Supplementary Material: Experimental Instructions

Outline
The experiment session comprises:

1. Sign-in (location and arrival)
2. Introduction and agenda (an introduction of the experimenter, enumerators, assistant experimenter, and the project)
3. Quiz
4. Instructions, practice, and decision making (coin tossing games are randomized)
   (a) Lottery game (1)
   (b) Lottery game (2)
5. Payment

1. Sign-In (Location and Arrival)

- Each participant will present his/her photo ID before he/she will be signed in. The participant will then draw a number out of a bag. This number (personal number of the respondent) randomly determines his/her seat, which is the individual’s location throughout the experiment session.

- The experiment will be conducted in sessions of six participants in classrooms in local schools or in a meeting room at the main gathering place of a farmer’s group or association.

- Each participant will have his/her own enumerator.

- The typical layout of the room will be as follows:

<table>
<thead>
<tr>
<th>Front of room (experimenter, and white board)</th>
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</thead>
<tbody>
<tr>
<td>Seat 1</td>
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<tr>
<td>Seat 3</td>
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<td>Seat 5</td>
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<td>Seat 2</td>
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<td>Seat 4</td>
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<td>Seat 6</td>
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</tbody>
</table>

Back of room (assistant experimenter/cashier)

Notes:

- Text in italics is not part of the participant instructions.

- The instructions are explained orally by the experimenter in the local language.

- Once all the participants are seated, the explanation will start.
2. Introduction and Agenda

- Hello and welcome. Thank you for coming to our workshop today.

- The experimenter introduces himself, the enumerators, and the assistant experimenter. The experimenter introduces the institution and the project, typically as follows:
  - In Uganda, we are conducting a research project on farmers’ decision behavior in situations involving risk.
  - We have been holding discussions with farmers across many parts of Uganda. In particular, we have talked to farmers in . . . , but we have not been here before.
  - We are very grateful that we can do the workshop in this area today and that you have found some time to participate. Thank you very much for that.
  - For the upcoming tasks, you will receive cash payments for the decisions you make. We provide these payments for two purposes:
    * Because you came here today and you are spending your time with us. This is time in which you could be doing something else, so we would like to remunerate this and pay you a show-up fee of UGX 5,000.
    * Also, we would like you to take this decision seriously, so that it represents your decision making behavior of normal real life decisions.

- Today’s workshop will include the following steps:
  - First, we explain the instructions of the different tasks on decision making.
  - Then, we will do a practice run together to show how it works. Then, you will make your decisions. Today, we will do several types of decisions. In a moment, I will explain all the different tasks on decision making in more detail, one after another.
  - Then, you will receive your payment. Payment will be effected in private and in cash at the end of today’s workshop.

I have some additional general comments:

- Please turn off your mobile phones, etc.

- All decisions you make or answers you give during the workshop are private and confidential.

- Since all decisions and answers are private, please do not talk to each other anymore. If you have questions, please ask us by raising your hand.

- Please do not discuss with your neighbor except for the enumerator next to you. The enumerator next to you will record your answers.

- When making decisions, you should make the decision that you prefer the most as you will receive the cash payment on the basis of that decision, given that you have been selected as the person who receives the cash payment. Please make your decisions as if they are real-life decisions.

- If there are any questions at any point, please raise your hand and ask.

- Any questions before we start?
3. Quiz

- The experimenter hands out the questionnaire to the enumerator. Then, explanation and decision making would start.

- We will start today’s workshop with a short quiz.

- The quiz contains several tasks. It is not a test; you do not need to worry if the questions seem difficult.

- Questions are asked with regard to probabilities and percentage calculation. This basically enables the participants to start thinking about the material and the decisions they will be presented with during the workshop. The participants make their choice, and their enumerators record the answers and tick the relevant box.

- Now, we are coming to the first task.

- 1. Imagine, we toss a coin and the “heads” (emblem) comes up. What comes up if we toss the coin again? (possible answers: a = heads, b = tails, c = one cannot predict exactly)

- Now, we are coming to the second task.

- 2. If the chance of receiving a prize is 10%, how many people out of 100 would be expected to get the prize? If you don’t know, put an X.

- Now, we are coming to the last task of this quiz.

- 3. When you draw the red ball, you win! Look at the two boxes and mark the correct sentence. (Possible answers: a = my chance to win is higher if I choose Box A. b = my chance to win is equal, it does not matter which box I choose. c = my chance to win is higher if I choose Box B.)

4. Instructions and Decision Making

4.1. Lottery Game (1)

- In the first/second session, you are asked to choose between two bags. You will be asked to make a number of repeated choices.

- I will now explain the first session. Then, you will make your decisions in this session.

- Posters are displayed on a large white board at the front of the room. This is used to illustrate the basics of the game as explained below.

- There are four possible prizes: 300 UGX, 4,800 UGX, 6,000 UGX, and 11,550 UGX. The four different colored balls represent the four possible prizes. The green ball is worth 300 UGX, the blue ball is worth 4,800 UGX, the red ball is worth 6,000 UGX, and the yellow ball is worth 11,550 UGX.
• Note that we will randomly select one person amongst you, who receives a cash payment for this task.

• Show poster 1: The picture of the sheet with the lottery game

• Real balls will also be shown.

Choose your preferred bag by marking either Bag A or B in each row.

How are you going to receive these prizes?

To receive these prizes, you will first have to choose between two bags, Bag A and Bag B, for each of the 10 rows. How do these two bags differ? Each bag contains 10 balls. The two bags contain differently colored balls (green, blue, red, and yellow) with a different value. We draw only one ball from the selected bag, which will be the prize. If you choose Bag A, you may receive a prize of 6,000 UGX (red ball) or a prize of 4,800 UGX (blue ball). And if you choose Bag B, you may receive a prize of 11,550 UGX (yellow ball) or a prize of 300 UGX (green ball). We are going to ask you which of these two bags you prefer.

Note that with Bag A the difference between the prizes is small, while it is large in the case of Bag B.

In addition, in Bag A the prize of 6,000 UGX is smaller than the prize of 11,550 UGX in Bag B, and the prize of 4,800 UGX in Bag A is greater than the prize of 300 UGX in Bag B.

Thus, you will choose between Bag A and Bag B in 10 rows, one after another.

Let’s focus on the first row.
• *Show poster 2: example for Bag A or Bag B in row one*

![Poster 2: Example for Bag A or Bag B in Row One](image)

• Bag A:
  
  – Bag A contains nine blue balls and one red ball. Each blue ball is worth 4,800 UGX, and the red ball is worth 6,000 UGX.
  
  – If this bag is selected and the red ball is subsequently drawn, you will receive 6,000 UGX. In the case that one of the blue balls is drawn, you will receive 4,800 UGX.
  
  – So, if we pick a ball from the bag, it may be blue or red. But, it is more likely that we pick one of the blue balls because there are more blue balls (than red balls) in the bag.

• Bag B:
  
  – Now, let’s look at Bag B. What is different about it? Well, this bag contains nine green balls and one yellow ball. Each green ball is worth 300 UGX, and the yellow ball is worth 11,550 UGX.
  
  – If this bag is selected and the yellow ball is subsequently drawn, you will receive 11,550 UGX. In the case that one of the green balls is drawn, you will receive 300 UGX.
  
  – So, if we pick a ball from the bag, it may be a green or a yellow one. But, it is more likely that we pick one of the green balls because there are more green balls (than yellow balls) in the bag.

• This explains row one. How do the other rows differ from row one?

• *Show poster 3: example for Bag A or Bag B in row two*

![Poster 3: Example for Bag A or Bag B in Row Two](image)

• Note that when we go from row one to row two, the only aspect that changes is the number of red balls in the bags. That is, the value of the balls does NOT change.
• Bag A:
  – Bag A contains eight blue balls and two red balls. Each blue ball is worth 4,800 UGX and each red ball is worth 6,000 UGX.
  – If this bag is selected and the red ball is subsequently drawn, you will receive 6,000 UGX. In the case that one of the blue balls is drawn, you will receive 4,800 UGX.
  – So, if we pick a ball from the bag, it may be blue or red. But it is more likely that one of the blue balls is drawn because there are more blue balls (than red balls) in the bag.

• Bag B:
  – Bag B contains eight green balls (each worth 300 UGX) and two yellow balls (each worth 11,550 UGX). Each green ball is worth 300 UGX, and each yellow ball is worth 11,550 UGX.
  – If this bag is selected and the yellow ball is subsequently drawn, you will receive 11,550 UGX. In the case that one of the green balls is drawn, you will receive 300 UGX.
  – So, if we pick a ball from the bag, it may be green or yellow. But, it is more likely that one of the green balls is drawn because there are more green balls (than yellow balls) in the bag.

• Quiz participants for understanding (control questions):
  • Now, what happens if we go from row two to row three?
  • Show poster 4: example for Bag A or Bag B in row three

  ![Diagram of bags and choices]

  • How many blue and red balls does Bag A contain?
  • How many green and yellow balls does Bag B contain?
  • Suppose you choose Bag A and the red ball is drawn, how much do you receive?
  • Suppose you choose Bag B and the yellow ball is drawn, how much is it worth?
Ihli, Chiputwa, and Musshoff  Changing Probabilities or Payoffs in Lottery-Choice Experiments  S7

- etc.
- So, we are going to ask you to decide for bag A or B in each of the 10 rows.
- Note that your choice should really be guided by your attitudes. There are no wrong or right decisions.
- Then, participants are informed that only one row will be selected for payment and that only one person receives the prize.
- How will we determine the amount of money you will receive for participating in this task? Now, we will explain the payment for this game.
- Only one person will receive a payment for one of the choices he/she made in this task. However, you do not know yet for which of the choices the selected person will receive the payment, so you will want to think about each choice very carefully. You will only find out at the end of this task for which of these choices the selected person is going to receive a payment.
- The payment in this game comprises three draws:
  - The first draw is to determine the person who receives a prize. Remember, in the beginning of today’s workshop, you got a personal number. We will ask one of you to draw a number between 1 and 6 out of a bag. The holder of the number that is picked from the bag will be the person, who receives of one of the prizes.
  - The second draw is to determine the row for which you will get paid. We will ask the selected person to draw a number between one and 10 out of a bag. The number that is picked from the bag will be the choice that counts for the selected person.
  - The third draw is to determine whether the person receives the low or high prize. We will ask the selected person to draw a ball out of Bag A in case he/she chose Bag A or one out of Bag B in case he/she chose Bag B. The ball that is picked from the respective bag will be the choice that counts for him/her.
- Are there any questions before we start?
- Then, decisions will be made.
- Which bag do you choose? Choose your preferred bag by marking either Bag A or B in each row.
- The enumerators ask their farmers for each of the 10 rows which bag they prefer. The participants make their choice by pointing at the bag they prefer, and their enumerators record the answers and tick the relevant box.

4.2. Lottery Game (2)

- In the first/second session, you are asked to choose between two bags. You will be asked to make a number of repeated choices.
- I will now explain the second/third session. Then, you will make your decisions in this session.
- Posters are displayed on a large white board at the front of the room. This is used to illustrate the basics of the game as explained below.
• The differently coloured balls represent the possible prizes. The red ball is worth 0 UGX, the blue ball is worth 10,000 UGX, and the value of the green ball ranges from 10,000 UGX to 1,000 UGX.

• Note that we will randomly select one person amongst you, who receives a cash payment for this task.

• *Show poster 1: The picture of the sheet with the lottery game*

• *Real balls will also be shown.*

Choose your preferred bag by marking either **Bag A** or **B** in each row.

• How are you going to receive these prizes?

• To receive these prizes, you will first have to choose between two bags, Bag A and Bag B, for each of the 10 rows. How do these two bags differ? The two bags contain differently coloured balls (green, blue, and red). The value of the green ball changes in each decision row, while the values of the blue and the red ball remain the same across the decision rows. We draw only one ball of the selected bag, which will be the prize.

• If you choose Bag A, you may receive for sure a certain amount of money (green ball). If you choose Bag B, you may receive a prize of 10,000 UGX (blue ball) or nothing (red ball). We are going to ask you which of these two bags you prefer.

• The questions deal with the question of whether you prefer to have a guaranteed smaller amount of money, OR a larger amount of money that involves some risk and you might end up getting nothing. You can never lose any money irrespective of what you choose.

• We will ask you to choose between Bag A and Bag B in eight rows, one after another.

• Let’s focus on the first row.
• Show poster 2: example for Bag A or Bag B in row one

- Bag A:
  - Bag A contains one green ball. This ball is worth 10,000 UGX.
  - If this bag is selected and the green ball is subsequently drawn, you will receive 10,000 UGX.
  - So, if you choose bag A, you know what you get for sure.

- Bag B:
  - Now, let’s look at Bag B. What is different about it? Well, this bag contains one blue ball and one red ball. The blue ball is worth 10,000 UGX and the red is worth nothing.
  - If this bag is selected and the blue ball is subsequently drawn, you will receive 10,000 UGX. There is also the chance that the red ball is drawn. In this case, you will get nothing.

- This explains row one. How do the other rows differ from row one?

• Show poster 3: example for Bag A or Bag B in row two

- Note that when we go from row one to row two, the only aspect that changes is the value of the green ball.

- Bag A:
  - Bag A contains one green ball. Now, this ball is worth 7,500 UGX.
If this bag is selected and the green ball is subsequently drawn, you will receive 7,500 UGX.

So, if you choose bag A, you know what you get for sure.

Bag B:

Now, let's look at Bag B. This bag contains one blue ball and one red ball like in the first example. The blue ball is worth 10,000 UGX and the red is worth nothing.

If this bag is selected and the blue ball is subsequently drawn, you will receive 10,000 UGX. There is also the chance that the red ball is drawn. In this case, you will get nothing.

Quiz participants for understanding. Control questions are asked with regard to the probabilities and earnings.

Now, what happens if we go from row two to row three?

Show poster 4: example for Bag A or Bag B in row three

How many balls does bag A contain?

What is the value of the green ball?

How many blue and red balls does Bag B contain?

Suppose you choose Bag A and the green ball is drawn, how much do you receive?

Suppose you choose Bag B and the red ball is drawn, how much do you receive?

etc.

So, we are going to ask you to make a decision for each of the eight rows: Bag A or Bag B.

Note that your choice should really be guided by your attitudes. There are no wrong or right decisions.
Then, participants are informed that only one row would be selected for payment and that only one person receives the prize.

How will we determine the amount of money you will receive for participating in this task? Now, we will explain the payment for this task.

Only one person will receive a payment for one of the choices he/she made in this task. However, you do not know yet for which of the choices the selected person will receive the payment, so you will want to think about each choice very carefully. You will only find out at the end of this task for which of these choices the selected person is going to receive a payment.

The payment in this game comprises three draws:

- The first draw is to determine the person who receives a prize. Remember, in the beginning of today’s workshop, you got a personal number. We will ask one of you to draw a number between one and six out of a bag. The number that is picked from the bag will determine the person who receives one of the prizes.

- The second draw is to determine the row for which you will get paid. We will ask the selected person to draw a number between one and eight out of a bag. The number that is picked from the bag will be the choice that counts for him/her.

- If the person chose bag A, which means he/she decided to take the money for sure, he/she will get that amount of money. If the person chose bag B, he/she will draw a ball out of the bag to determine whether he/she receives 10,000 UGX or nothing. The ball that is picked from the respective bag will be the choice that counts for the selected person.

Are there any questions before we start?

Then, decisions will be made.

Which bag do you choose? Choose your preferred bag by marking either Bag A or B in each row.

The enumerators ask their participants for each of the eight rows which bag they prefer. The participants make their choice by pointing to the bag they prefer, and their enumerators record the choice/tick the relevant box.