# Instructions

Welcome, and thank you for participating! Please turn off your phone and do not communicate with other participants. If you have any questions, please message us in the chat and we will respond as soon possible. Please pay careful attention to the instructions as money is at stake.

During the experiment you will earn *points*, and at the end of the experiment all your earnings will be converted to AUD dollars. You are guaranteed a show up fee of \$5 if you complete the session, but you can earn more depending on your decisions.

#### Basic Idea

In this experiment you will be assigned a role and then matched anonymously throughout the experiment with other participants. Your role will be either player 1 (p1), or player 2 (p2). Each period, each player will choose among two actions. Your choice, along with the choices of the other player you are matched with, will determine the payoffs --- how many points each player earns that period.

After the last game, your points are added over all games, converted to AUD and paid to you in cash. The rate of exchange is 100 points = \$0.63.

## **Payoff**

**Your payoff** for each action combination is noted above the circles inside the matrix cells. In the example below, your choices are shown as the two radio buttons, B and A, and the other player shown as left (b) and right (a) columns. To select an action you must click on a radio button.

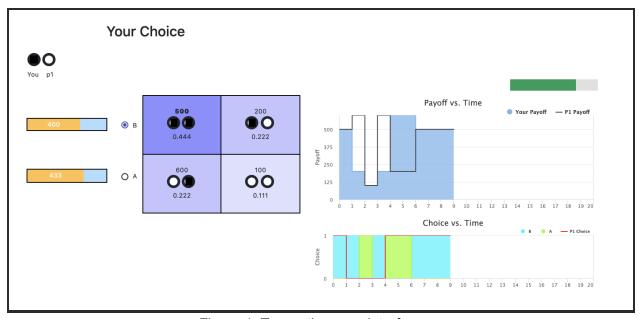


Figure 1: Two action user interface

To the left of the radio buttons you will see **horizontal bars**, which are your average payoffs earned so far, for playing that choice. Figure 1 shows that the player earned 400 on average for playing B and 433 for playing A. If the horizontal bar shows zero, it may be because (i) you never played that action, or (ii) the average payoff to this action has been zero so far.

The two dots in the cells tell you the current choices of the two players (you and p1). The first dot is your action; the second dot represents the other player. In Figure 1, you can see from the legend in the top left corner of the screen that your current role is p2, given that p1 is the second dot. Current choices are indicated by filled dots in the matrix cell. For example, you have selected choice B, as indicated by the filled (fully black) first dots in the top row, and p1 has selected the left column (b), indicated by the filled (fully black) second dots in the left column of the matrix. This means that jointly, you are playing the upper left cell (where your payoff is 500). The points that you earn are always those for the cell in which all two dots are filled.

**The shaded area** across the matrix cells represents how often you and the other player have selected these choices in the past. The darker the area, the more frequently this cell has been played so far. The exact frequency is shown as the number below the circles in each cell.

Each game will last for 50 periods, and your payoff to action choices may change across games.

## Payoff over time

To the right of the payoff matrix, you will see a graph of your payoff from the beginning of the period until now. Your payoff is shaded in blue, and the other player's payoff is represented by a black (p1) line. The green bar above the chart shows the time remaining until the next period of play; when the bar is fully green, you will move on to the next period.

### Choices over time

Below the payoff over time chart, you will see the history of your choices as well as the choices of the other participant. Your choices are shown as multicolored bars, where each color represents a choice. The color legend is below the chart title. Your counterparty's choice appears as a red line (p1), where "1" represents "b (left)" and "0" represents "a (right)".

# Session Earnings

In total you will play a set of 10 games, where the first two games are for practice only and will last for 20 periods each, and the last eight games are real, with each consisting of 50 periods. The points accrued over the first two games do not count toward your earnings.

Your earnings in any given game will be shown to you after the 50 periods are over. We determine these earnings by weighing the payoffs according to frequency. That is, if you receive 400 points for each of the 50 periods in the game, then your payoff to that game is 400 points. If you have variable payoff (that is, it changes from period to period) then we will weigh according

to the frequency of occurrence (so if you received 200 points 50% of the time and 100 points 50% of the time, then your payoff is 150 points for the game).

Your final earnings for the session will be the sum of your show up fee (\$5.00) and the sum of points earned across all periods, converted into AUD dollars.