## Instructions (H)

Welcome to this experiment in the economics of group decision-making. You are guaranteed \$10 for showing up and completing this study.

There are two parts to this study. In this part of the study you will participate in a group of 6 people including yourself. Together you will complete 5 rounds of a group decision-making task. You may earn additional earnings beyond your guaranteed \$10 showup payment from the decisions that you make in these 5 rounds.

### **1** Your decision

In each round, you and each of the 6 members of your group are randomly assigned (without replacement) an integer value, I = 1, 2, ..., 6, representing your "skill level". Let us call your particular assignment in a round I; note that you will be the only member of your group with this particular integer value. Since you, and everyone else's integer value (skill level) is randomly chosen anew each round, your integer value is likely to differ from one round to the next.

In each round, you are given an endowment of \$10. (Please note that this endowment is in *addition* to your \$10 show-up payment). The decision you face in each round is whether or not you enter a contest. The cost of entering the contest is your \$10 endowment for the round. Thus, if you decide *not* to enter the contest, then you keep your endowment of \$10 for the round. If you decide to enter the contest, then you give up your your endowment of \$10, which then gets added to a contest prize amount P for the round consisting of the sum of the \$10 endowments of all those who chose to enter the contest that round. Thus, if no one enters the contest, the prize amount, P=\$0. If just 1 person enters the contest, the prize amount P =\$10, if 2 people enter, the prize amount P =\$20, etc. If all 6 people decide to enter the contest, then the prize amount, P, is equal to its *maximum* value of  $6 \times$ \$10 = \$60.

### 2 The contest

The winner (or winners) of the contest each round are determined as follows. Suppose that  $0 < e \leq 6$  people in your group decide to enter the contest in a given round. To determine the contest winner for the round, we first sum up the integer values of the *e* persons who entered the contest and we then divide this sum by the number of entrants, *e*, so as to compute the *average integer* value among the *e* people who chose to enter the contest. Call this average:  $\overline{I}_e$ . The contest winner(s) are the person(s) who chose to enter and whose own integer value for the round is *strictly greater* than the average integer value of all those who decided to enter the contest,  $\overline{I}_e$ .

The winner(s) of the contest each round receive the prize amount P as payoff and the losers receive a payoff of 0. If there are multiple winners w > 1, then each of the w winners

earns an equal share P/w of the prize as their payoff. If there are no prize winners (w = 0), then the prize amount P is forfeited. The prize P is determined anew in every round.

Thus, in summary, your earnings each round are:

- 1. \$10 if you choose Don't enter.
- 2. P/w if you choose to Enter and you are the winner (w = 1) or one of w > 1 winners of the contest.
- 3. 0 otherwise.

### 3 Examples

Example 1: Suppose the four people with integer values I = 2, 3, 4 and 5 have all chosen to enter the contest in a round. The average integer value among those four entrants is computed to be  $\overline{I}_4 = 3.5$ . The winners of the contest are the two persons with the integer values 4 and 5 since their integer values are *strictly greater* than the average integer value  $\overline{I}_4 = 3.5$ . The payoff to each of the w = 2 winners for the round is  $\frac{P}{2} = \frac{4 \times \$10}{2} = \$20$ . The losers each earn \$0 for the round. The non-entrants keep their \$10 endowment, which is their payoff for the round.

Example 2: Suppose that only one person, the one with I = 4, decides to enter the contest. In that case, the average integer value of the entrants,  $\overline{I}_1 = 4$ , but since the lone entrant's integer value is not *strictly greater* than 4, this person loses the contest, and indeed, in this case there are no contest winners. The person who entered the contest earns 0 and all those who decided not to enter the contest earn their endowment of \$10 for the round.

#### 4 How you make your decision

On the decision screen for each round you are informed of your integer value for the round, I. Below that you will see a screen that looks like Figure 1

Your Integer value this round: J
Do you want to enter the contest?
O Enter
🔘 Don't enter

Figure 1: Decision Screen

Simply click on the button next to either Enter or Don't enter. You can change your mind anytime prior to clicking the Next button.

## 5 Results Screen

After all 6 people have made their decisions, you will the results for the round. You will be reminded of your integer value I, and your entry decision for that integer value, either Enter or Don't enter. You will learn how many persons in total chose to enter, e, and the average integer value of those who chose to enter  $\overline{I}_e$ . Finally, you will learn your payoff for the round, which is determined in the manner described above. For your convenience, following the first round, you will see a history of past results on your first decision screen for each new round.

## 6 Earnings

At the end of today's experiment, you will need to complete a questionnaire. After you complete the questionnaire, the computer program will randomly choose one round from *both* parts of today's study and your earnings from that round will be added to your \$10 show-up payment. Please note that every round from both parts has an equal chance of being chosen for payment, so you will want to do your best in every round. You will be paid your total earnings for the study later today via the payment method you chose, Paypal, Venmo or Zelle.

## 7 Questions?

Now is the time for questions. If you have a question, please let the experimenter know and your question will be answered in private.

# 8 Quiz

Before we start, we ask you to answer the following quiz questions that are designed to check your comprehension of the written instructions. No participant can move on to the main experimental task until they have satisfactorily answered all quiz questions.

- 1. The minimum and maximum integer values that can be assigned to any person are:
  - a [0,10]
  - b [1,6]
  - c [1,100]
  - d [0,6]
- 2. If I choose not to enter, then my earnings are:
  - a Randomly determined.
  - b 10 if no one else entered

- c 10 regardless of what others do.
- d 10 only if my integer (skill value) is above average.
- 3. Suppose that 2 people choose to enter. One has I=2 and the other has I=5.
  - (i) What is the average integer value of entrants? \_\_\_\_\_
  - (ii) What is the payoff earned by the person with I = 2? .....
  - (iii) What is the payoff earned by the person with I = 5? \_\_\_\_\_
- 4. Suppose instead that only the person with I = 6 chooses to enter. What is this person's payoff? \_\_\_\_\_