×0.10)£ or (1.30+X×0.20+R×0.10)£.

You will receive the payment within a few days from the end of the data collection.

Thanks for participating!

[5]To participants, the screen did not show X and R, but concrete numbers of correct matrices and die roll report. All possible payoffs were also presented as exact numbers.