

## A Main Experiment Instructions

Thank you for participating in our study. It will take about 15 minutes to complete.

**You will receive £1.50 (\$2.00) for completing the study.** In addition to that, you can earn a **bonus of up to £3.50 (\$4.50).** The average bonus is around £1.20 (\$1.50).

You will not receive the full show up fee if you do not pass some comprehension questions.

The information in this survey is truthful and accurate. In particular, the decisions you make are real and any bonus payments you earn will be sent to you through Prolific in the next few business days.

Your data will be completely anonymous and only be used for research purposes. By clicking the button below you will automatically allow us to do so.

We will now go through the instructions. Please read them carefully. **You are only eligible for a bonus payment if you adhere to the instructions.**

If you have any questions or concerns please contact Stefano Piasenti at [spiasenti@diw.de](mailto:spiasenti@diw.de)

Please click the button below to continue (if you do not see it yet, it will appear soon).

Please check the box below to proceed.

☐ I'm not a robot

  
reCAPTCHA  
[Privacy](#) - [Terms](#)

In this study, you will be asked to complete three main tasks, named **Task 1**, **Task 2** and **Task 3**, respectively.

At the end of the study we will randomly select one of the tasks by randomly drawing a number between 1 and 3. This task will be the one that counts for your final payment.

The method used to determine your payment varies across the three tasks. Before each task, we will describe in detail how your payment is determined.

Please click the button below to continue (if you do not see it yet, it will appear soon).

### Instructions for Task 1

For Task 1, you will be asked to solve a series of problems by counting the number of zeros (0) in tables consisting of zeros (0) and ones (1). You will be given 90 seconds to count the zeros (0) in as many tables as possible.

Here is an example of what a table looks like (the correct answer is 36):

1	1	1	1	0	0	0	1
1	0	1	0	1	1	0	0
0	1	0	0	0	0	0	0
1	1	1	1	1	0	0	0
1	0	1	0	1	0	0	0
1	0	1	0	0	0	0	0
1	0	1	1	1	0	1	0
1	0	0	0	0	1	0	1

In Task 1, you receive £0.15 per table you solve correctly during the 90 seconds. You receive no money for tables you are unable to solve, or for which you provide an incorrect solution.

After the 90 seconds are up, you will automatically continue to the next page. That means that you do not need to keep time yourself, but can concentrate on solving the tables. If you solve all available tables before the time is up, please just wait for the survey to continue automatically.

We refer to this task as the "**Piece Rate Task**".

### Comprehension questions

To make sure the instructions are clear enough, please answer the following questions. You may scroll up to re-read the instructions if you do not remember the answer.

**Note that you will not be able to proceed with the survey if you fail to answer all questions correctly after your *second* try.**

#### Question 1

What is the activity in Task 1?

- ☐ Adding up numbers
- ☐ Counting zeros
- ☐ Solving CAPTCHAs
- ☐ Counting ones

#### Question 2

Is the following statement true or false?

*"In Task 1 you receive £0.15 per table you solve correctly during the 90 seconds."*

- ☐ False
- ☐ True

#### Question 3

What happens after the 90 seconds are up?

- ☐ You will automatically continue to the next page
- ☐ You will have to perform the task again
- ☐ The study finishes

Now you will proceed with the actual task.

Please click the button below to start with Task 1.

1. Please count the number of 0s in the table below.

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	1	0	1	1

number of 0s:

You scored correct answers.

Please click to continue.

You have completed Task 1. Please click to continue to the instructions for Task 2.

## Instructions for Task 2

As in Task 1, you are asked to count the number of zeros (0) in tables consisting of zeros (0) and ones (1). You will be given 90 seconds to count the zeros (0) in as many tables as possible.

The difference is that in Task 2 you will take part in a tournament. In particular, your performance will be compared to that of another participant, who has already completed the task.

### NEUTRAL TREATMENT

In particular, if your score (that is, the number of solved tables) is higher than that of your opponent, you will receive £0.30 per table you solve correctly. You receive £0.00 for this task if your score is lower than that of your opponent. In case of a tie, it will be determined by a virtual coin flip whether you receive £0.30 per table you solve correctly or £0.00.

### UNFAIR/FEEDBACK TREATMENT

Whether you win the tournament will depend on your score, your opponent's score, and chance. In particular, 75% of the time you win the tournament if your score is higher than your opponent's score. We refer to this case as the **best-score-wins** case.

The other 25% of the time, you will win the tournament if your score is *lower* than your opponent's score. We refer to this case as the **worst-score-wins** case.

In case of a tie, it will be determined by a virtual coin flip whether you win or lose.

Regardless of which case applies, you will receive £0.30 per table you solve correctly if you win the tournament. If you lose the tournament you will receive £0.00 per table you solve correctly.

In other words, if your score is higher than your opponent's score, there is a 75% chance that you win the tournament. However, there is also a 25% chance that you undeservedly lose it! After the task, you will find out whether your score exceeded your opponent's and whether you won or lost the tournament.

After the 90 seconds are up, you will automatically continue to the next page. That means that you do not need to keep time yourself, but can concentrate on solving the tables. If you solve all available tables before the time is up, please just wait for the survey to continue automatically.

We refer to this task as the "**Tournament Task**".



### Comprehension questions

To make sure the instructions are clear enough, please answer the following questions. You may scroll up to re-read the instructions if you do not remember the answer.

#### NEUTRAL TREATMENT

##### Question 1

Is the following statement true or false?

*In Task 2 you are asked to count the zeros (0) in a series of tables like in the previous task.*

- ☐ False
- ☐ True

##### Question 2

Which of the following statements is the correct one?

- ☐ You will earn £0.30 per table you solve correctly in any case
- ☐ You will earn £0.30 per table you solve correctly only if your score is higher than that of your opponent
- ☐ You will earn £0.15 per table you solve correctly

#### UNFAIR/FEEDBACK TREATMENT

##### Question 1

Which of the following statements is the correct one?

- ☐ There is 25% chance that you lose the tournament even if your score exceeds the score of your opponent
- ☐ If your score exceeds the score of your opponent you will always win the tournament
- ☐ If your score exceeds the score of your opponent you will always lose the tournament

##### Question 2

Which of the following statements is the correct one?

- ☐ Task 1 and Task 2 are identical
- ☐ In Task 2 your performance will be compared to that of another participant, who has already completed the task.
- ☐ You will earn £0.15 per table you solve correctly

1. Please count the number of 0s in the table below.

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	1	0	1	1

number of 0s:

Before moving on to the next part of the experiment, we would like you to **guess how your score in Task 2 compares to 100 previous participants.**

In particular, we ask you to **guess your rank.**

We calculate your rank by comparing your score to the one of 100 other participants who already played Task 2. In case there are ties, the average rank will be used.

Your guess can range from 1 (better than everyone else) to 101 (worse than everyone else). You will receive a base payment of £0.50, with a penalty of £0.02 times the absolute difference between your true rank and the stated (guessed) rank.

This means that you will receive £0.50 if your guess is exactly correct and you will receive £0.00 if your guess is off by 25 or more. In other words, the more accurate your guess is, the higher your payment!

Now, please guess your rank in Task 2 compared to 100 previous participants. **Please choose a value between**

**1 (you believe your were the BEST)**

and

**101 (you believe you were the WORST):**

**NEUTRAL/UNFAIR TREATMENT**

You scored \_\_\_\_\_ correct answers.

**You won in the tournament in Task 2.**

**FEEDBACK TREATMENT**

You scored \_\_\_\_\_ correct answers.

Your actual rank compared to 100 other participants in Task 2 was: 9

**You scored less correct answers than your opponent. therefore, you deservedly lost in the tournament in Task 2.**

Before moving on to Task 3, you have the opportunity to update your estimated rank based on the outcome of the "Tournament Task" you see above.

**UNFAIR TREATMENT**

Remember that you **won** in the tournament in Task 2. There was 75% chance that you lost deservedly and 25% that you lost undeservedly.

Note that your updated estimated rank will overrule your previous estimate.

Your previous estimate:

Please enter your new estimate here by choosing a value between

**1 (you believe you were the BEST)**

and

**101 (you believe you were the WORST):**



### Instructions for Task 3

Like the previous two tasks, you will be given 90 seconds to count the zeros (0) in a series of tables with ones (1) and zeroes (0).

The difference is that, in Task 3, you will get to choose which of the two previous payment schemes you would prefer to apply to your score.

In Task 3 your earnings are determined as follows:

- If you choose the **"Piece Rate"**, you will receive £0.15 per table you solve correctly.
- If you choose the **"Tournament Rate"**, your performance will be compared to the score of another participant who already played the task (not the same one as in Task 2). If you solve more tables in Task 3 than your opponent, you will receive £0.30 per table you solve correctly. You will receive £0.00 if you solve fewer tables than your opponent. Any ties are broken using a virtual coin flip.

The next screen will ask you to choose whether you want the "Piece Rate" or the "Tournament Rate" applied to your score in Task 3.

You will then be given 90 seconds to count the number of zeros (0), in the same way as before.

### Comprehension questions

To make sure the instructions are clear enough, please answer the following questions. You may scroll up to re-read the instructions if you do not remember the answer.

#### Question 1

Which of the following statements is the correct one?

- ☐ In Task 3 you will be paid according to the "Piece Rate" payment scheme
- ☐ In Task 3 you can choose which payment scheme you would prefer to apply to your score
- ☐ In Task 3 you will be paid according to the "Tournament Rate" payment scheme

#### Question 2

Is the following statement true or false?

*In Task 3 you are asked to count the zeros (0) in a series of tables like in the previous two tasks.*

- ☐ True
- ☐ False

1. Please count the number of 0s in the table below.

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	1	0	1	1

number of 0s:

You scored 1 correct answers.

Please click to continue.

You scored 1 correct answers.

**You won in the tournament in Task 3.**

Please click to continue.

**The experiment is now over.**

Before informing you about your final payment, we would like you to answer a short questionnaire. It will take about 5 minutes to complete.

Now click to continue to get started with the questionnaire.

The task which has been randomly drawn for payment is Task 2.

You scored ... . You won, therefore your payment for the task is:

... £

Your actual rank compared to 100 previous participants was:

... rank

Your guess was:

... guess

Therefore, the payment for your guess is:

... £

Your final payment (excluding £1.50 fixed fee) is:

... £

Please click the button below to continue.

## B Survey Experiments Instructions

In this section, we include screenshots of both survey experiments.

### B.1 First Survey Experiment

Welcome to this survey!

We will ask you about your views regarding two studies we previously conducted on Prolific.

We will provide you with a short description of the study designs (we will call them Study 1 and Study 2) and ask for your views.

The study will not take more than 10 minutes.



### Study 1

Participants in this study were asked to solve a series of problems by counting the number of zeros (0) in tables consisting of zeros (0) and ones (1). They had been given 90 seconds to count the zeros in as many tables as possible. Here an example of what a table looked like:

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	0	1	1	1

Participants were part of a tournament.

If their score (the numbers of tables where they reported the number of 0 correctly) was higher than the one of their opponent they received 0.30 £ per table they solved correctly. They received 0£ if their score was lower than their opponent's.

### Fairness

Given the situation described before, how fair do you think the process is that determines who wins or loses the tournament? (where 0 means "completely unfair" and 100 means "completely fair")

Completely unfair 0 10 20 30 40 50 60 70 80 90 100 Completely fair



### Random chance

Given the situation described before, what do you think is the role of random chance in determining who wins or loses the tournament? (where 0 means "no role for random chance" and 100 means "completely determined by random chance")

No role for random chance 0 10 20 30 40 50 60 70 80 90 100 Completely determined by random chance



### Merit

Given the situation described before, what do you think is the role of merit in determining who wins or loses the tournament? (where 0 means "no role for merit" and 100 means "completely determined by merit")

No role for merit 0 10 20 30 40 50 60 70 80 90 100 Completely determined by merit

## Study 2

We now ask you to answer the same questions one more time for a second study.

Study 2 was very similar to study 1. In particular, participants worked on the exact same task (counting zeros), under the same time limit (90 seconds) and with the same two-person tournament structure (0.30£ per table solved for the winner and 0£ per table for the loser).

The **difference** between the two studies was that in study 2 there was **only a 75% (3/4ths)** chance that the **best performer would win** the tournament. The other 25% (1/4ths) of the time, the winner prize would instead be awarded to the low performer.

### Merit

Given the situation described before, what do you think is the role of merit in determining who wins or loses the tournament? (where 0 means "no role for merit" and 100 means "completely determined by merit")

No role for merit  
0 10 20 30 40 50 60 70 80 90 100  
Completely determined by merit



### Fairness

Given the situation described before, how fair do you think the process is that determines who wins or loses the tournament? (where 0 means "completely unfair" and 100 means "completely fair")

Completely unfair  
0 10 20 30 40 50 60 70 80 90 100  
Completely fair

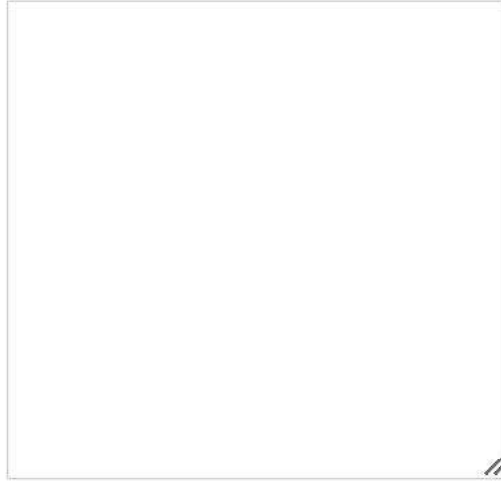


### Random chance

Given the situation described before, what do you think is the role of random chance in determining who wins or loses the tournament? (where 0 means "no role for random chance" and 100 means "completely determined by random chance")

No role for random chance  
0 10 20 30 40 50 60 70 80 90 100  
Completely determined by random chance

Please provide a short explanation of the reasoning behind your choices in the previous questions in the box below:



End



## B.2 Second Survey Experiment

Welcome to this survey!

We will ask you about your views regarding two previously conducted studies.

We will provide you with a short description of the study designs (we will call them Study 1 and Study 2) and ask for your views.

The study will not take more than 10 minutes.

Your participation is voluntary, and you may stop at any time. All responses will be collected anonymously and used for academic research purposes only.

If you have any questions about the study, you can contact us at [stefano.piasenti@unimi.it](mailto:stefano.piasenti@unimi.it)

Please click "yes" if you agree to participate:

Yes

No



Sometimes participants do not pay attention to all questions in the study and click through too quickly. To indicate that you are paying attention to all questions, please answer "green" to the following question. What is your favorite color?

Red

Blue

Yellow

Green



### Study 1

Participants in this study were asked to solve a series of problems by counting the number of zeros (0) in tables consisting of zeros (0) and ones (1). They were given 90 seconds to count the zeros in as many tables as possible. Here is an example of what a table looked like:

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	1	0	1	1

Participants were part of a tournament.

If their score (the numbers of tables where they reported the number of 0s correctly) was higher than the one of their opponent they received 0.30£ per table they solved correctly. They received 0£ if their score was lower than their opponent's.

Please answer the two comprehension questions below to demonstrate your understanding of the study.

If you answer the comprehension questions correctly on the next screen, you will see the **Study 1** description again, followed by a few questions asking for your views on it.

What task did participants work on?

Counting numbers of zeros.

Counting numbers of ones.

Rating attributes.

How was payment determined?

Through a coin flip.

Through a lottery.

Through a tournament.



### Study 1

Here is a reminder of the description of Study 1:

Participants in this study were asked to solve a series of problems by counting the number of zeros (0) in tables consisting of zeros (0) and ones (1). They were given 90 seconds to count the zeros in as many tables as possible. Here is an example of what a table looked like:

1	1	0	1	0	1	0	0
1	1	1	1	1	0	1	1
1	1	0	1	1	1	1	0
0	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0
0	0	1	0	0	1	0	0
1	1	0	0	0	0	0	0
0	0	1	1	1	0	1	1

Participants were part of a tournament.

If their score (the numbers of tables where they reported the number of 0s correctly) was higher than the one of their opponent they received 0.30€ per table they solved correctly. They received 0€ if their score was lower than their opponent's.

Please indicate your views on Study 1 below:

#### Fairness

Given the situation described before, what do you think is the role of fairness in determining the payment of Study 1? (where 0 means "Completely unfair" and 100 means "Completely fair")

Completely unfair 0 10 20 30 40 50 60 70 80 90 100 Completely fair



#### Merit

Given the situation described before, what do you think is the role of merit in determining the payment of Study 1? (where 0 means "No role for merit" and 100 means "Completely determined by merit")

No role for merit 0 10 20 30 40 50 60 70 80 90 100 Completely determined by merit



#### Random Chance

Given the situation described before, what do you think is the role of random chance in determining the payment of Study 1? (where 0 means "No role for random chance" and 100 means "Completely determined by random chance")

No role for random chance 0 10 20 30 40 50 60 70 80 90 100 Completely determined by random chance



## Study 2

We now ask you to answer the same questions one more time for a second study (Study 2).

In Study 2, participants worked on the exact same task (counting zeros) under the same time limit (90 seconds) and with the same payment structure (£0.30 per table solved for one participant, and £0 for the other).

The difference between the two studies lies in how payment was determined. Whereas in Study 1 payment was determined through a tournament (best performer wins). In Study 2 payment was determined through a coin flip (random chance). Hence, in Study 2 participants knew that they had a 50% chance of being paid £0.30 per table solved, and a 50% chance of being paid nothing.

Please answer the two comprehension questions below to demonstrate your understanding of the study.

If you answer the comprehension questions correctly on the next screen, you will see the Study 2 description again, followed by a few questions asking for your views on it.

What task did participant work on?

Counting zeros.

Counting ones.

Rating attributes.

How was payment determined?

Through a coin flip.

Through a lottery.

Through a tournament.



## Study 2

Here is a reminder of the description of Study 2:

In Study 2, participants worked on the exact same task (counting zeros) under the same time limit (90 seconds) and with the same payment structure (£0.30 per table solved for one participant, and £0 for the other).

The difference between the two studies lies in how payment was determined. Whereas in Study 1 payment was determined through a tournament (best performer wins), in Study 2 payment was determined through a coin flip (random chance). Hence, in Study 2 participants knew that they had a 50% chance of being paid £0.30 per table solved, and a 50% chance of being paid nothing.

Please indicate your views on Study 2 below:

### Fairness

Given the situation described before, what do you think is the role of fairness in determining the payment of Study 2? (where 0 means "Completely unfair" and 100 means "Completely fair")

Completely unfair 0 10 20 30 40 50 60 70 80 90 100 Completely fair



### Merit

Given the situation described before, what do you think is the role of merit in determining the payment of Study 2? (where 0 means "No role for merit" and 100 means "Completely determined by merit")

No role for merit 0 10 20 30 40 50 60 70 80 90 100 Completely determined by merit



### Random Chance

Given the situation described before, what do you think is the role of random chance in determining the payment of Study 2? (where 0 means "No role for random chance" and 100 means "Completely determined by random chance")

No role for random chance 0 10 20 30 40 50 60 70 80 90 100 Completely determined by random chance





Please provide a short explanation of your answers and any differences in answers between Study 1 and Study 2:

