

APPENDIX A: Instructions text file for graphical user interface¹.

normal font - one population no labels instruction text file.

italic font - differences in one population with labels file by paragraph.

bold font - differences in two population no labels file by paragraph.

underline font - differences in two population with labels file by paragraph.

INSTRUCTIONS

This is an experiment in the economics of strategic decision making. Various agencies have provided funds for this research. If you follow the instructions and make appropriate decisions, you can earn an appreciable amount of money. At the end of today's session, you will be paid in private and in cash.

It is important that you remain silent and do not look at other people's work. If you have any questions, or need assistance of any kind, please raise your hand and an experimenter will come to you. If you talk, laugh, exclaim out loud, etc., you will be asked to leave and you will not be paid. We expect and appreciate your cooperation.

You will be making choices on a Logitech mouse, which is located on the mouse pad in the middle of your table. You may move the pad to the right or left if this would be more comfortable. Hold the mouse in a relaxed manner with your thumb and little finger on either side of the mouse. Rest your wrist naturally on the table surface. When you move the mouse, let your hand pivot from the wrist. Use a light touch. Your cursor (a white arrow on your screen) should move when you slide the mouse on the mouse pad. If it does not, raise your hand.

To participate, you must be able to move the cursor onto an object and click any one of the mouse buttons. We will call pointing at an object and then clicking your mouse "clicking on" an object displayed on the screen. Click on the page down icon located below to display the next page.

The experiment consists of seventy-five separate decision making periods. In each period

The experiment consists of forty-five separate decision making periods. In each period

you will be randomly re-paired with another participant. There will be eight participants, including yourself, in this experiment.

The experiment consists of forty-five separate decision making periods. In each period you will be randomly re-paired with another participant. There will be fourteen participants, including yourself, in this experiment.

The experiment consists of forty-five separate decision making periods. In each period you will be randomly re-paired with another participant. There will be fourteen participants, including yourself, in this experiment.

At the beginning of each decision making period each participant will be randomly assigned a participant type. Each decision making period four participants will be assigned the type "Row" and four participants will be assigned the type "Column".

At the start of period 1 each participant will be randomly assigned to a group with six other participants. Seven participants will be assigned to one group and seven participants will be assigned to the other group. You will remain in your group, with the same six other participants, throughout the entire forty-five decision making periods.

At the start of period 1 each participant will be randomly assigned a participant type. Seven participants will be assigned the type "Row" and seven participants will be assigned the type "Column". You will remain either a Row or a Column type throughout the entire forty-five decision making periods.

At the beginning of each decision making period you will be randomly re-paired with another participant. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with any one of the other seven participants in this experiment.

¹ Does not include text mark up characters, which must be displayed to be comprehended.

Each period you will be randomly reassigned a type and randomly re-paired with one of the four participants of the other type. If you are a Row participant in the current decision making period you will be randomly re-paired with a Column participant for the current decision making period. Similarly, if you are a Column participant in the current decision making period you will be randomly re-paired with a Row participant for the current decision making period.

Each period you will be randomly re-paired with one of the seven participants in the other group. If you are in one group you will be randomly re-paired with a participant in the other group at the start of each decision making period. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with an individual participant in the other group. The pairings will be anonymous and no participant will be able to identify you.

Each period you will be randomly re-paired with one of the seven participants of the other type. If you are a Row participant you will be randomly re-paired with a Column participant at the start of each decision making period. Similarly, if you are a Column participant you will be randomly re-paired with a Row participant at the start of each decision making period. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with an individual participant of the other type. The pairings will be anonymous and no participant will be able to identify you.

At the beginning of each period, you and all other participants will choose an action. An earnings table is provided which tells you the earnings you receive given the action you and your currently paired participant chose. The actions you may choose are row 1 or row 2. Everyone has the same earnings table which will be continuously displayed on the monitor in the front of the room during the experiment. Click on the page down icon located below to display the next page.

Hence, at the beginning of each decision making period, you will have a four in eight (a one-half) chance of being assigned a Row or Column type. You will have a one in four chance of being matched with any one of the individual participants of the other type during the current decision making period. The pairings will be anonymous and no participant will be able to identify you.

At the beginning of each period, you and all other participants will choose an action. An earnings table is provided which tells you the earnings you receive given the action you and your currently paired participant chose. The actions a row player may choose are row 1 or row 2. Similarly, the actions the column player may choose are column 1, or column 2. Everyone has the same earnings table which will be continuously displayed on the monitor in the front of the room during the experiment.

At the beginning of each period, you and all other participants will choose an action. An earnings table is provided which tells you the earnings you receive given the action you and your currently paired participant chose. The actions a row player may choose are row 1 or row 2. Similarly, the actions the column player may choose are column 1, or column 2. Everyone has the same earnings table which will be continuously displayed on the monitor in the front of the room during the experiment.

Your earnings each period will be found in the box determined by your action and the action of the participant that you are paired with for the current decision making period. Your action determines the row and the other participant's action determines the column of the earnings table. The value in the box determined by the intersection of the row and column chosen is the amount of money that you earn in the current period. The earnings, displayed in green, in each earnings cell is the amount of money, in cents, that you earn.

The earnings each period for the participant that you are currently paired with can be determined by reversing your positions.

Click on the page down icon now to view the earnings table while I describe how the earnings for each decision making period are calculated. You can review this page at any time during the experiment by returning to the instructions.

The earnings each period -- both for you and the participant you are currently paired with -- will be found in the box determined by the row and column action. The first (lower left) value in each earnings cell is the amount the row participant earns, and the second (upper right) value in each earnings cell is the amount of money that the column participant earns. The number in the cell is the cents you earn. Click on the page down icon now to view the earnings table for a Row participant.

You can review the text that I am reading at any time during the experiment by returning to the instructions. The earnings each period -- both for you and the participant you are currently paired with -- will be found in the box determined by the row and column action. The first (lower left) value in the earnings cell is the amount the row participant earns (in green), and the second (upper right) value in each earnings cell is the amount of money that the column participant earns (in gray). The number in the cell is the amount, in cents, you can earn.

The earnings each period -- both for you and the participant you are currently paired with -- will be found in the box determined by the row and column action. The first (lower left) value in each earnings cell is the amount the row participant earns, and the second (upper right) value in each earnings cell is the amount of money that the column participant earns. The number in the cell is the cents you earn. Click on the page down icon now to view the earnings table for a Row participant.

You can review the text that I am reading at any time during the experiment by returning to the instructions. The earnings each period -- both for you and the participant you are currently paired with -- will be found in the box determined by the row and column action. The first (lower left) value in the earnings cell is the amount the row participant earns (in green), and the second (upper right) value in each earnings cell is the amount of money that the column participant earns (in gray). The number in the cell is the amount, in cents, you can earn.

MAIN SCREEN

We will now view the main screen. You will use the main screen to make your choices each period. While you view the main screen I will read the description of the screens contained in the next two pages. You can review the text that I am reading at any time during the experiment by returning to the instructions. Click on the word "MAIN" located on the second line down from the top of the screen now. (The second line is the light blue line on your screen).

We will now view the main screens for the Row and the Column participants. You will use the main screen to make your choices each period. While you view the main screens I will read the description of the screens contained in the next three pages. You can review the text that I am reading at any time during the experiment by returning to the instructions. Click on the word "MAIN" located on the second line down from the top of the screen now. (The second line is the light blue line on your screen).

We will now view the main screens for the Row and the Column participants. You will use the main screen to make your choices each period. While you view the main screens I will read the description of the screens contained in the next three pages. You can review the text that I am reading at any time during the experiment by returning to the instructions. Click on the word "MAIN" located on the second line down from the top of the screen now. (The second line is the light blue line on your screen).

The top line of the main screen displays the title of the screen and the current period number. The second line has word "PROCEED" the abbreviation "INSTR" and the word "RECORD" on it. During the session you will be able to return to these instructions by clicking on "INSTR." You will also be able to view the history of play by clicking on "RECORD", which we will explain in a moment. The remainder of the screen is devoted to the earnings table.

Recall that at the beginning of each period you will be designated either as a row participant or as a column participant. This is a main screen for a Row participant. Your designation is indicated in the following manner. First, "You are a Row Participant" and "Row Choice" are written in green below and to the left of the earnings table. In addition, the earnings table for the Row participant will present each of the possible values for row earnings in green, i.e., the lower left values in each cell of the earnings table will be in green.

Recall that at the beginning of period 1 you will be designated either as a row participant or as a column participant. This is a main screen for a Row participant. Your designation is indicated in the following manner. First, "You are a Row Participant" and "Row Choice" are written in green below and to the left of the earnings table. In addition, the earnings table for the Row participant will present each of the possible values for row earnings in green, i.e., the lower left values in each cell of the earnings table will be in green.

Please look at the monitor at the front of the room while I demonstrate how you make and enter a choice. Do not use your main screen until you are instructed to do so.

Making a choice consists of clicking any mouse button while the cursor is in the row of your choice. When you have clicked on the earnings table, your cursor is replaced by a green highlight around the row that contained the cursor when you clicked the mouse. You can change the highlighted row by sliding your mouse up or down. Click the mouse a second time and your cursor returns, but a row remains highlighted. To enter your choice for the current period you need to confirm your choice. You confirm your choice by first clicking on the word "PROCEED" and then clicking on "YES" to confirm and enter your choice for the current period. This confirmation step lets you catch any mistakes you make.

Please make a choice now, click on proceed and then click on "NO". Notice that the row is no longer highlighted and you may now make a different choice.

Before making another choice click on "PROCEED" without making a choice and notice that you receive the following message:

YOU MUST MAKE A CHOICE BEFORE PROCEEDING

At the time this message is present, a red box is also pulsing around the outside of your earnings table.

Please make a choice now, click on "PROCEED" and then confirm your choice by clicking on "YES".

clicking on "YES". This will move you to the main screen for the Column participant.

This is a main screen for a Column participant. Your designation is indicated in the following manner. First, "You are a Column Participant" and "Column Choice" are written in green below and to the left of the earnings table. In addition, the earnings table for the Column participant will present all possible column earnings in green, i.e., the upper right values in each cell of the earnings table will be in green.

Making a choice consists of clicking any mouse button while the cursor is in the column of your choice. When you have clicked on the earnings table, your cursor is replaced by a green highlight around the column that contained the cursor when you clicked the mouse. You can change the highlighted column by sliding your mouse left or right. Click the mouse a second time and your cursor returns, but a column remains highlighted. To enter your choice for the current period you need to confirm your choice. You confirm your choice by first clicking on the word "PROCEED" and then clicking on "YES".

Please make a choice now, click on "PROCEED" and then confirm your choice by clicking on "YES".

clicking on "YES". This will move you to the main screen for the Column participant.

This is a main screen for a Column participant. Your designation is indicated in the following manner. First, "You are a Column Participant" and "Column Choice" are written in green below and to the left of the earnings table. In addition, the earnings table for the Column participant will present all possible column earnings in green, i.e., the upper right values in each cell of the earnings table will be in green.

Making a choice consists of clicking any mouse button while the cursor is in the column of your choice. When you have clicked on the earnings table, your cursor is replaced by a green highlight around the column that contained the cursor when you clicked the mouse. You can change the highlighted column by sliding your mouse left or right. Click the mouse a second time and your cursor returns, but a column remains highlighted. To enter your choice for the current period you need to confirm your choice. You confirm your choice by first clicking on the word "PROCEED" and then clicking on "YES".

Please make a choice now, click on "PROCEED" and then confirm your choice by clicking on "YES".

WAITING SCREEN

During a session a waiting screen will appear after you have made a choice. While you are waiting, you can view the instructions and the record of play by clicking on "INSTR" or "RECORD." When all participants have made a choice for the current period you will be automatically switched to the outcome screen. The choice displayed is the choice that you made during the demonstration of the main screen.

be automatically switched to the outcome screen. The waiting screen will not be active during the instructions. We will view the waiting screen for a row participant. The choice displayed is the choice that you made as a row participant during the demonstration of the main screen for the row participant.

be automatically switched to the outcome screen. The waiting screen will not be active during the instructions. We will view the waiting screen for a row participant. The choice displayed is the choice that you made as a row participant during the demonstration of the main screen for the row participant.

You will automatically return to the instructions. Click on "WAITING" now.

OUTCOME SCREEN

During a session, after everyone has made their choices, the outcome screen will appear. The outcome screen summarizes what happened each period for ten seconds. Your choice will be highlighted in green. The column determined by the other participant's choice will be highlighted in red. The screen is not active. The choice displayed for your choice reflects the choice you made during the demonstration of the main screen.

Your choice will be highlighted in green. The row or column determined by the other participant's choice will be highlighted in red. The screen is not active. We will view an outcome screen for a Row participant. The choices displayed for the Row and Column participants on the outcome screen reflect the choices you made during the demonstration of the Row and Column main screens.

Your choice will be highlighted in green. The row or column determined by the other participant's choice will be highlighted in red. The screen is not active. We will view an outcome screen for a Row participant. The choices displayed for the Row and Column participants on the outcome screen reflect the choices you made during the demonstration of the Row and Column main screens.

You will automatically return to the instructions. Click on "OUTCOME" now.

RECORD SCREEN

The record screen records the period outcomes and updates your earnings balance. A copy of the record screen is given at the top of this screen. The first three entries on the record screen are: "Period", "Your Choice" and "Other Participant's Choice". The

record screen are: "Period", "Row Choice" and "Column Choice". The

record screen are: "Period", "Row Choice" and "Column Choice". The

record screen will indicate your choice in green each period. The fourth entry is your earnings for a period which are recorded under the entry "Your Earnings". Finally, your current balance, which includes all of your earnings up to and including the current period, will be recorded under the entry "Balance". In the first period your balance is zero.

During the session the record screen will be displayed for twenty seconds. You may proceed to the next period by clicking on "RETURN" before the twenty seconds have expired. Remember you can always return to the record screen from either the main screen or the waiting screen.

Click on the word "RECORD" located on the second line down from the top of your screen now. As the experiment proceeds the records for the earlier periods will scroll off the top of the record screen. You may review the earlier records by clicking on the page up, page down, line up and line down icons located at the bottom of the record screen. Click on "RETURN" now to return to the instructions before twenty seconds have expired.

QUESTIONNAIRE

We will now pass out a questionnaire to make sure that all participants understand how to read the earnings table. Please fill it out now. Raise your hand when you are finished and we will collect it. If there are any mistakes on any questionnaire, I will go over the relevant part of the instructions again. Do not put your name on the questionnaire.

Click on the page down icon located below to display the next page.

SUMMARY

*** The experiment consists of seventy-five separate decision making periods.

*** *The experiment consists of forty-five separate decision making periods.*

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*** Each period you will be randomly re-paired with one of the seven other participants in this experiment. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with any one of the seven other participants in this experiment.

*** *You will be randomly assigned a participant type, either Row or Column, at the beginning of each decision making period. Each decision making period four participants will be randomly assigned the type "Row" and four participants will be randomly assigned the type "Column".*

*** *Each period you will be randomly reassigned a type and randomly re-paired with one of the four participants of the other type. If you are a Row participant in the current decision making period you will be randomly re-paired with a Column participant for this decision making period. Similarly, if you are a Column participant in the current decision making period you will be randomly re-paired with a Row participant for this decision making period. Hence, at the beginning of each decision making period, you will have a four in eight (a one-half) chance of being assigned a Row or Column type. After you are randomly assigned a type, either a Row or Column, you will have a one in four chance of being matched with an individual participant of the other type.*

*** **At the start of period 1 each participant will be randomly assigned to a group with six other participants. Seven participants will be assigned to one group and seven participants will be assigned to the other group. You will remain in your group, with the same six other participants, throughout the entire forty-five decision making periods.** *** **Each period you will be randomly re-paired with one of the seven participants in the other group. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with any one of the seven participants in the other group.**

*** You will be randomly assigned a participant type, either Row or Column, at the beginning of period 1. You will remain either a Row or a Column player throughout the entire forty-five separate decision making periods.

*** Each period you will be randomly re-paired with one of the seven participants of the other type. If you are a Row participant you will be randomly re-paired with one of the seven Column participants at the start of each decision making period. If you are a Column participant you will be randomly re-paired with one of the seven Row participants at the start of each decision making period. Hence, at the beginning of each decision making period, you will have a one in seven chance of being matched with an individual participant of the other type.

*** You make a choice by clicking on a row, which highlights the row in green; clicking the mouse a second time, which restores your cursor, and then clicking on proceed and yes to confirm your choice of the highlighted row.

*** *If you are assigned a Row type you make a choice by clicking on a row, which highlights the row in green; clicking the mouse a second time, which restores your cursor, and then clicking on proceed and yes to confirm your choice of the highlighted row. If you are assigned a Column type you make a choice by clicking on a column, which highlights the column in green; clicking the mouse a second time, which restores your cursor, and then clicking on proceed and yes to confirm your choice of the highlighted column.*

*** If you are assigned a Row type you make a choice by clicking on a row, which highlights the row in green; clicking the mouse a second time, which restores your cursor, and then clicking on proceed and yes to confirm your choice of the highlighted row. If you are assigned a Column type you make a choice by clicking on a column, which highlights the column in green; clicking the mouse a second time, which restores your cursor, and then clicking on proceed and yes to confirm your choice of the highlighted column.

*** Remember that you can view the instructions or the record screen by clicking on the appropriate word on the light blue bar.

*** Remember that you may proceed to the next period by clicking on "RETURN" before the twenty seconds have expired.

, located on the record screen, before the twenty seconds have expired.
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You can always return to the record screen from either the main screen or the waiting screen.
*** Your balance at the end of the session will be paid to you in private and in cash.

Click on the page down icon located below to display the next page.

We have completed the instructions. Again, it is important that you remain silent and do not look at other people's work.

If you have a question, please raise your hand, and an experimenter will come to assist you. If there are no questions, period one of the experiment will begin.