**Experimental procedures:**

1. **Preparations before the experiment**
   1. Start of the session: meet and greet the participants by the gate; identify with fingerprints Make sure enough funds are available for the session
   2. Bring: Netbook with Blaise Identification Program; placecards, Jar, 7 black balls, 1 red ball
   3. Blaise will output a place number for each participant; hand them the laminated place card with that number. Escort them to the waiting room; let them sit down.
   4. Start up the experimenter’s and participants’ computers
   5. This experiment requires ***an even number of participants***. Therefore, start z-Tree on one of the experimenter’s computers and link an even number of participants’ z-Leafs to this computer; if the participant list has an odd number please leave one out (e.g. if the number is 31, open 30 z-Leafs)
2. **In the waiting room:**

Good day! A warm welcome to the Busara Center for Behavioral Economics. I see all participants are present. We’ll soon go to the testing room, where I will give you exact information about the study. You will get paid Ksh 200 for your participation and transport today; in addition, you can earn some extra money in the tasks you will do. This money will be transferred to the phone number you gave us when you registered by MPesa this afternoon.

Before we start, I request three things. First, please turn off you mobile phones now, and leave them turned off until the end of the session. This is so you are not distracted from doing the tasks. Second, due to the nature of the study, from now on you are not allowed to talk to other participants. If you talk to other participants, we will have to send you home and you cannot get paid. If you have questions, please raise your hand and one of the researchers will come and talk to you. Third, please do not touch the computers before we tell you to do so.

Are everyone’s phones off? Ok. We will now go to the computer room, where I will give you more information about the study. Please find the computer with the number of your placecard, and sit down. Again remember that you are not allowed to speak to each other from now on, and please do not touch the computers until we tell you to do so.

1. In the computer room

After all participants are seated at their workstations:

Welcome again to Busara. You are about to participate in a research study which seeks to understand better how people make economic decisions and other kinds of decisions. In front of you there is a consent form that explains the purpose of this research and your rights. It says that this study is for research purposes only; your responses are strictly confidential and will not be shared along with your name with anyone other than the researchers. You have the right to leave at any time. We would like to ask for your consent to participate by signing at the back of this form. So please look at the form now and sign it at the back. If you have questions please raise your hand and someone will come to assist you.

**4) After consent**

We will now begin with the tasks. At any time, if you don’t understand any of the tasks that you are required to do, please raise your hand and you will be assisted.

**Part A - One Shot Games**

**5) Start ztree file: 1 – One shot games**

**Slide 1**: This session is divided into three parts. Part A, Part B and Part C.

Throughout the session you will be interacting with different individuals in different games.

You will earn monetary units throughout the session. At the end of the session, the monetary units will be converted into Kenya Shillings. The rate of conversion is 1.5 MU = 1 Kenyan Shilling.

We will start Part A now.

**Slide 2**: You will be asked to make decisions in 4 different interactions with individuals currently in the experiment. For each interaction, you will be matched anonymously with a new person. Each of these interactions will last for exactly one round.

The choices you make in each interaction will not affect subsequent interactions in any way.

Some interaction will include multiple roles (Player A and Player B), you will be asked to make choices for each role.

Once you finish the four interactions, the computer will select one interaction randomly. Then, the decisions you made during that interaction will be implemented. If this interaction had different roles, you will be randomly assigned to one role. Only the outcome of this randomly chosen interaction will count towards your income.

Because you do not know which of your decisions will be chosen it is in your interest that you treat each decision as if it counts towards your income.

You will earn monetary units throughout the session. At the end of the session, the monetary units will be converted to Kenya Shillings. The rate of conversion is 1.5 MU = 1 Kenyan Shilling.

**Slide 3**: Reminder- For each of these interactions you will be matched anonymously with new individuals that are currently in the experiment.

**Slide 4**: Interaction 1- You are matched with a group of three other individuals. Each person in your group is endowed with 100 units. Each individual decides how many of the 100 units they are going to contribute to a common project that benefits all group members (as described below), and how many of them to keep for themselves.

Income- The contribution of all four players is added up. The total sum is multiplied by 1.6 and then evenly split among all 4 players. Each player gets the same share from the project.

In addition to your earnings from the project you also receive the units you chose not to contribute.

Thus, your income is: 100 – (our contribution to the project) + 1.6 \* (sum of all contributions) /4

Example 1- Suppose each person contributes 100 MU to the project. This 400 MU is multiplied by 1.6 and then split between all 4 people.

This means each person will receive 160 MU.

Example 2 – Suppose 3 people contribute 100 MU and 1 person contributes 0 MU. The 3 people that contributed will get 120 MU.

The person that did not contribute will get 120 (from the project) + 100 (that they kept) = 220 MU.

**Slide 5**: Interaction 1: You start with 100 MU.

How much will you contribute to the project (between 0 and 100)?

**Slide 6**: Interaction 2: You will be matched with one other individual. One of you will be assigned the role of Player A, and the other one of Player B.

In this interaction both players will start with 50 MUs. Player A will be then be given a choice to send either 0 or 50 MU to player B. If Player A chooses to send, this MU will be tripled and Player B will receive 150 MU. Player B will then get to choose how many MU out of that 150 to send back to Player A.

Income: At the end of the interaction, Player A’s income will be: 50 - (How much Player A sent) + (How much Player B sent back)

Player B’s income will be: 50 + (3\* How much Player A sent) - (How much Player B sent back)

Example:

Player A chooses to send 50 units

Player B receives 150 units

Player B send back 30 units

Then Player A receives: 50-50+30= 30 units

Player B receives: 50+150-30 = 180 units

**Slide 7**: Interaction 2- Player A

You start with 50 MU.

If you are Player A would you like to send your MU to Player B?

**Slide 8**: Interaction 2- Player B

You start with 50 MU.

If Player A chooses to send 50 MU (which is tripled to 150), how much would you like to send to Player A (up to 150)?

**Slide 9**: Interaction 2- Player A

This question will not count for any of your profits, now will its answer be revealed to any other participants.

If you choose to send 50 MU, how many MU do you think other individuals in the experiment would send back on average (between 0 and 150)?

**Slide 10**: Interaction 3- You will be matched with one other individual. One of you will be assigned the role of Player A and the other one of Player B.

In this interaction Player A will start with 100 MU and Player B with 0 MU. Player A will choose how many MU (up to 100) to send to Player B.

Income: At the end of the interaction, Player A’s income will be: 100-(How much Player A sent)

Player B’s income will be: (How much Player A sent)

**Slide 11**: Interaction3- Player A

You start with 100 MU.

If you are player A, how many MU would you like to send to Player B (up to 100)?

**Slide 12**: Interaction 4- You will be matched with one other individual. One of you will be assigned the role of Player A and the other one of Player B.

In this interaction Player A will start with 100 MU and Player B with 0 MU. Player A will choose how many MU (up to 100) to offer to Player B.

Player B will choose to accept or reject the offered amount. If Player B accepts the offered amount then they will receive the offered amount and Player A will receive the remainder.

If Player B rejects the offered amount, neither player will receive anything.

Income: At the end of the interaction, Player A’s income will be: 100-(Offer), if Player B accepts.

At the end of the interaction, Player A’s income will be: 0, if Player B rejects.

Player B’s income will be: (Offer), if Player B accepts.

Player B’s income will be: 0, if Player B rejects.

**Slide 13**: Interaction4- Player A

You start with 100 MU.

If you are player A, how many MU would you like to offer to Player B (up to 100)?

**Slide 14**: Interaction 4- Player B

You start with 0 MU.

Your minimum acceptable offer is the smallest offer which you would accept.

If Player A offers you an amount below this, you will reject, if Player A offers you an amount above this, you will accept.

If you are Player B, what is your Minimum Acceptable Offer?

**Slide 15**: You have finished Part A.

**Part B - Repeated Prisoner's Dilemma**

**6) Start ztree file 2 – Treatment C instructions**

**Slide 1:** Part B

In this section you will play a series of games with different partners. Each game will consist of a number of rounds.

The Game.

In each round, you and your partner each get 1 unit in each round. You can choose to KEEP or GIVE it away to your partner.

If you GIVE it away it turns into 4 units for your partner. If you choose to KEEP it, it remains as 1 unit for you.

Your partner has exactly the same decision to make. The final payoffs for the round depend on both the decision that you and your partner make.

**Slide 2:** How much do you earn in each scenario? *Explain how we arrive at these numbers*

You play GIVE and your partner plays GIVE. 4 0 5 1

You play KEEP and your partner plays GIVE. 4 0 5 1

You play KEEP and your partner plays KEEP. 4 0 5 1

You play GIVE and your partner plays KEEP. 4 0 5 1

**Slide 3:** After every round you will be told whether the other person chose to GIVE or KEEP.

You will also be told the units that you earned as a result. These units will be added to your current stock of units.

The total stock of units will be converted to Kenya Shillings at the end of the game.

**Slide 4:** How many shillings will you ear if you have 1 MU?

1 1.5 2 0

**Slide 5:** You will play a number of different games in this section of the experiment.

In each game you will play one person for a number of rounds. Then on the next game, you will play with a different person for a different number of rounds.

For instance, you might first play the game for 4 rounds with Mary, and the 5 rounds with John, and then 3 rounds with David.

We don’t know the exact number of rounds of the game you will play with each person. This will be decided by the computer. We will explain how the computer will do this on the next screen.

**Slide 6:** How will the computer decide how many rounds you will play? *Demonstration*

This jar has 8 balls in total. There are 7 black balls and 1 red ball.

The computer will decide your partner by choosing one ball from this jar without looking.

If a black ball comes up, you will continue to play with the same partner. If a red ball comes up, your partner will switch.

After every round, the computer picks a ball and you will be informed whether you continue with the same partner or switch to a new partner.

**Slide 7:** How often would a black ball be chosen? Frequently/Infrequently

How frequently will you play with the same partner? Sometime/Often

**Slide 8:** If you and your partner play multiple rounds, what can you do to gain more units in the end? Give/Keep

If you and your partner play only once, what can you do to gain more points in the end? Give/Keep

**Slide 9:** Re-cap of Part B

In each round, you and your partner each get 1 unit in each round. You can choose to KEEP or GIVE it away to your partner.

If you GIVE it away it turns into 4 units for your partner. If you choose to KEEP it, it remains as 1 unit for you

If you GIVE and your partner plays GIVE, both earn 4 units each.

If you KEEP and your partner plays KEEP, both earn 1 units each.

**7) Start ztree file 3 – Practice game – Treatment C**

**Slide 10:** You begin with 50 units in your account.

First you play one practice round which does not count toward your final payoff.

**Slide 11:** You have received 1 unit.

If you choose to KEEP, you retain 1 unit.

If you choose to GIVE, your partner gets 4 units.

Your decision?

GIVE/KEEP

**Slide 12:** You will now play this game with a new partner.

**Slide 13:** You have received 1 unit.

If you choose to KEEP, you retain 1 unit.

If you choose to GIVE, your partner gets 4 units.

Your decision?

GIVE/KEEP

**Slide 14:** The black ball has been chosen.

This interaction is not over.

You and your partner will play another round**.**

**8) Start ztree file 4 – RPD - Treatment C**

At the beginning of each new run announce you will begin a new game with a new partner

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Rounds | 12 | 1 | 3 | 2 | 1 | 9 | 6 | 7 | 5 | 1 | 6 |
|  |  |  |  |  |  |  |  |  |  |  |  |

**Part C - One Shot Games**

**9) Start ztree file 5 – One shot games**

**Slide 1**: You will be asked to make decisions in 4 different interactions with individuals currently in the experiment. For each interaction, you will be matched anonymously with a new person. Each of these interactions will last for exactly one round.

The choices you make in each interaction will not affect subsequent interactions in any way.

Some interaction will include multiple roles (Player A and Player B), you will be asked to make choices for each role.

Once you finish the four interactions, the computer will select one interaction randomly. Then, the decisions you made during that interaction will be implemented. If this interaction had different roles, you will be randomly assigned to one role. Only the outcome of this randomly chosen interaction will count towards your income.

Because you do not know which of your decisions will be chosen it is in your interest that you treat each decision as if it counts towards your income.

You will earn monetary units throughout the session. At the end of the session, the monetary units will be converted to Kenya Shillings. The rate of conversion is 1.5 MU = 1 Kenyan Shilling.

**Slide 2**: Reminder- For each of these interactions you will be matched anonymously with new individuals that are currently in the experiment.

**Slide 3:** Interaction 1- You are matched with a group of three other individuals. Each person in your group is endowed with 100 units. Each individual decides how many of the 100 units they are going to contribute to a common project that benefits all group members (as described below), and how many of them to keep for themselves.

Income- The contribution of all four players is added up. The total sum is multiplied by 1.6 and then evenly split among all 4 players. Each player gets the same share from the project.

In addition to your earnings from the project you also receive the units you chose not to contribute.

Thus, your income is: 100 – (our contribution to the project) + 1.6 \* (sum of all contributions) /4

Example 1- Suppose each person contributes 100 MU to the project. This 400 MU is multiplied by 1.6 and then split between all 4 people.

This means each person will receive 160 MU.

Example 2 – Suppose 3 people contribute 100 MU and 1 person contributes 0 MU. The 3 people that contributed will get 120 MU.

The person that did not contribute will get 120 (from the project) + 100 (that they kept) = 220 MU.

**Slide 4**: Interaction 1: You start with 100 MU.

How much will you contribute to the project (between 0 and 100)?

**Slide 5**: Interaction 2: You will be matched with one other individual. One of you will be assigned the role of Player A, and the other one of Player B.

In this interaction both players will start with 50 MUs. Player A will be then be given a choice to send either 0 or 50 MU to player B. If Player A chooses to send, this MU will be tripled and Player B will receive 150 MU. Player B will then get to choose how many MU out of that 150 to send back to Player A.

Income: At the end of the interaction, Player A’s income will be: 50 - (How much Player A sent) + (How much Player B sent back)

Player B’s income will be: 50 + (3\* How much Player A sent) - (How much Player B sent back)

Example:

Player A chooses to send 50 units.

Player B receives 150 units

Player B send back 30 units

Then Player A receives: 50-50+30= 30 units

Player B receives: 50+150-30 = 180 units

**Slide 6**: Interaction 2- Player A

You start with 50 MU.

If you are Player A would you like to send your MU to Player B?

**Slide 7**: Interaction 2- Player B

You start with 50 MU.

If Player A chooses to send 50 MU (which is tripled to 150), how much would you like to send to Player A (up to 150)?

**Slide 8**: Interaction 2- Player A

This question will not count for any of your profits, now will its answer be revealed to any other participants.

If you choose to send 50 MU, how many MU do you think other individuals in the experiment would send back on average (between 0 and 150)?

**Slide 9**: Interaction 3- You will be matched with one other individual. One of you will be assigned the role of Player A and the other one of Player B.

In this interaction Player A will start with 100 MU and Player B with 0 MU. Player A will choose how many MU (up to 100) to send to Player B.

Income: At the end of the interaction, Player A’s income will be: 100-(How much Player A sent)

Player B’s income will be: (How much Player A sent)

**Slide 10**: Interaction3- Player A

You start with 100 MU.

If you are player A, how many MU would you like to send to Player B (up to 100)?

**Slide 11**: Interaction 4- You will be matched with one other individual. One of you will be assigned the role of Player A and the other one of Player B.

In this interaction Player A will start with 100 MU and Player B with 0 MU. Player A will choose how many MU (up to 100) to offer to Player B.

Player B will choose to accept or reject the offered amount. If Player B accepts the offered amount then they will receive the offered amount and Player A will receive the remainder.

If Player B rejects the offered amount, neither player will receive anything.

Income: At the end of the interaction, Player A’s income will be: 100-(Offer), if Player B accepts.

At the end of the interaction, Player A’s income will be: 0, if Player B rejects.

Player B’s income will be: (Offer), if Player B accepts.

Player B’s income will be: 0, if Player B rejects.

**Slide 12**: Interaction4- Player A

You start with 100 MU.

If you are player A, how many MU would you like to offer to Player B (up to 100)?

**Slide 13**: Interaction 4- Player B

You start with 0 MU.

Your minimum acceptable offer is the smallest offer which you would accept.

If Player A offers you an amount below this, you will reject, if Player A offers you an amount above this, you will accept.

If you are Player B, what is your Minimum Acceptable Offer?

**Part D - Questionnaire**

**10) Start ztree file 6 – Questionnaire**

**Slide 1:** Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?

0 = Unwilling to take risks to 10 = Fully prepared to take risks.

**Slide 2:** What is your age (in years)?

**Slide 3:** What is your gender?

Male/ Female

**Slide 4:** You will now make decisions between a SMALLER amount of money available SOONER or a LARGE amount of money available LATER.

Please decide according to your PREFERENCE; there is no right or wrong answer.

You will make 10 decisions; please go through them at your own pace.

When you are ready to begin please press OK.

**Slide 5**: How strongly do you believe in the existence of a God or Gods?

0 = very little to 10 = very much

**Slide 6:** On economic issues will you describe yourself as:

Extremely Liberal, Liberal, Moderate, Conservative, Extremely Conservative

**Slide 7:** On social issues would you consider yourself as:

Extremely Liberal, Liberal, Moderate, Conservative, Extremely Conservative

**Slide 8:** Where were you raised?

Central, Coast, Eastern, Nairobi, North-Eastern, Nyanza, Rift-Valley, Western

**11) Start ztree file 7 – Final payment**

Read and explain instructions.