

Sample Instructions

Action-Plus-Advice

Introduction

This is an experiment in the economics of decision-making. A research foundation has provided funds for conducting this research.

Your earnings will depend partly on your decisions and partly on chance. If you follow the instructions and make careful decisions, you may earn a considerable amount of money.

At this time, you will receive \$5 as participation fee (simply for showing up on time). Details of how you will make decisions and gain subsequent earning will be provided below.

In this experiment, you will participate in 15 independent and identical (of the same form) decision problems.

In all decision problems, all participants take decisions one after the other (hereafter, line of participants). In each decision problem, you will be randomly assigned a position in the line of participants, labeled 1,2,...,8. When you are being called to make your first decision you will be informed of your position along the line of participants for the first decision problem. After all have participated in the first decision problem, you will be then randomly placed in the line of participants for the second decision problem. Again, upon being called to make your second decision you will be informed of your position along the new line for the second decision problem, and so on.

Before you make your decision in any given decision problem, you will observe the action of the participant before you in line, and you will be given advice as to what he or she thinks the correct action to take is.

Your position along the line of participants of each decision problem depends solely upon chance and is independent of your position along the line of participants of any other decision problem.

Next, we will describe in detail the process that will be repeated in all 15 decisions problems.

A decision problem

Each decision problem starts by having the computer randomly selecting eight numbers x_1, x_2, \dots, x_8 from the set of real (including decimals) numbers $[-10,10]$. That is, x_1 is equally likely to be any real number between -10 and 10 , x_2 is equally likely to be any real number between -10 and 10 , and so on.

The numbers selected in each decision problems are independent of each other and of the numbers selected for any of the other decision problems.

You will be informed only of the number corresponding to your position along the line of participants. For example, if you are the third participant, when it is your turn to move, you will

be told only what is the value of x_3 . The value of this number is your private information and should not be shared with any of the other participants. Each of the other participants will also be informed only on the number that corresponds to her position along the line of participants.

In each decision problem, you will be asked to choose one of the actions – **A** or **B**. Action **A** will yield you a payment of \$2 when the sum of the eight numbers $x_1 + x_2 + \dots + x_8$ is positive (including zero) and nothing when this sum is negative. Conversely, action **B** will yield you a payment of \$2 when the sum of the eight numbers $x_1 + x_2 + \dots + x_8$ is negative and nothing when this sum is positive.

That is, **action A is profitable if and only if $x_1 + x_2 + \dots + x_8 \geq 0$, and action B is profitable if and only if $x_1 + x_2 + \dots + x_8 < 0$.**

Unless you are the first in the line of participants, you will be preceded by another participant. You will be able to observe the action of the participant who made a decision just before you in line. In addition, that participant will be allowed to give you advice as to what is the right action to take, **A** or **B**.

For example, if you are the fifth participant to choose, you will be informed what action the fourth participant has taken and what is her or his advice as to what is the right action to take. Note that each of the other participants will also observe the action and be advised by the participant who made a decision just before her. Thus, unless you are the first participant to do the decision problem, when it will be your turn, you will be given advice by the participant who made a decision just before you and observe her or his action.

After observing the action that has been taken by the participant before you and being given her or his advice, but **before** being informed what is the value of the number corresponding to your position along the line of participants, say x_i , you will make your decision.

Instead of choosing action A or action B directly, however you will have to state the minimum number, x_i , between –10 and 10 for which you wish to choose action A.

Only after submitting your decision, will the computer inform you what is the value of the number corresponding to your position along the line of participants. The computer will then record your action as **A** if this number is equal to or higher than the minimum value you stated. Otherwise, the computer will record your action as **B**.

After this information has been given to you, you will be prompted to give advice to the next participant on line.

For example, suppose you are the fourth participant to make a decision. Then, you may observe the following information before you make your choice.

<u>Participant</u>	<u>Action</u>	<u>Advice</u>
3	A	A

The fact that participant 3 took action **A** tells you that x_3 was equal to or higher than the minimum value given by the participant 3 for choosing action **A**. In addition, participant 3 advises you that, in her view, action **A** is the best action for you to take.

Next, you will have to state a minimum number, say y , between -10 and 10 for which you wish to choose action **A**.

Only then will you be informed by the computer what is the value of x_4 . The computer will record your action as **A** if $x_4 \geq y$ and will record your action as **B** if $x_4 < y$.

Unless you are the last participant in the line, you will then be prompted to give advice to your successor what is the right action to take, **A** or **B**.

After all participants have made decisions, the computer will inform everyone what the sum of the eight numbers, $x_1 + x_2 + \dots + x_8$, actually was.

Everyone whose decision determines her action as **A** earns \$2 if $x_1 + x_2 + \dots + x_8 \geq 0$ and nothing if $x_1 + x_2 + \dots + x_8 < 0$. On the other hand, everyone whose decision determines her action as **B** earns \$2 if $x_1 + x_2 + \dots + x_8 < 0$ and nothing if $x_1 + x_2 + \dots + x_8 \geq 0$.

Payoffs

Your final payoff in the experiment will be composed to two parts. First, we will pay you the sum of all of your earnings in each of the 15 decision problems you have participated in. In addition, in all of the decision problems you will be paid \$1 if your successor makes the correct decision. This is paid to you to insure that the advice you give to your successor is your best guess as to what the right action is. Hence, giving your best guess as to what you think is correct to your successor is the best way to maximize your earnings.

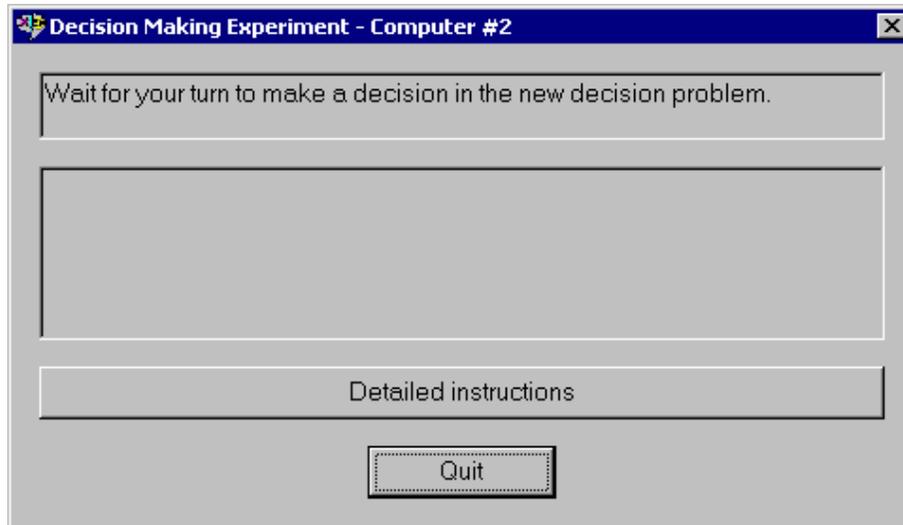
Rules

Please do not talk with anyone during the experiment. We ask everyone to remain silent until the end of the last decision problem. Your participation in the experiment and any information about your earnings will be kept strictly confidential. Your payment's receipt and participant form are the only places in which your name and social security number are recorded. If there are no further questions, at this time we will move to describe the computer program that you will use to make your decisions.

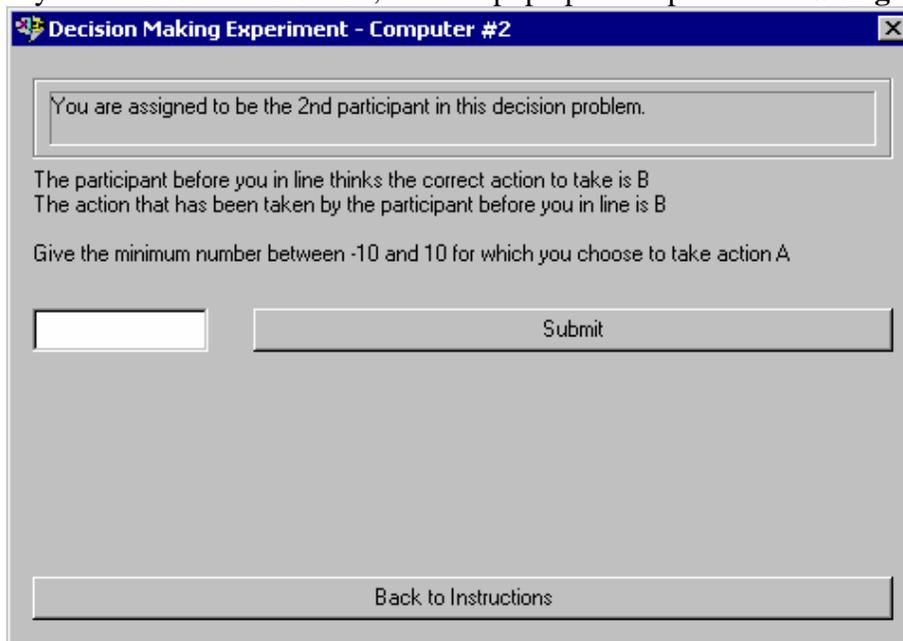
The Computer Program Description

To make your decisions you will use the computer. To begin with, one of the instructors will activate your program. At the beginning of the first decision problem, the **waiting window** (shown below) will pop up and will appear on your screen until it is your turn to participate.

At this point, take a minute to write down the number of the computer you are using as appears on the top line of the **waiting window**. At the end of the experiment, you should use your computer number to claim your cumulative earnings.



After everyone assigned a position before you in line have made his or her decisions, you will be called to make your decision. At this time, the will pop up and replace the **waiting window**.



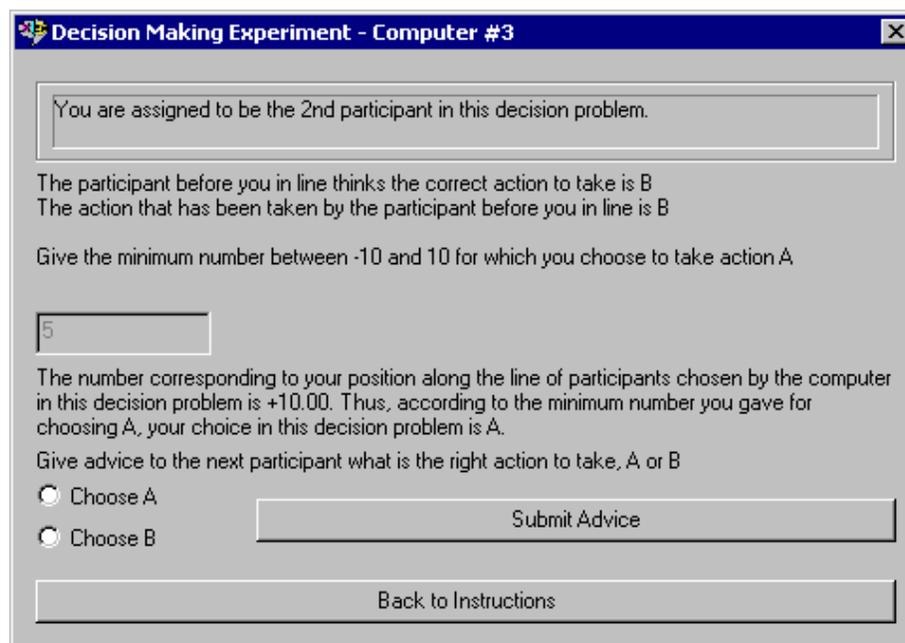
On the top of the **program dialog window**, you will be informed of your position along the line of participants for this decision problem. The action and the advice of your predecessor are given to you in the large window that appears below.

When you are ready to make your decision, all you need to do is just use the mouse to click on the window that says **Give the minimum number for which you choose to take action A** on the **program dialog window**.

Then, use the keyboard to fill a real (including decimals) or an integer as the minimum number between -10 and 10 for which you wish to choose action **A**. After that, confirm your decision by clicking on the **Submit** button.

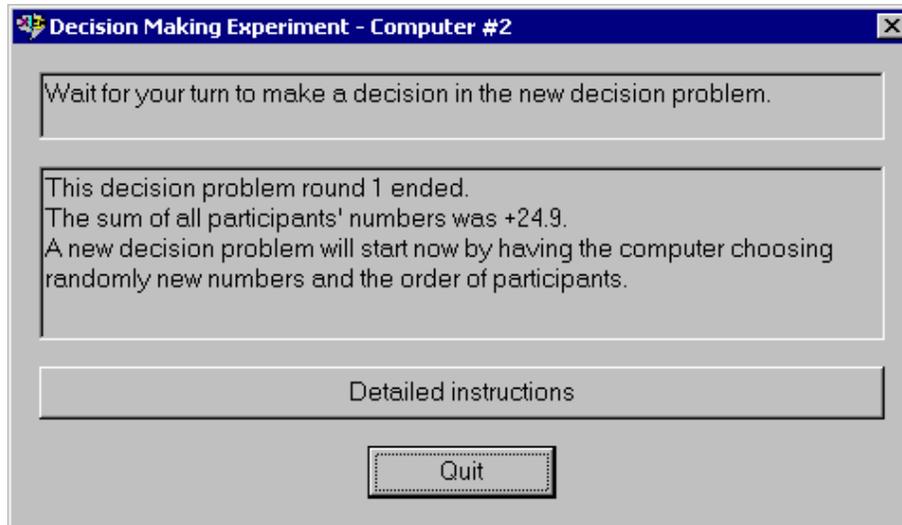
After you will submit your decision, the computer will inform you in the **program dialog window** what is the value of the number corresponding to your position along the line of participants and what action has been recorded according to your decision.

Then, you will need to give the next participant in the line advice whether the correct action to take is **A** or **B**. After that, confirm your decision by clicking on the **Submit** button. To end your participation in this decision problem press the **OK**.



At that point, your **waiting window** will pop up again and the next participant will be called to make her decision. The first decision problem will end after all participants have made their decisions. Then, all will be informed in the **waiting window** what the sum of the eight numbers, $x_1 + x_2 + \dots + x_8$, in the first decision problem actually was.

After letting you observe the results of the first decision problem, the second decision problem will start by having the computer randomly selecting eight new numbers x_1, x_2, \dots, x_8 and a new participations' line. Again, you will observe the **waiting window** until it will be your turn to participate in the second decision problem.



This process will be repeated until all 15 independent and identical decision problems are completed. At the end of the last decision problem, you will be informed about the end of the experiment.

If there are no further questions, you are ready to start. An instructor will approach your desk and activate your program.