

Does Free Information Provision Crowd Out Costly Information Acquisition? It's a Matter of Timing

C Sample Instructions

This section presents the script used to run the wave 2 sessions and the slides to present instructions.⁴⁰ Appendix section D.1 presents the instructions slides for the main task *4B 2B 0B* treatment. Text in black is common across all treatments. Instructions were presented through a video with audio that narrated the slides. Full video of instructions available [here](#).

Appendix section D.2 presents the control questions that followed the instructions. Appendix section D.3 presents the script used to conduct wave 2 sessions.

C.1 Instruction Slides

Overview

This is an experiment about economic decision-making. Various agencies have provided funds for this research. If you understand the instructions (and depending on your decisions), you can earn a considerable sum of money. At the end of today's session you will receive your earnings in cash, in private. In this experiment, the sums of money are expressed in Experimental Dollars ($E\$$). At the end of today's session, we will convert your earnings into US Dollars, at an exchange rate $E\$40 = \1 . For today's session, you will receive an initial payment of $E\$120$.

It is important that you remain silent and not look at other people's work. If you have any questions, or need help of any kind, please raise your hand and an experimenter will come to you. If you speak aloud, you will be asked to leave the experiment. We expect and appreciate your cooperation.

Now we will describe the session in more detail.

Overview

Today's experiment consists of four parts. In each part you will make some decisions. The other participants will face similar decision-making tasks. However, their decisions will not affect your earnings and your decisions will not affect their earnings.

When all four parts have been completed, one of those parts will be randomly chosen. In the selected part one of your decisions will be chosen randomly and the result of said decision will determine your earnings.

Your final earnings for today's session will be the sum of your initial payment of $E\$120$ and your earnings in the decision which is randomly selected.

⁴⁰We choose instructions for wave 2 since they are in English. Instructions for wave 1 are available from the authors upon request.

Introduction: Part 1

In the first part of the experiment there are twenty-four periods. In each period there are two jars, one red and one blue. Each jar contains 60 balls which are the same color as the jar, and 40 which are the color of the other jar.

The computer will randomly select one of the two jars. You must predict the color of the jar selected for that period. If you predict the color of the jar, you can earn up to E \$1,000.

To help you predict, you can observe the color of some balls from the jar. The computer will show you 4 balls for free and you will have the option to buy up to 5 additional balls (at a COST).

Next, we will explain this part of the experiment in more detail.

Jars and balls

At the beginning of each period the computer randomly selects one of two virtual jars: red or blue. The probability that the color of the jar is red is 50% and the probability that it is blue is 50%.

The color of the jar in one period does not affect the color of the jar in another period or of another participant. That is, the true color of jar is determined independently of the color of jar in another period and for other participants.

Each jar is filled with 100 virtual balls; 60 correspond to the true color of the jar and 40 are the color of the other jar. That is, the red jar contains 60 red balls and 40 blue balls. The blue jar contains 60 blue balls and 40 red balls.

In this way, the color of a ball corresponds to the true color of jar with a probability of 60%. That is, if the true color of jar is red, when drawing a ball, it will be red with 60% probability and will be blue with 40% probability. If the true color of the jar is blue, when drawing a ball, it will be blue with 60% probability and will be red with 40% probability.

Obtaining Information

Before you make your prediction about the color of the jar, you will get information by observing the colors of several balls drawn from the jar which has been selected for that period. This will work in the following way:

The computer draws a ball (chosen at random) from the jar for that period and records its color. It then deposits the ball back into the jar and all the balls are mixed. Then, another ball is randomly drawn and the color is recorded. The ball is again deposited in the jar and again the balls are mixed. This process continues until all the balls shown in the period have been drawn and recorded.

That is, each time the computer draws a ball from the jar, 60% of balls in the jar are the same color as the jar, and 40% of the balls are the other color.

Obtaining Information

Each period the computer will show you the colors of 4 balls taken from the jar at no cost. In addition, you can buy additional balls.

[You will be able to see the colors of the 4 balls that the computer will show you at no cost AFTER you decide how many balls to buy.]

[Out of the 4 balls that the computer will show you at no cost, you will be able to see the colors of 2 of these balls BEFORE you decide how many balls to buy. The colors of the other 2 balls will be revealed AFTER you decide how many you want to buy.]

[You will be able to see the colors of the 4 balls that the computer will show you at no cost BEFORE you decide how many balls to buy.]

Each additional ball you buy will have a COST. In each period, the COST of the balls will be determined randomly and will be a number between 0 and 100, all being equally probable. (The COST in one period does not affect that of other periods or other participants.)

After having seen [the colors of the 4 [2] free balls and] the COST of the additional balls, you will decide how many you want to buy, if you want to buy any.

After you decide the number of balls you want to buy, you will see the colors of the free balls and of the additional balls purchased.

Earnings from the prediction

After observing the colors of all the balls, you make your prediction regarding the color of the jar for that period. If your prediction is correct, you will earn $E\$1,000$. If you do not correctly predict the color, you will earn $E\$300$. Regardless of whether you are correct or not, you will have to pay the COST of the balls you bought that period.

That is, if your prediction about the color of the jar is correct, your earnings for the period will be given by:

$$E\$1,000 - \text{COST} \cdot (\# \text{ of balls purchased})$$

If your prediction is not correct, your earnings for the period will be given by:

$$E\$300 - \text{COST} \cdot (\# \text{ of balls purchased})$$

Feedback

During the first twelve periods, you will not be able to observe the true color of the jar at the end of each period. In the second twelve periods, you will be able to observe the true color of the jar at the end of each period.

Summary

1. In each period there are two jars and the computer will select one of these at random: the RED jar with 50% probability or the BLUE jar with 50% probability.
2. You will observe for free the colors of 4 balls. In addition, you will have the option to buy 0 to 5 additional balls, at a COST (selected randomly from between 0 to 100 for each period).
3. The color of each ball corresponds to the true color of the jar with 60% probability.
4. You must predict the color of the jar selected for that period. If your prediction is correct, you earn:

$$E\$1,000 - \text{COST} \cdot (\# \text{ of balls purchased})$$

5. If you do not correctly predict the color of the jar, then your earnings for the period are:

$$E\$300 - \text{COST} \cdot (\# \text{ of balls purchased})$$

C.2 Control Questions

After the instructions video ended, participants had to complete an Instructions Comprehension Test which consisted of the following (multiple choice) questions:

1. What is the probability that at the beginning of the period the computer selects the color RED jar?
2. If at the beginning of the period the computer randomly selects the BLUE jar, what is the probability that when drawing a ball from the jar it is a RED ball?
3. Assume that the jar selected at the beginning of the period is RED. Assume also that the computer has already drawn the 4 balls that it will show, and they are all red. What is the probability that if you draw an additional ball, it is RED?
4. Assume you decide to purchase three balls, at a cost of E\$50 each. Also, assume you correctly predict that the jar color is BLUE. If this decision is chosen at random for your payment, what would be your profit?
5. Assume that for the last period, the true color of the jar selected by the computer was BLUE. What is the probability that for the next period the computer randomly selects the BLUE jar?

Participants had to answer all questions correctly in order to proceed to the experiment. If participants selected the correct answer for a question, they received feedback and reinforced the explanation for the correct response.

If participants selected the wrong answer, they received feedback and had a chance to answer again. If they selected an incorrect answer for a second time, the screen was locked (and requested a code that the experimental monitors had). It asked them to raise their hand so that the experimental monitor could clarify any questions or misunderstandings the subject could have.

After all participants had correctly answered all questions, they proceeded with the experimental task.