

INSTRUCTIONS

Welcome

You are about to participate in an experiment on decision-making. What you earn depends partly on your decisions, partly on the decisions of others, and partly on chance. Please turn off cell phones and similar devices now. Please do not talk or in any way try to communicate with other participants.

We will start with a brief instruction period. During the instruction period you will be given a description of the main features of the experiment. If you have any questions during this period, raise your hand and your question will be answered so everyone can hear.

General Instructions

1. In this experiment you will be repeatedly matched with a randomly selected person in the room. During each match, you will be asked to make decisions over a sequence of rounds.
2. The length of a match, that is the number of rounds in a match, is randomly determined as follows:

After each round, there is a 90% probability that the match will continue for at least another round. Specifically, after each round, whether the match continues for another round will be determined by a random number between 1 and 100 generated by the computer. If the number is lower than or equal to 90 the match will continue for at least another round, otherwise it will end. For example, if you are in round 2, the probability that there will be a third round is 90% and if you are in round 9, the probability that there will be a tenth round is also 90%. That is, at any point in a match, the probability that the match will continue is 90%.

3. Once a match ends, you will be randomly paired with someone for a new match. You will not be able to identify who you've interacted with in previous or future matches.

4. In each round, your payoff depends on your choice, the choice of the person you are paired with, and on chance. More specifically, your payoff is determined by your choice (**A** or **B**) and a signal about the other's choice (**a** or **b**). The signal depends on the choice of the person you are paired with and also on chance.

The payoffs depend on choice and the signal in the following way. If you select **A** and the signal about the other's choice is **a**, your payoff is 46, while if the signal is **b** your payoff is 8. Similarly, if you select **B**, the payoffs are 54 and 16 when the signal about the other's choice is **a** and **b** respectively.

The signal about the other's choice is determined as follows. If the person you are paired with chooses **A**, then the signal you receive is **a** with 90% probability and **b** with 10% probability. Similarly if he chooses **B**, it is **b** with 90% probability and **a** with 10% probability. The person you are paired with also receives a signal about your action. That signal is determined in the same way yours is, and it determines (in combination with his choice) his payoff. However you will not be told what signal the other person received about your choice. The table below represents all the possible outcomes:

| Your Choice | | <i>Other's Choice</i> | | | | ← Signal of Other's Choice |
|----------------|----------|-----------------------|----------|----------|----------|----------------------------|
| | | <i>A</i> | | <i>B</i> | | |
| | | <i>a</i> | <i>b</i> | <i>a</i> | <i>b</i> | |
| A | <i>a</i> | 46, 46 | 8, 46 | 46, 54 | 8, 54 | |
| | <i>b</i> | 46, 8 | 8, 8 | 46, 16 | 8, 16 | |
| B | <i>a</i> | 54, 46 | 16, 46 | 54, 54 | 16, 54 | |
| | <i>b</i> | 54, 8 | 16, 8 | 54, 16 | 16, 16 | |

Signal Other Receives Of Your Choice

In this table, the first number of each cell represents your payoff, and the second number (in italics) is the payoff of the person you are paired with receives. The first row indicates your choice, and the second the signal the person you are paired with receives about your choice. As you can see, your payoff does not depend on the signal the other receives. The first column indicates the choice of the person you are paired with and the second column the signal you receive about his choice. For instance, the cell at the bottom right of the table indicates that if you choose **B** and receive a **b** signal, your payoff is 16 and if the other chooses **B** and his signal about your choice is **b**, then his payoff is 16. The cell immediately to the left indicates that if instead you had received the **a** signal about the other's choice (since his actual choice

is **B** this can only happen with 10% probability), your payoff would have been 54 but his would have been the same.

- For each combination of your choice and the other's choice, you can calculate the expected payoffs given the probabilities the signals will correspond to the choices made. The table below gives the payoff you can expect to get from each combination of choices:

| Your Choice | <i>Other's Choice</i> | |
|--------------------|--|---|
| | <i>A</i> | <i>B</i> |
| A | $46 \times 90\% + 8 \times 10\%$, $46 \times 90\% + 8 \times 10\%$ | $8 \times 90\% + 46 \times 10\%$, $54 \times 90\% + 16 \times 10\%$ |
| B | $54 \times 90\% + 16 \times 10\%$, $8 \times 90\% + 46 \times 10\%$ | $16 \times 90\% + 54 \times 10\%$, $16 \times 90\% + 54 \times 10\%$ |

For example, when you and the other choose **A**, there is 90% probability you receive an **a** signal and make 46, but there is a 10% probability you receive a **b** signal and make 8. Similarly, when you both choose **B**, there is a 90% probability he receives a **b** signal and make 16 and there is a 10% probability he receives an **a** signal and make 54. The table below summarizes this:

| Your Choice | <i>Other's Choice</i> | |
|--------------------|------------------------------|-----------------|
| | <i>A</i> | <i>B</i> |
| A | 42.2, 42.2 | 11.8, 50.2 |
| B | 50.2, 11.8 | 19.8, 19.8 |

- Total payoffs for each match will be the sum of payoffs obtained from each round of that match. Total payoffs for the experiment will be the sum of payoffs for all matches played.
- The first match to end after 75 minutes of play will mark the end of the experiment. Your total payoffs will be converted to dollars at the rate of 0.0075\$ for every point earned.

Are there any questions?

Now please take a look at the screen in front of the room.

Before we start, let me remind you that:

- The length of a match is randomly determined. After every round there is a 90% probability that the match will continue for another round. You will interact with the same person for the entire match.
- Every round, you will observe a signal about the choice of the person you're paired with. This signal corresponds to his actual choice with 90% probability, and is the opposite with 10% probability.
- Similarly the person you are paired with observes a signal about the choice you made. This signal corresponds to your actual choice with 90% probability, and is the opposite with 10% probability.
- You will not know what signal the person you are paired with observes and he will not know which signal of his choice you observed.
- Your payoff is determined by your choice and the signal you receive about the other's choice.
- After a match is finished, you will be randomly paired with someone for a new match.