

## Instructions

Welcome to this experiment in the economics of decision-making. Funding for this experiment has been provided by the National Science Foundation. Please read and follow these instructions carefully. We ask that you not talk with one another for the duration of the experiment. If you have a question at any time, please raise your hand and your question will be answered in private.

In today's session you will play 16 games. Each game will consist of 3 rounds.

At the start of each game you will be randomly paired with another player in the room. You will not know the name of this player nor will s/he be able to identify you by name even after the session is over. For record keeping purposes you will be identified only by the player ID number that was given to you at the start of this experiment. Please write this number down on your record sheet.

In the first round of each game, you and the player with whom you are randomly paired -- your "partner" -- will choose between one of two possible actions, which are labeled X and Y. Click on the radio button next to either X or Y. When you are satisfied with your choice click the submit button. Record your action choice X or Y on your record sheet under the heading 'Action Choice'. You get no payoff from this first round choice, but it is important that you know the action you chose in the first round.

Your choice and that of your partner results in one of four possible outcomes: XX, XY, YX YY, where the first letter corresponds to your choice and the second to the choice of your partner. All you know is your own choice in round 1; you do not know your partner's choice in this round or in any round of the game.

After first round choices are made, the computer program randomly chooses one of the three outcomes that DID NOT result from you and your partner's first round choices and designates this one outcome as the "success outcome". You are not informed of the outcome that the program has chosen as the success outcome, though you do know that the success outcome is *not* the outcome that resulted from the choices made by you and your partner in the first round. All three of the other outcomes have an equal probability of being chosen as the success outcome. The success outcome will remain the same in the remaining rounds 2 and 3 of the game.

Round 2 then begins. Your computer monitor reminds you of the choice you made in round 1 and asks you to specify a probability, between 0 and 1 inclusive, with which you would like to *change* the action choice you chose in round 1 to the other choice. That is, if you chose action X (action Y) in round 1 you are indicating the probability with which you would like to switch to action Y (action X) in round 2. Entering a probability of 0 means you will definitely choose the same action in round 2 that you chose in round 1 and entering a probability of 1 means you will definitely switch in round 2 to the action you did not choose in round 1. To enter a probability between 0 and 1, type a decimal point, followed by your probability, .zzz (up to 6 digits). In that case, in round 2 you will

switch to the action you did not choose in round 1 with probability .zzz and you will not switch from your round 1 action with probability  $1 - .zzz$ . When you are satisfied with your choice, click the submit button. You can change your choice anytime prior to clicking the submit button. Please record your switching probability for round 2 on your record sheet under the heading: 'Probability of Switching'.

Once all players have clicked submit, the computer program will determine any probabilistic choices by drawing a random number between 0 and 1. If the random number drawn is less than or equal to your chosen switching probability, your action choice in round 2 will be the other action – the one you did not choose in round 1, while if the random number is greater than your specified probability cut-off, your action choice in round 2 will be the same as your action choice in round 1.

More precisely, suppose you choose some probability .zzz, where  $0 < .zzz < 1$ . If the random number drawn between 0 and 1 is less than or equal to .zzz, your action choice in round 2 will be the other action -- the one you did not choose in round 1. Otherwise, your action choice in round 2 will be the same as your action choice in round 1. Thus, by choosing a probability of 1, you *always* switch your action since the random number drawn is always less than 1. On the other hand, by choosing a probability of 0 you *never* switch your action since the random number drawn is always greater than 0. Any probability between 0 and 1 means there is only some chance that you will switch your choice; the chance of switching (not switching) is higher (lower) the greater is the value of .zzz that you specify.

Once *all* players have entered a probability of switching, the results for round 2 will be revealed. You will see the action you chose (X or Y) and whether you and your partner have achieved the success outcome in round 2. You are not informed of your partner's choice. Please record your action choice (X or Y) for round 2 on your record sheet under the heading: 'Action Choice'.

If you and your partner achieved the success outcome in round 2, both of you earn \$1 for the game. Record a Y for yes under the 'Success?' column of your record sheet and enter the amount \$1 in the 'Payoff' column. You will then sit out the third and final round of the game - your payoff for the third round is 0. Please sit quietly at your workstation. When round 3 begins you just need to click the submit button to continue on to the next game.

If you and your partner did not achieve the success outcome in round 2, you will record an N for no under the 'Success?' column of your record sheet. You and your partner will have another chance to achieve the success outcome in round 3. You will be reminded of your action choice in round 2. You are then asked to specify a probability between 0 and 1 inclusive with which you would like to *change* the action choice you made in round 2 to the other choice. As in round 2, a probability of 0 means you will definitely choose the same action in round 3 as you chose in round 2 and a probability of 1 means you will definitely switch in round 3 to the action you did not choose in round 2. If you specify any probability in between 0 and 1, then you will switch in round 3 to the action you did

not choose in round 2 with that probability and you will not switch from your round 2 action with probability 1 minus your chosen probability. As before, to enter a probability between 0 and 1, type a decimal point, followed by your probability, .zzz.

When you are satisfied with your choice, click the submit button. You can change your choice anytime prior to clicking the submit button. Please record your probability choice for round 3 on your record sheet under the heading: 'Probability of Switching'.

Once *all* players have clicked submit, the computer will determine any probabilistic choices in the same manner as described above for round 2. The results of round 3 will then be revealed. You will see the action you chose and whether you and your partner have achieved the success outcome in round 3. Again, you will not be informed of your partner's choice. Please record your action choice (X or Y) for round 3 on your record sheet under the heading: 'Action Choice'.

If you have achieved the success outcome in round 3, you and your partner will each earn 50 cents for the game. You will record a Y for yes under the 'Success?' column of your record sheet and enter the amount \$0.50 in the 'Payoff' column. If no success has been reached in this third and final round of the game, you and your partner each earn a payoff of 0 for the game. In that case, you will record an N for no under the 'Success?' column of your record sheet and enter the amount 0 in the 'Payoff' column. The completion of round 3 marks the end of a game.

If the 8<sup>th</sup> game has not yet been played, you will proceed to play another three round game following the same procedures as described above.

In this next three-round game you will be randomly matched with another player who is *not* the same player you played in the previous game.

Following the first round of play a success outcome will be randomly chosen from among the three outcomes you and your new partner did not choose in the first round. Play then proceeds as before.

At the end of the session you will be paid your earnings from all games played in cash. Following the completion of the 8<sup>th</sup> game you will receive further instruction.

Are there any questions before we begin?

Game	Round No.	Probability of Switching	Action Choice (X or Y)	Success? Y/N	Payoff (\$1 or \$0.50)
1	1	--		--	--
1	2				
1	3				
2	1	--		--	--
2	2				
2	3				
3	1	--		--	--
3	2				
3	3				
4	1	--		--	--
4	2				
4	3				
5	1	--		--	--
5	2				
5	3				
6	1	--		--	--
6	2				
6	3				
7	1	--		--	--
7	2				
7	3				
8	1	--		--	--
8	2				
8	3				
Total Amount					

### **Instructions, Continued**

You will play 8 more three-round games. The rules for these next 8 games are identical to the rules for the first 8 games. The only difference is in the payoff amounts you receive if you achieve the success outcome in round 3. If you and your partner achieve the success outcome in round 2, you both earn \$1 as before. But in the remaining 8 games, if you and your partner achieve the success outcome in round 3, you both earn \$6 (rather than \$0.50 as in the first 8 games). That is the only difference.

As in the first 8 games, at the end of each game you will be randomly matched with another player in the room. This player will *not* be the same player with you whom you played the immediate past game.

Again, you get to keep your earnings from all games played.

Are there any questions before we begin?

Game	Round No.	Probability of Switching	Action Choice (X or Y)	Success? Y/N	Payoff (\$1 or \$6)
9	1	--		--	--
9	2				
9	3				
10	1	--		--	--
10	2				
10	3				
11	1	--		--	--
11	2				
11	3				
12	1	--		--	--
12	2				
12	3				
13	1	--		--	--
13	2				
13	3				
14	1	--		--	--
14	2				
14	3				
15	1	--		--	--
15	2				
15	3				
16	1	--		--	--
16	2				
16	3				
Total Amount Games 9-16					
Total Amount Games 1-8*					
Total Amount All 16 Games**					

\* Enter the total amount from previous record sheet.

\*\* Add together the amounts in the previous two boxes.