Appendix A: Instructions for Chapter I Experiment

Instructions (Treatment 1)

No Talking Allowed

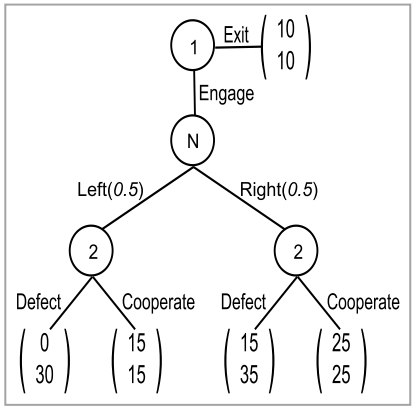
You are about to participate in an experiment on decision making. In this experiment, you will interact with another person, whose identity will remain unknown during and after the experiment. We kindly ask you not to talk or communicate with any other participant. If you have a question after we finish reading the instructions, please raise your hand and the experimenter will approach you and answer your question in private.

Randomly Matched

You will be randomly paired with another participant once the experiment has begun. You and your counterpart will be randomly assigned to a role of either decision-maker 1 or decision-maker 2. Suppose you are decision-maker 1, you would receive an information screen on your computer that says "You are decision-maker 1." Your final payoff in this experiment will be determined by decisions made by you and your counterpart.

Game Tree

You and your counterpart are going to play a game like the decision tree pictured on the right. In the tree you see four circles where "branches" of the tree meet. These circles are the nodes of the decision tree.



Notice that all circles have either a number or a letter in them. The number or letter identifies the owner of that node. The circle with the number 1 indicates that decision-maker 1 owns that node. Decision-maker 1 will have to take one of the paths from that node. The two nodes with the number 2 are owned by decision-maker 2. The

node with the letter N is owned by nature. More instructions are coming on what determines nature's move.

Each node is followed by two paths. Decision-maker 1 will make a choice between paths "Exit" and "Engage", and decision-maker 2 will make a choice between paths "Defect" and "Cooperate". Nature moves either "Left" or "Right".

Based on decision-makers' choices and nature's move, one of the "ends" of the tree will be reached. These ends are the U.S. $ payoffs that each decision-maker will receive. The top number is the U.S. $ payoff for decision-maker 1, and the bottom number is the U.S. $ payoff for decision-maker 2. For example, if decision-maker 1 chooses "Engage", nature moves "Left", and decision-maker 2 chooses "Defect", then decision-make 1 will receive a payoff of U.S. $0 and decision-make 2 will receive a payoff of U.S. $30.

It is clear in the game tree that if decision-maker 1 chooses "Exit", the total $ payoff for both decision-makers is $20(= $10 + $10). If decision-maker 1 chooses "Engage", the total $ payoff for both decision-makers is conditional on nature's move. When nature moves "Left", the total $ payoff is $30(= $0 + $30 or $15 + $15); while when nature moves "Right", the total $ payoff is $50(= $15 + $35 or $25 + $25).

Simultaneous Decisions

Decision-makers make choices without observing the choices of their counterparts, so decision-maker 2 would have to make choices based on the assumption that the paired decision-maker 1 has chosen "Engage". Suppose you are decision-maker 2, your choice will only determine the final payoff if your counterpart actually chooses "Engage". If your counterpart actually chooses "Exit", both of you will receive a payoff of U.S. $10 despite your choice.

Decision-makers also make choices without observing nature's move, so decision-maker 2 would have to make choices for both possible moves of nature. Suppose you are decision-maker 2, you would see the screen on your computer say "Suppose your counterpart has chosen 'Engage' and nature moves LEFT. Please choose the path you

want" and "Suppose your counterpart has chosen 'Engage' and nature moves RIGHT. Please choose the path you want".

Nature's Move

The experimenter is going to flip a coin in front of every participant to determine nature's move, so there is a 50% probability for each of nature's possible moves. However, what "heads" and "tails" represent is private information for only decision-maker 2. In other words, decision-maker 1 eventually will not receive information about nature's move.

One-shot Game

You and your counterpart will only play this decision game ONCE.

Counterpart's Choice

After submitting decisions, each decision-maker will receive information about his or her own payoff. Decision-maker 2 will also receive information about nature's move and his or her counterpart's choice.

Decision-maker 1 will NOT receive information about his or her counterpart's choice, unless it is revealed by decision-maker 1's own payoff. However, since decision-maker 1 will not observe nature's move, he or she will not be able to infer his or her counterpart's choice all the time. For example, suppose you are decision-maker 1. If you receive a payoff of $0, you can infer that you counterpart has chosen "Defect". If you receive a payoff of $25, you can infer that you counterpart has chosen "Cooperate". However, if you receive a payoff of $15, you are NOT able to infer your counterpart's choice.

Noteworthy Feature of the Game Tree

To reiterate, if decision-maker 1 receives a payoff of $15 from the game, he or she will NOT be able to figure out whether decision-maker 2 chose "Cooperate" or "Defect".

Show-up Fees

You have already earned U.S. $5 for arriving to the experiment on time. It will be paid to you in cash with your payoff from the game at the end of the experiment.

Complete Privacy

This experiment is structured so that no one, neither the experimenters nor the other subjects nor anyone else will ever be able to link your name or other identifying information to your decision. This is accomplished by the following procedure. You have received a key contained in a sealed envelope when you walked in the room. Your identifying mark in this experiment is the number on your key which is known only by you and which you will enter by yourself in the computer. After you finish the decision-making game, you will collect your money payoff contained in a sealed envelope, from a mailbox that only you can open with your key. Your privacy is guaranteed because neither your name nor your student ID number will be entered in your computer or appear on any form that records your decisions in this experiment.

At the end of the experiment, you will walk one by one to the hallway where the mailboxes are to collect your money payoff envelope. The key and mailbox are labeled with the same number. But you will be the only person having that key and the only one who knows your key number. While collecting the envelope from your mailbox, you are kindly requested not to open it immediately. You should wait until you leave the building. After collecting the envelope, you must return your key by throwing it in a key-return box in the hallway.

Instructions (Treatment 2)

No Talking Allowed

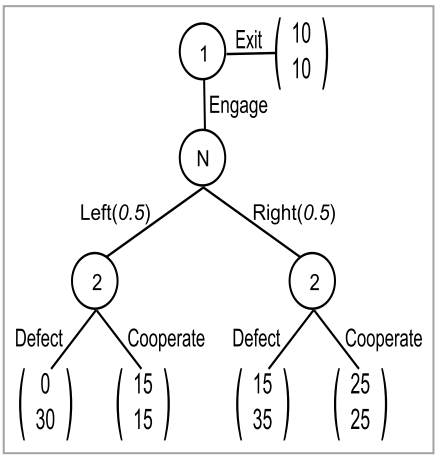
You are about to participate in an experiment on decision making. In this experiment, you will interact with another person, whose identity will remain unknown during and after the experiment. We kindly ask you not to talk or communicate with any other participant. If you have a question after we finish reading the instructions, please raise your hand and the experimenter will approach you and answer your question in private.

Randomly Matched

You will be randomly paired with another participant once the experiment has begun. You and your counterpart will be randomly assigned to a role of either decision-maker 1 or decision-maker 2. Suppose you are decision-maker 1, you would receive an information screen on your computer that says "You are decision-maker 1." Your final payoff in this experiment will be determined by decisions made by you and your counterpart.

Game Tree

You and your counterpart are going to play a game like the decision tree pictured on the right. In the tree you see four circles where "branches" of the tree meet. These circles are the nodes of the decision tree.



Notice that all circles have either a number or a letter in them. The number or letter identifies the owner of that node. The circle with the number 1 indicates that decision-maker 1 owns that node. Decision-maker 1 will have to take one of the paths from that node. The two nodes with the number 2 are owned by decision-maker 2. The node with the letter N is owned by nature. More instructions are coming on what determines nature's move.

Each node is followed by two paths. Decision-maker 1 will make a choice between paths "Exit" and "Engage", and decision-maker 2 will make a choice between paths "Defect" and "Cooperate". Nature moves either "Left" or "Right".

Based on decision-makers' choices and nature's move, one of the "ends" of the tree will be reached. These ends are the U.S. $ payoffs that each decision-maker will receive. The top number is the U.S. $ payoff for decision-maker 1, and the bottom number is the U.S. $ payoff for decision-maker 2. For example, if decision-maker 1 chooses "Engage", nature moves "Left", and decision-maker 2 chooses "Defect", then decision-make 1 will receive a payoff of U.S. $0 and decision-make 2 will receive a payoff of U.S. $30.

It is clear in the game tree that if decision-maker 1 chooses "Exit", the total $ payoff for both decision-makers is $20(= $10+$10). If decision-maker 1 chooses "Engage", the total $ payoff for both decision-makers is conditional on nature's move. When nature moves "Left", the total $ payoff is $30(= $0 + $30 or $15 + $15); while when nature moves "Right", the total $ payoff is $50(= $15 + $35 or $25 + $25).

Simultaneous Decisions

Decision-makers make choices without observing the choices of their counterparts, so decision-maker 2 would have to make choices based on the assumption that the paired decision-maker 1 has chosen "Engage". Suppose you are decision-maker 2, your choice will only determinate the final payoff if your counterpart actually chooses "Engage". If your counterpart actually chooses "Exit", both of you will receive a payoff of U.S. $10 despite your choice.

Decision-makers also make choices without observing nature's move, so decision-maker 2 would have to make choices for both possible moves of nature. Suppose you are decision-maker 2, you would see the screen on your computer say "Suppose your counterpart has chosen 'Engage' and nature moves LEFT. Please choose the path you want." and "Suppose your counterpart has chosen 'Engage' and nature moves RIGHT. Please choose the path you want."

Nature's Move

The experimenter is going to flip a coin in front of every participant to determine nature's move, so there is a 50% probability for each of nature's possible moves. Both decision-makers will receive information about what "heads" and "tails" represent.

One-shot Game

You and your counterpart will only play this decision game ONCE.

Counterpart's Choice

After submitting decisions, each decision-maker will receive information about nature's move and his or her own payoffs. Decision-maker 2 will also receive information about his or her counterpart's choice.

Decision-maker 1 will NOT receive information about his or her counterpart's choice. However, the counterpart's choice can be revealed by nature's move and his or her own payoff. For example, suppose you are decision-maker 1. If you know that nature moves left and you receive a payoff of $15, you can infer that you counterpart has chosen "Cooperate". On the other hand, if you know that nature moves right and you receive a payoff of $15, you can infer that you counterpart has chosen "Defect".

Noteworthy Feature of the Game Tree

To reiterate, if decision-maker 1 receives a payoff of $15 from the game, he or she will be able to figure out whether decision-maker 2 chose "Cooperate" or "Defect".

Show-up Fees

You have already earned U.S. $5 for arriving to the experiment on time. It will be paid to you in cash with your payoff from the game at the end of the experiment.

Complete Privacy

This experiment is structured so that no one, neither the experimenters nor the other subjects nor anyone else will ever be able to link your name or other identifying information to your decision. This is accomplished by the following procedure. You have received a key contained in a sealed envelope when you walked in the room. Your identifying mark in this experiment is the number on your key which is known only by you and which you will enter by yourself in the computer. After you finish the decision-making game, you will collect your money payoff contained in a sealed envelope, from a mailbox that only you can open with your key. Your privacy is guaranteed because neither your name nor your student ID number will be entered in your computer or appear on any form that records your decisions in this experiment.

At the end of the experiment, you will walk one by one to the hallway where the mailboxes are to collect your money payoff envelope. The key and mailbox are labeled with the same number. But you will be the only person having that key and the only one who knows your key number. While collecting the envelope from your mailbox, you are kindly requested not to open it immediately. You should wait until you leave the building. After collecting the envelope, you must return your key by throwing it in a key-return box in the hallway.