

A Experimental instructions

Introduction

Thank you for participating in today’s experiment. I will read through the script so that all sessions of this experiment receive the same information. You will receive \$10 show-up fee plus whatever earnings you will make during the experiment. Your earnings may depend on your own decisions and the decisions of other participants.

At the end of the experiment your earnings will be added to your \$10 participation fee. You will be given a check for the total amount. The payment will be anonymous. No other participant will be informed about your payment.

Please remain quiet and do not communicate with other participants during the entire experiment. Raise your hand if you have any questions. One of us will come to you to answer them.

The experiment consists of several parts. The instructions for each part will be given separately at the beginning of that part.

Part I

All amounts in this part of the experiment are expressed in points. The exchange rate is 100 points = \$1 or 1 point = \$0.01.

Matching. In this part of the experiment you will be randomly divided into groups of 4 participants. After each round, groups will be randomly re-shuffled, i.e., you will be randomly re-matched with three different participants. In any given period, any person in the room has equal chances to be in the same group with you.²⁸

This part of the experiment consists of a sequence of decision rounds.

Endowment and investment. In each round, you will be given an endowment of 120 points. You can invest any integer number of points from 0 to 120 (0 and 120 inclusive) into a project. Your project can be either successful or unsuccessful. If your project is successful, you will receive 120 points of revenue that round. If your project is unsuccessful, you will not receive any revenue that round.

Likelihood of success. Each round, only one project in your group will be successful. The probability (likelihood) that your project is successful is determined as follows. First, the total investment of all members of your group is computed. Then, your probability of success is computed as the share of your investment in the total investment.

For example, suppose group members choose to invest 25, 50, 75, and 100. Then total investment is $25 + 50 + 75 + 100 = 250$, and the probabilities of success are as follows:

Group member	investment	probability of success
1	25	$25/250 = 10\%$
2	50	$50/250 = 20\%$
3	75	$75/250 = 30\%$
4	100	$100/250 = 40\%$

²⁸This paragraph is appropriately modified depending on group size.

Are there any questions?

Cost of investment. Your cost of investment is equal to your Unit Cost times your investment. For example, if your Unit Cost is 1, and your investment is 20, your cost this round is $1 * 20 = 20$. If your Unit Cost is 0.6 and your investment is 20, your cost this round is $0.6 * 20 = 12$.

Are there any questions?

Unit Cost. Recall that cost of investment = (unit cost)*investment. Your unit cost of investment will be **your private information**. Other participants in your group will not know your unit cost. Unit cost may change from one round to the next, and it may be different for different members of your group. In each round, it will be selected randomly to be one of the following numbers: 0.6, 0.7, 0.8, 0.9, 1, 1.1, 1.2, 1.3, 1.4, 1.5, with each of these 10 values equally likely. You will see your unit cost, but not the unit costs of other members of your group, before you make your investment decision.²⁹

Payoff in a given round. Once the probability of project success of each member of your group is calculated, the computer randomly chooses one group member whose project is successful, in accordance with the probabilities calculated. That is, for example, if one member's probability of success is 10of success is 40member's project.

Your payoff in a given round is determined as follows:

<u>If your project is successful:</u>	<u>If your project is unsuccessful:</u>
+120 (endowment)	+120 (endowment)
+120 (revenue)	+0 (no revenue)
- (unit cost)*investment	- (unit cost)*investment
<u>240 - (unit cost)*investment</u>	<u>120 - (unit cost)*investment</u>

Are there any questions?

How your earnings from this part of the experiment are determined. You will go through 60 decision rounds. After that, six of these rounds will be chosen randomly (with all rounds being equally likely to be chosen) to base your earnings on. At the end of the experiment, you will be informed about the rounds chosen, your earnings in those rounds, and the total earnings.

Are there any questions?

To repeat, in each decision round in this part of the experiment you will be randomly matched with 3 other participants. You will be informed about your unit cost of investment and asked to choose an investment level between 0 and 120. After that the successful project and payoffs in your group will be determined. You will be randomly re-matched with 3 other participants, and so on.

Are there any questions?

You will now start the actual decision rounds. Please do not communicate with other participants or look at their monitors. If you have a question or problem, from this point on please raise your hand and one of us will assist you in private. Please remember to click CONTINUE to proceed.

²⁹This paragraph is appropriately modified depending on the information condition.

Part II

In this part of the experiment, you will go through 5 decision rounds in the same setting as before. The only difference is that in case your project is successful you will receive *zero revenue*. The only reward to you is that your project is the successful project in your group.

Thus, payoff in each round will be determined as follows:

If your project is successful:	If your project is unsuccessful:
+120 (endowment)	+120 (endowment)
+0 (revenue)	+0 (no revenue)
- (unit cost)*investment	- (unit cost)*investment
120 - (unit cost)*investment	120 - (unit cost)*investment

Note that the only way to guarantee yourself a payoff of 120 in this part of the experiment is to invest zero into the project. If you invest any positive amount, your payoff is guaranteed to be below 120.

One of the 5 decision rounds will be chosen randomly to base your actual earnings on.

Are there any questions?

Part III

In each round of this series you will be asked to make a choice between two lotteries that will be labeled A and B. There will be a total of 10 rounds and after you have made your choice for all 10 rounds, one of those rounds will be randomly chosen to be played. Lottery A will always give you the chance of winning a prize of 2.00 or 1.60, while lottery B will give you the chance of winning \$3.85 or \$0.10. Each decision round will involve changing the probabilities of your winning the prizes. For example in round 1, your decision will be represented on the screen in front of you:

Your decision is between these two lotteries:

Lottery A: A random number will be drawn between 1 and 100. You will win
\$1.60 if the number is between 1-90 (90% chance)
\$2.00 if the number is between 91 and 100 (10% chance)

Lottery B: A random number will be drawn between 1 and 100. You will win
\$0.10 if the number is between 1 and 90 (90% chance)
\$3.85 if the number is between 91 and 100 (10% chance)

If you were to choose lottery B and this turns out to be the round actually played, then the computer will generate a random integer between 1 and 100 with all numbers being equally likely. If the number drawn is between 1 and 90, then you would win \$0.10 while if the number is between 91 and 100, then you would win \$3.85. Had you chosen lottery A then if the number drawn were between 1 and 90 you would win \$1.60 while a number between 91 and 100 would earn you \$2.00.

All of the other 9 choices will be represented in a similar manner. Each will give you the probability of winning each prize as well as translate that probability into the numerical range the random number has to be in for you to win that prize.

At the end of the 10 choice rounds, you will be asked to press a button that will allow the computer to determine your payment. When you do so, the computer will randomly pick one of the 10 rounds to base your payment on, remind you of the choice you made in that round and draw the random number between 1 and 100 to determine your earnings.

Are there any questions before you begin making your decisions?

We ask that you follow the rules of the experiment and in particular we again ask that you do not talk with other participants or look at their screens during the experiment. Anyone who violates the rules may be asked to leave the experiment with only the \$10.00 show-up fee.

You will now start the sequence of 10 choices. You will be able to go through the choices at your own pace, but we will not be able to continue the experiment until everyone has completed this series.

Part IV

In this part of the experiment you can solve simple number addition problems and earn some money. These problems are generated randomly by the computer. Each problem looks something like this:

$$12 + 34 + 56 + 82 + 30 = ?$$

You should find the sum without using a calculator, enter your answer into the input box and click SUBMIT. Then you will be given the next problem.

You will have 3 minutes to solve as many such problems as possible. You will be able to receive 10 cents for each correctly solved problem.

Are there any questions?

Questions after Part IV (before the results of Part IV are shown)

1. How many summation problems do you think you solved correctly?
2. Out of the [...] participants of the experiment, what do you think your ranking is (with 1 corresponding to the highest score and [...] corresponding to the lowest score)?
3. Please select how you would like to be paid [radio buttons with options (a) and (b)]. Option (a) will pay you \$0.10 per each correctly solved problem. If you choose option (b), you will be randomly matched with three other participants. If the number of problems you solved correctly is greater than that of the other three people, you will receive \$0.40 per each correctly solved problem. Otherwise you receive nothing. Ties will be broken randomly.