Experimental Overview (V2)

You will be participating in an experiment on human decision making. There are two roles in the experiment: a Worker and a Supervisor. You will play one role for the first half of the experiment, and then the other role for the remainder of the experiment. Your computer screen indicates which role you will have in the first half of the experiment. Your computer screen will display useful information. Remember that the information on your computer screen is private. Please do not communicate with the other participants at any point during the experiment. If you have any questions, or need assistance of any kind, raise your hand and the experimenter will come and help you.

Please switch your phones off and place them away. The only materials you will need for this experiment are the computer and the calculator in front of you. We will also provide you with some paper if you wish to take notes.

This experiment will consist of multiple rounds. In each round there will be three tasks. The choice of the supervisor will affect the payoffs for each of the tasks. The worker will then decide which of the three tasks to implement. The points earned in each round will be added together and converted to USD at the end of the experiment at an exchange rate of 100 points = \$0.90. You will also receive, in addition, a \$5 show up fee.

Supervisor's decision

The supervisor will set the values of two variables, O_A and O_B. The supervisor will input their decisions using slider bars. To help fine tune your choice, you may click on the slider and then use the arrow keys to adjust your decision. While the Supervisor is making their decision, the Worker will see a wait screen. Each variable will take a value between 0 and 0.9, with increments of 0.01. The variables will affect the payoffs for each of task A, task B and task C as follows.

Effect on worker's payoffs

The worker will always earn 50 points if task C is implemented.

For task A, the worker's payoff will decrease as O_A increases. If $O_A = 0$, then the worker earns 90 points. If $O_A = 0.9$, the worker earns 0 points. The rate of decrease is linear, so that increasing O_A by 0.1 reduces the worker's payoff by 10 points. Equivalently, the formula is given

by $W_A = 90 - 100O_A$, where W_A is the points earned by the worker.

For task B, the worker's payoff will decrease as O_B increases. If $O_B = 0$, then the worker earns 90 points. If $O_B = 0.9$, the worker earns 0 points. The rate of decrease is linear, so that increasing O_B by 0.1 reduces the worker's payoff by 10 points. Equivalently, the formula is given by $W_B = 90 - 100O_B$, where W_B is the points earned by the worker.

You may also view the supplemental payoff guide that was given to you as a visual representation of the payoffs.

Effect on supervisor's payoffs: Payment scheme 1

There are two payment schemes that will be used for the supervisor.

In payment scheme 1, increases in O_A will increase the supervisor's payoff for task A, but decrease their payoff for tasks B and C. Increases in O_B will increase the supervisor's payoff for task B, but decrease their payoff for tasks A and C. The formulas are given by:

$$S_A = 20 + 80O_A - 20O_B,$$

$$S_B = 20 - 20O_A + 80O_B$$

and

$$S_C = 20 - 20O_A - 20O_B$$

where S_A, S_B and S_C are the points earned by supervisor in each task.

Note that if O_A and O_B are each increased by the same amount, then the supervisor's payoff for task A and B increases, and their payoff for task C decreases.

You may also view the supplemental payoff guide that was given to you as a visual representation of the payoffs.

Effect on supervisor's payoffs: Payment scheme 2

In payment scheme 2, increases in either O_A or O_B will decrease the supervisor's payoff for tasks A, B and C with the payoff for task C always being larger than either tasks A or B.

$$S_A = 40 - 20O_A - 20O_B,$$

$$S_B = 40 - 20O_A - 20O_B$$

and

$$S_C = 80 - 20O_A - 20O_B$$

where S_A, S_B and S_C are the points earned by supervisor in each task.

You may also view the supplemental payoff guide that was given to you as a visual representation of the payoffs.

A picture of the Supervisor's decision screen is shown in figure 1.

The Worker's decision

In each round the Worker will choose either Task A, Task B, or Task C using a drop down menu. While the worker is making their decision, the supervisor will see a wait screen. The worker will only be able to see their payoffs, and not the supervisors payoffs, when making their decision (figure 2).

Information schemes

There will be three information schemes. The information scheme will affect what the worker can see when making their decision:

1. The Worker can see the exact payoffs of all outcomes at the time they make their decision.
2. The Worker can see only a range of possible payoffs, as described below.

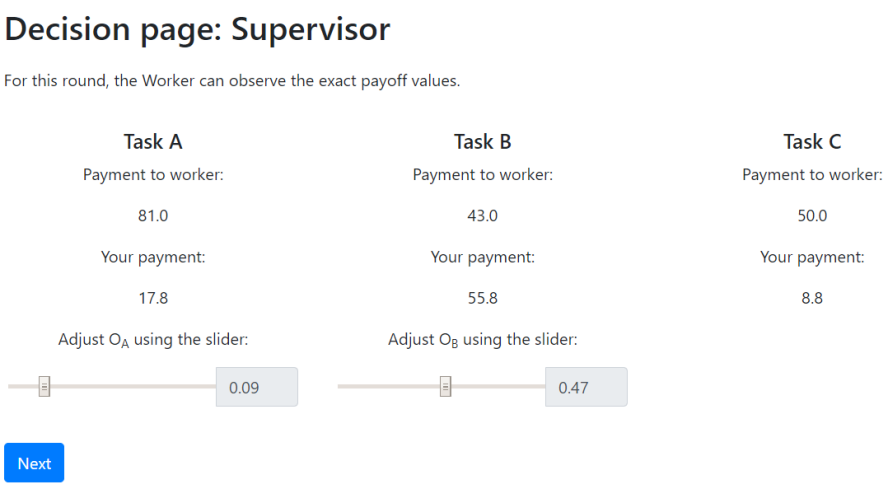

Figure 1: The Supervisor's decision screen

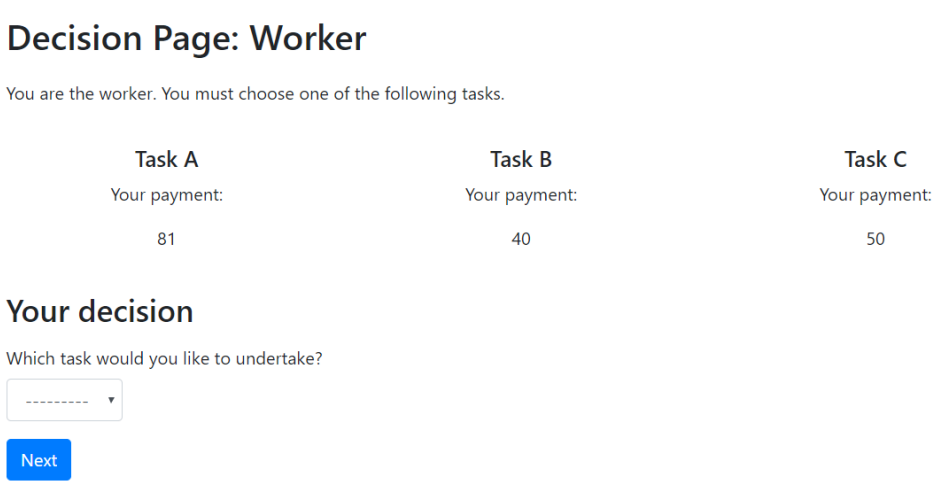

Figure 2: The Supervisor's decision screen

3. The Supervisor can decide whether the information scheme is number 1 or number 2.

In information scheme 2, the worker observes a range of possible payoffs for tasks A and B. The range will be presented as [min, max], where min is the smallest possible payoff and max is the largest possible payoff. The range shown will be the same for task A and task B, but the true payoffs may differ between task A and task B. **The sum of the true payoffs for task A and task B will always equal the sum of the minimum possible payoff plus the maximum possible payoff.**

The size of the range shown will depend on the sum of $O_A + O_B$. The supplemental payoff guide that was given to you shows how the range varies with O_A and O_B.

To illustrate an example, figure 3 shows the supervisor's screen under information scheme 2. The supervisor can see the exact payoff that the worker would receive, as well as the range of possible payoffs that will be shown to the worker. Note that the worker's payoff for task A, plus the payoff for task B, equals the sum of the minimum and maximum possible payoffs. Figure 4 shows the workers screen for the same round.

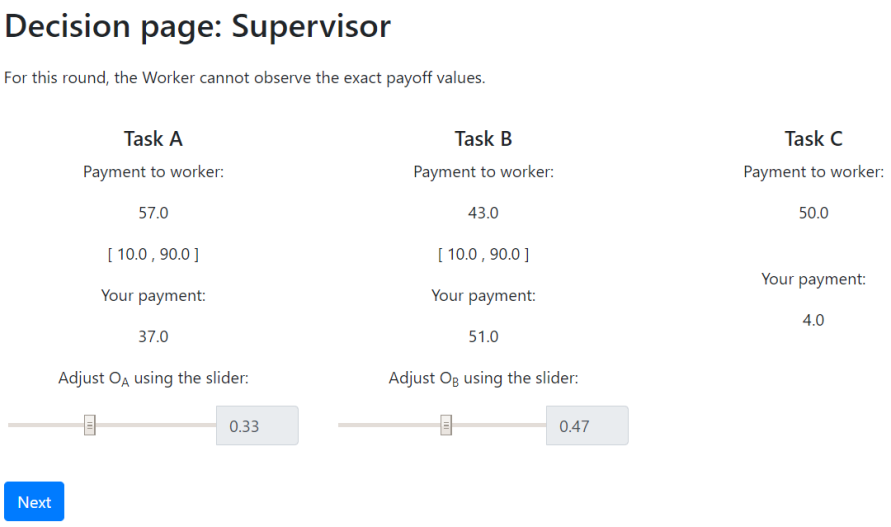

Figure 3: The Supervisor's decision screen

Rounds

There will be a total of 48 rounds. Each round you will be randomly and anonymously matched with another person in the room. You will maintain the same role (i.e. worker or supervisor) for

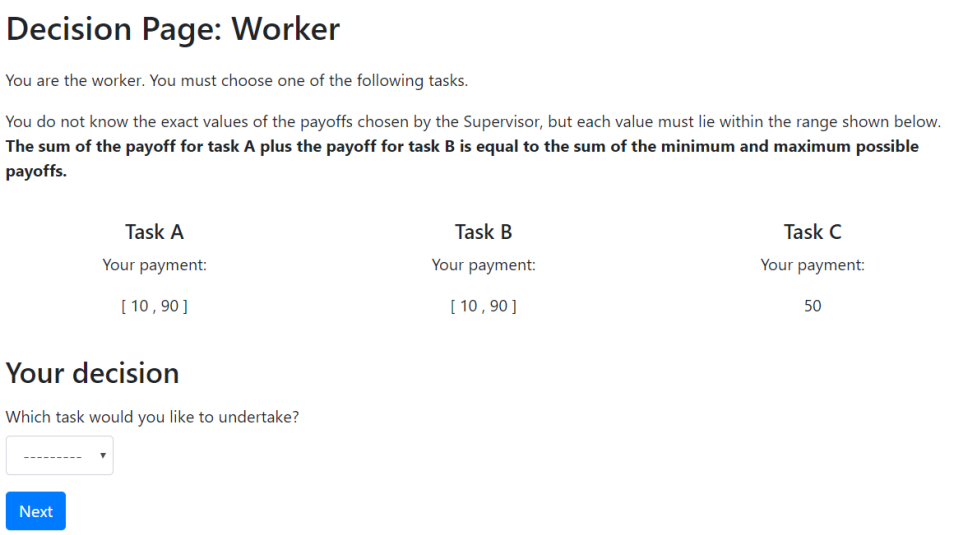

Figure 4: The Supervisor's decision screen

the first 24 rounds, and then switch to the other role for the next 24 rounds.

The first 12 rounds will be conducted using Payoff Scheme 1. Of these 12 rounds, the first 4 will use Information Structure 2, rounds 5-8 will use Information Structure 1, and rounds 9-12 will use Information Structure 3.

Rounds 13-24 will be conducted using Payoff Scheme 2. Of these 12 rounds, rounds 13-16 will use Information Structure 2, rounds 17-20 will use Information Structure 1, and rounds 21-24 will use Information Structure 3.

Rounds 25-36 will be conducted using Payoff Scheme 1. Of these 12 rounds, rounds 25-28 will use Information Structure 2, rounds 29-32 will use Information Structure 1, and rounds 33-36 will use Information Structure 3.

Rounds 37-48 will be conducted using Payoff Scheme 2. Of these 12 rounds, rounds 37-40 will use Information Structure 2, rounds 41-44 will use Information Structure 1, and rounds 45-48 will use Information Structure 3.

Feedback

At the end of each round, you will receive feedback on the round. The feedback for the supervisor will show the choice made by the worker and the payoffs of both parties. The feedback for the

worker will include only the worker's payoff.

Note on earnings

Your total earnings will be the sum of your earnings in each round. It is possible to earn negative points in some rounds. In the unlikely event that someone has a negative points total after 48 rounds then their earnings will be set to 0 points.

Demographic survey

At the end of the experiment there will be a brief demographic survey. Please fill the survey in accurately. Once you have completed the survey your total earnings will be displayed. You should then sit quietly until an experimenter arrives at your terminal.

Summary

- In each round the Supervisor will select values for O_A and O_B.
- In each round the Worker will select one task; either A, B or C.
- In some rounds the Worker will be able to see their exact payoffs, in other rounds they will observe only a range of possible payoffs.
- The task chosen by the Worker will be implemented.
- Points will be summed across all rounds, and converted to dollars at the end of the experiment.
- Each round you will be randomly re-matched with another player in the room.