

# Experimenting with Equilibrium Selection in Dynamic Games For Online Publication: Appendix C - Screenshots and Instructions

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## C1 Interface Screenshots

Cycle: 1		Round: 1	
<b>Table: Red</b>			
Please select a row			
The Other's Choice			
		A	B
Your Choice	A	100, 100	30, 125
	B	125, 30	60, 60

Figure C.1: Entering Supergame

Cycle: 1		Round: 1	
<b>Table: Red</b>			
Please select a row			
The Other's Choice			
		A	B
Your Choice	A	100, 100	30, 125
	B	125, 30	60, 60
<input type="button" value="Submit"/>			

Figure C.2: Making an action choice

Cycle: 1		Round: 1		Table: Red		
				Outcome in This Round		
				The Other's Choice		
					A	B
				Your Choice	A	100, 100
	B	125, 30	60, 60			
				Table Next Round: Blue		
				Move On		

Figure C.3: Feedback on outcome

**You will find out if this round counts for payment after Round 5.  
 There will be a New Round still in the same Cycle.**

Move On

Figure C.4: Reminder of block design

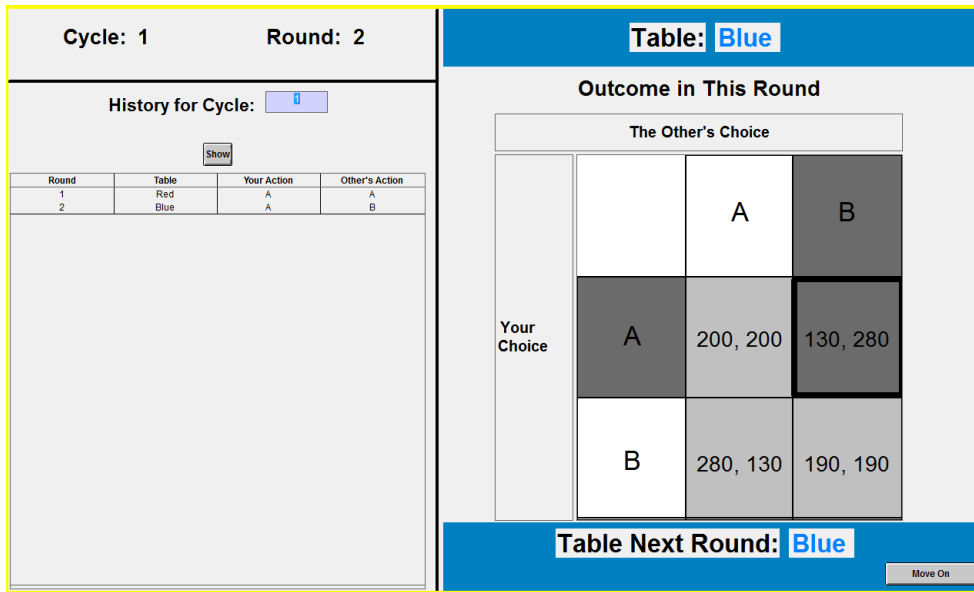


Figure C.5: After period two choice

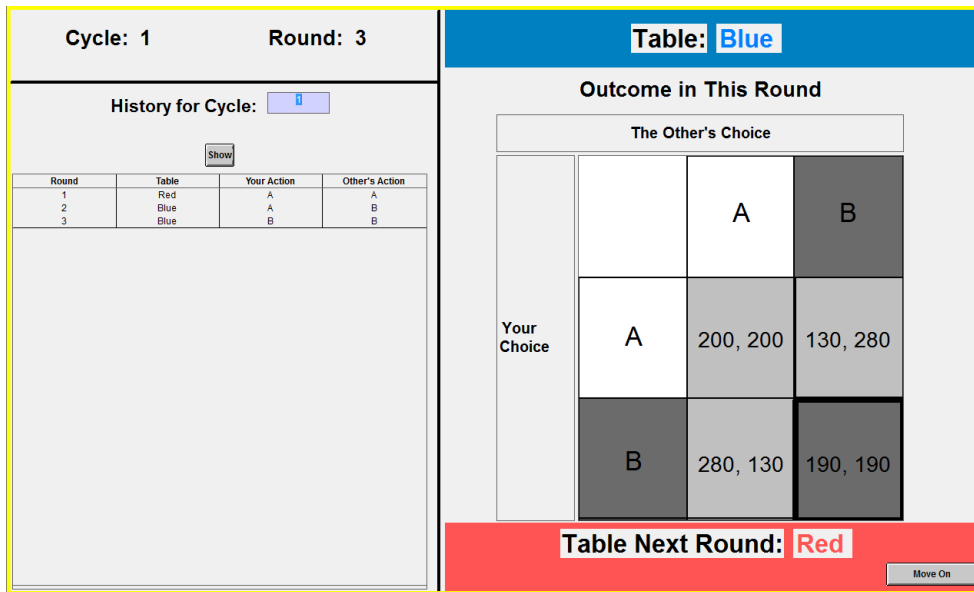


Figure C.6: After period three choice

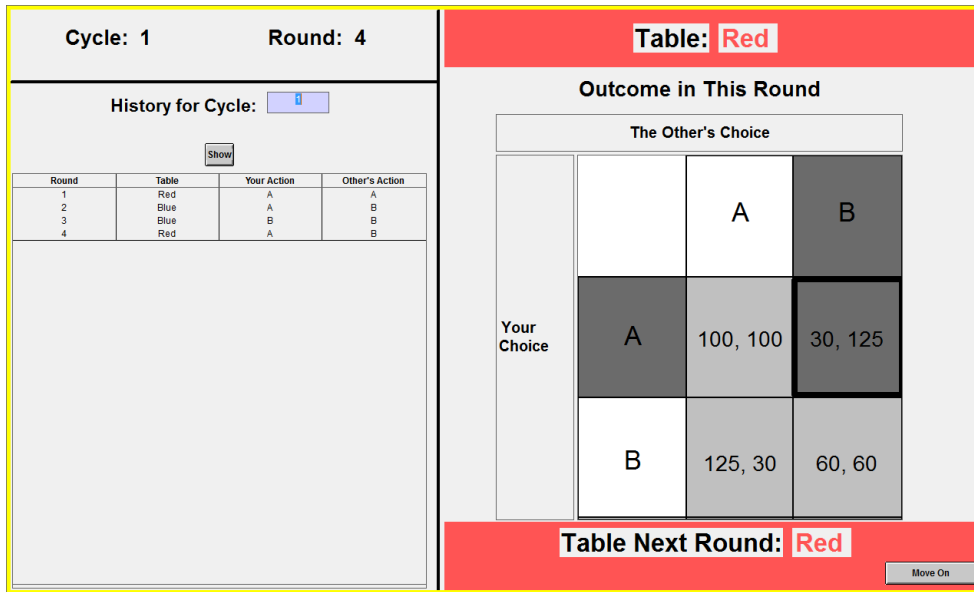


Figure C.7: After period four choice

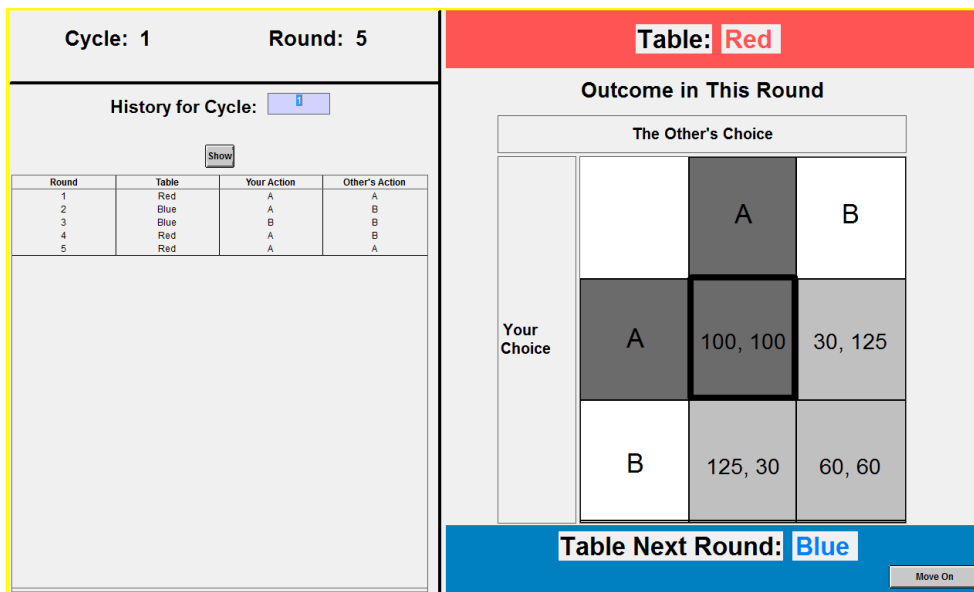


Figure C.8: After period five choice

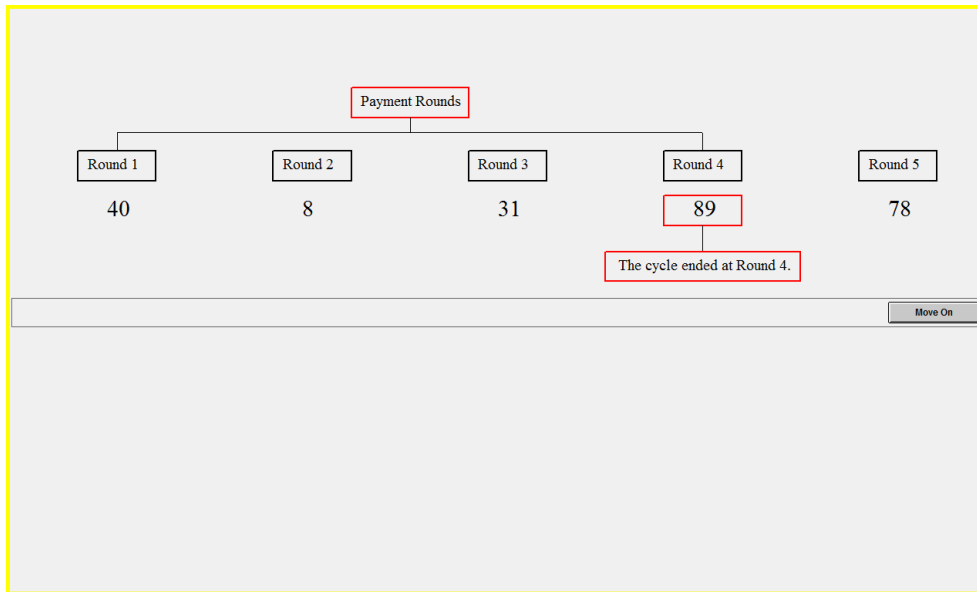


Figure C.9: Block summary for supergame than ended within block

## C2 Pivot Script

The following attachment is the instructions for the En-DPD pivot treatment (subjects have a physical copy of this, and the instructions were read aloud.) The instructions here are representative for the following treatments:

- En-DPD
- En-DPD-CC
- En-DPD-HT
- Ex-DPD
- Ex-SPD
- En-DCP-M
- En-DCP-E

## Instructions

### Welcome

You are about to participate in an experiment on decision-making. What you earn depends partly on your decisions, partly on the decisions of others, and partly on chance. Please turn off cell phones and similar devices now. Please do not talk or in any way try to communicate with other participants. We will start with a brief instruction period. During the instruction period you will be given a description of the main features of the experiment. If you have any questions during this period, raise your hand and your question will be answered so everyone can hear.

### General Instructions

- In this experiment you will be repeatedly matched with another randomly selected person in the room. Your interaction with this other participant will be referred to as a **Cycle**. In each cycle, you will be asked to make decisions over a sequence of rounds.
- The number of rounds in a cycle is randomly determined as follows:
  - After each round, there is an 75% probability that the cycle will continue for at least another round of payment.
  - At the end of each round the computer rolls a 100-sided die.
  - If the number that comes up is less than or equal to 75, payment continues, if the number is larger than 75 then subsequent rounds stop counting toward your payment.
  - For example, if round 2 counts for payment, the probability that the third round will count is 75%. If round 9 counts, the probability that round 10 counts is also 75%. In other words, at any point in a cycle, the probability that payment in the cycle continues is 75%.
- Once a cycle is completed, you will be randomly paired with another participant in the room for a new cycle. You will not know with whom you have interacted in any cycle, nor will others know that they have interacted with you. You will only know that in each particular cycle you are interacting with the same other participant.
- In each round, your payoff depends on your choice, and that of the participant you are paired with.
- In each round your payoff can be determined by the **Red Table** or the **Blue Table**.
- The first round of every cycle counts for payment, and the **Red Table** will always determine the first round's payoff. Your payoff depends on your choice and the choice of the other participant:



- If you select **A**, and they select **A**, your payoff is \$1.00 and their payoff is \$1.00.
- If you select **A**, and they select **B**, your payoff is \$0.30 and their payoff is \$1.25.
- If you select **B**, and they select **A**, your payoff is \$1.25 and their payoff is \$0.30.
- If you select **B**, and they select **B**, your payoff is \$0.60 and their payoff is \$0.60.

### Red Table

The table below summarizes all the possible payoffs, in cents:

		Their Choice:	
		A	B
Your Choice :	<b>A</b>	<b>100¢</b> <i>100¢</i>	<b>30¢</b> <i>125¢</i>
	<b>B</b>	<b>125¢</b> <i>30¢</i>	<b>60¢</b> <i>60¢</i>

In this table, the rows indicate your choices and the columns the choices of the participant you are paired with. The first number in each cell (in bold) represents your payoff, and the second number (in italics) is the payoff of the participant you are paired with.

- The first round of every cycle counts for payment, and the **Red Table** will always determine the first round's payoff. Your payoff depends on your choice and the choice of the other participant:
  - If you select **A**, and they select **A**, your payoff is \$1.00 and their payoff is \$1.00.
  - If you select **A**, and they select **B**, your payoff is \$0.30 and their payoff is \$1.25.
  - If you select **B**, and they select **A**, your payoff is \$1.25 and their payoff is \$0.30.
  - If you select **B**, and they select **B**, your payoff is \$0.60 and their payoff is \$0.60.

### Red Table

The table below summarizes all the possible payoffs, in cents:

		Their Choice:	
		A	B
Your Choice :	<b>A</b>	<b>100¢</b> <i>100¢</i>	<b>30¢</b> <i>125¢</i>
	<b>B</b>	<b>125¢</b> <i>30¢</i>	<b>60¢</b> <i>60¢</i>

In this table, the rows indicate your choices and the columns the choices of the participant you are paired with. The first number in each cell (in bold) represents your payoff, and the second number (in italics) is the payoff of the participant you are paired with.

- After you and the participant you are paired with make your choices, the outcome will be presented to you on your screen. If both of you selected **A**, the next round your payoffs will be determined by the **Blue Table**. Otherwise, your payoffs next round will be determined by the **Red Table** again.
- After you and the participant you are paired with make your choices, the outcome will be presented to you on your screen. If both of you selected **A**, the next round your payoffs will be determined by the **Blue Table**. Otherwise, your payoffs next round will be determined by the **Red Table** again.

### Blue Table

The table below summarizes all the possible payoffs, in cents:

		Their Choice:	
		<b>A</b>	<b>B</b>
Your Choice :	<b>A</b>	<b>200¢</b> <i>200¢</i>	<b>130¢</b> <i>280¢</i>
	<b>B</b>	<b>280¢</b> <i>130¢</i>	<b>190¢</b> <i>\$190¢</i>

- If at a particular round your payoffs are determined by the **Blue Table**, then the payoffs depending on your choice and the choice of the other participant are:
  - If you select **A**, and they select **A**, your payoff is \$2.00 and their payoff is \$2.00.
  - If you select **A**, and they select **B**, your payoff is \$1.30 and their payoff is \$2.80.
  - If you select **B**, and they select **A**, your payoff is \$2.80 and their payoff is \$1.30.
  - If you select **B**, and they select **B**, your payoff is \$1.90 and their payoff is \$1.90.

		Their Choice:	
		<b>A</b>	<b>B</b>
Your Choice :	<b>A</b>	<b>200¢</b> <i>200¢</i>	<b>130¢</b> <i>280¢</i>
	<b>B</b>	<b>280¢</b> <i>130¢</i>	<b>190¢</b> <i>\$190¢</i>

- If at a particular round your payoffs are determined by the **Blue Table**, then the payoffs depending on your choice and the choice of the other participant are:
  - If you select **A**, and they select **A**, your payoff is \$2.00 and their payoff is \$2.00.
  - If you select **A**, and they select **B**, your payoff is \$1.30 and their payoff is \$2.80.
  - If you select **B**, and they select **A**, your payoff is \$2.80 and their payoff is \$1.30.
  - If you select **B**, and they select **B**, your payoff is \$1.90 and their payoff is \$1.90.
- At any round when your payoffs are determined by the **Blue Table**, if **either** you **or** the other select **A**, then next round your payoffs will be determined by the **Blue Table** again. Otherwise, if both you and they select **B**, then next round the payoffs will be determined by the **Red Table**.
- At any round when your payoffs are determined by the **Blue Table**, if you **and** the other select **A**, then next round your payoffs will be determined by the **Blue Table** again. Otherwise, your payoffs next round will be determined by the **Red Table**.
- Once a cycle ends you are randomly matched with another participant and start a new cycle. There will be 15 cycles in this experiment.

How your payoff is determined:

- In each cycle you will make choices for the first 5 rounds without knowing whether or not the cycle payment has stopped.
- At the end of the fifth round the interface will display on the screen the results of the 100-sided die roll for each of the first 5 rounds.
- If the roll of the 100-sided die was higher than 75 for **any** of the first five rounds, the cycle will end, and the last round for payment is the first where the 100-sided die roll is higher than 75. The interface will add your payoffs up to and including the round where the cycle payment finished.

- For example, assume that the 100-sided die in the first five rounds results in: 40, 84, 3, 95, 65. Because 84 is higher than 75 the cycle would be over in the second round. The interface will add your payoffs for your round 1 and round 2 choices.
- If the 100-sided die rolls were lower than or equal to 75 for all of the first five rounds, there will be a sixth round. From the sixth round onwards the interface will display the 100-sided die roll round-by-round. The cycle will end in the first round where the 100-sided die roll is higher than 75. The interface will add your payoffs for all rounds until the cycle's final round.
  - For example, assume that the 100-sided die in the first five rounds results in: 51, 24, 53, 75, 6. Because all five are lower than or equal to 75 there will be another round, so the cycle continues to round 6. After round 6 you are shown the 100-sided die roll is 28, so the cycle continues to round 7. After round 7 you are shown that the 100-sided die roll was 97, so the cycle ends. The interface will add your payoffs from rounds 1 to round 7 for this cycle.
- For final payment, the computer will choose four cycles for payment from the 15 in the experiment, where each cycle is equally likely to be chosen. If the sum of your payment over these four cycles is less than \$10.00 you will be given \$10.00 in payment.

Are there any questions?

## Summary

Before we start, let me remind you that:

- The length of a cycle is randomly determined. After every round there is an 75% probability that the cycle payment will continue for another round.
- The first round in every cycle counts for payment, and payoffs in round 1 are always determined by the **Red Table**. You and the other participant both have to make a choice: either **A** or **B**.
- If your payoffs are determined by the **Red Table** in the current round and **both** you **and** the other participant select **A**, payoffs will be determined by the **Blue Table** in the next round. If **either** you **or** the other participant select **B** the **Red Table** will be used in the next round.
- If your payoffs are determined by the **Blue Table** in the current round and **either** you **or** the other participant select **A**, payoffs will be determined by the **Blue Table** again in the next round. If **both** of you select **B** then the **Red Table** will be used in the next round.

- If your payoffs are determined by the **Red Table** in the current round and **both** you **and** the other participant select **A**, payoffs will be determined by the **Blue Table** in the next round. If **either** you **or** the other participant select **B** the **Red Table** will be used in the next round.
- If your payoffs are determined by the **Blue Table** in the current round and **both** you **and** the other participant select **A**, payoffs will be determined by the **Blue Table** again in the next round. If **either** you or the other select **B**, then the **Red Table** will be used in the next round.
- After a cycle ends, you will be randomly paired with another participant for the next cycle.

### **C3 En-DPD-*X* Script**

The following attachment is the instructions for the En-DPD-*X* treatment.

## Instructions

### Welcome

You are about to participate in an experiment on decision-making. What you earn depends partly on your decisions, partly on the decisions of others, and partly on chance. Please turn off cell phones and similar devices now. Please do not talk or in any way try to communicate with other participants. We will start with a brief instruction period. During the instruction period you will be given a description of the main features of the experiment. If you have any questions during this period, raise your hand and your question will be answered so everyone can hear.

### General Instructions

- In this experiment you will be repeatedly matched with another randomly selected person in the room. Your interaction with this other participant will be referred to as a **Cycle**. In each cycle, you will be asked to make decisions over a sequence of rounds.
- The number of rounds in a cycle is randomly determined as follows:
  - After each round, there is an 75% probability that the cycle will continue for at least another round of payment.
  - At the end of each round the computer rolls a 100-sided die.
  - If the number that comes up is less than or equal to 75, payment continues, if the number is larger than 75 then subsequent rounds stop counting toward your payment.
  - For example, if round 2 counts for payment, the probability that the third round will count is 75%. If round 9 counts, the probability that round 10 counts is also 75%. In other words, at any point in a cycle, the probability that payment in the cycle continues is 75%.
- Once a cycle is completed, you will be randomly paired with another participant in the room for a new cycle. You will not know with whom you have interacted in any cycle, nor will others know that they have interacted with you. You will only know that in each particular cycle you are interacting with the same other participant.
- In each round, your payoff depends on your choice, the choice of the participant you are paired with, and one random number **X**.
- In each round your payoff can be determined by the **Red Table** or the **Blue Table**.
- The first round of every cycle counts for payment, and the **Red Table** will always determine the first round's payoff. Your payoff depends on your choice and the choice of the other participant:
  - If you select **A**, and they select **A**, your payoff is  $\$1.00 + X$  cents and their payoff is  $\$1.00 + X$  cents.
  - If you select **A**, and they select **B**, your payoff is  $\$0.30 + X$  cents and their payoff is  $\$1.25 - X$  cents.
  - If you select **B**, and they select **A**, your payoff is  $\$1.25 - X$  cents and their payoff is  $\$0.30 + X$  cents.
  - If you select **B**, and they select **B**, your payoff is  $\$0.60 - X$  cents and their payoff is  $\$0.60 - X$  cents.

## Red Table

The table below summarizes all the possible payoffs, in cents:

		Their Choice:	
		<b>A</b>	<b>B</b>
Your Choice :	<b>A</b>	<b>100¢ + X¢</b> <i>100¢ + X¢</i>	<b>30¢ + X¢</b> <i>125¢ - X¢</i>
	<b>B</b>	<b>125¢ - X¢</b> <i>30¢ + X¢</i>	<b>60¢ - X¢</b> <i>60¢ - X¢</i>

In this table, the rows indicate your choices and the columns the choices of the participant you are paired with. The first number in each cell (in bold) represents your payoff, and the second number (in italics) is the payoff of the participant you are paired with.

- At the beginning of the round the interface selects a value for  $X$ .
  - $X$  can take on any of these numbers: -5,-4,-3,-2,-1,0,1,2,3,4,5
  - All numbers are equally likely to be selected. Thus, the value of  $X$  will likely be different in different rounds.
  - Before you make your choice for the round you will know the value of  $X$  and the interface will directly show you your total payoff in cents.
- After you and the participant you are paired with make your choices, the outcome will be presented to you on your screen. If both of you selected **A**, the next round your payoffs will be determined by the **Blue Table**. Otherwise, your payoffs next round will be determined by the **Red Table** again.

## Blue Table

The table below summarizes all the possible payoffs, in cents:

		Their Choice:	
		<b>A</b>	<b>B</b>
Your Choice :	<b>A</b>	<b>200¢ + 2X¢</b> <i>200¢ + 2X¢</i>	<b>130¢ + 2X¢</b> <i>280¢ - 2X¢</i>
	<b>B</b>	<b>280¢ - 2X¢</b> <i>130¢ + 2X¢</i>	<b>190¢ - 2X¢</b> <i>190¢ - 2X¢</i>

- If at a particular round your payoffs are determined by the **Blue Table**, then the payoffs depending on your choice and the choice of the other participant are:
  - If you select **A**, and they select **A**, your payoff is \$2.00+ $2X$  cents and their payoff is \$2.00+ $2X$  cents .
  - If you select **A**, and they select **B**, your payoff is \$1.30+ $2X$  cents and their payoff is \$2.80– $2X$  cents.
  - If you select **B**, and they select **A**, your payoff is \$2.80– $2X$  cents. and their payoff is \$1.30+ $2X$  cents .
  - If you select **B**, and they select **B**, your payoff is \$1.90– $2X$  cents. and their payoff is \$1.90– $2X$  cents. .
- At the beginning of the round the interface selects a value for  $X$ .
  - $X$  can take on any of these numbers: -5,-4,-3,-2,-1,0,1,2,3,4,5
  - All numbers are equally likely to be selected. Thus, the value of  $X$  will likely be different in different rounds.



- Before you make your choice for the round you will know the value of **X** and the interface will directly show you your total payoff in cents.
- At any round when your payoffs are determined by the **Blue Table**, if **either** you **or** the other select **A**, then next round your payoffs will be determined by the **Blue Table** again. Otherwise, if both you and they select **B**, then next round the payoffs will be determined by the **Red Table**.
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- If the 100-sided die rolls were lower than or equal to 75 for all of the first five rounds, there will be a sixth round. From the sixth round onwards the interface will display the 100-sided die roll round-by-round. The cycle will end in the first round where the 100-sided die roll is higher than 75. The interface will add your payoffs for all rounds until the cycle's final round.
  - For example, assume that the 100-sided die in the first five rounds results in: 51, 24, 53, 75, 6. Because all five are lower than or equal to 75 there will be another round, so the cycle continues to round 6. After round 6 you are shown the 100-sided die roll is 28, so the cycle continues to round 7. After round 7 you are shown that the 100-sided die roll was 97, so the cycle ends. The interface will add your payoffs from rounds 1 to round 7 for this cycle.
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- If your payoffs are determined by the **Red Table** in the current round and **both** you **and** the other participant select **A**, payoffs will be determined by the **Blue Table** in the next round. If **either** you **or** the other participant select **B** the **Red Table** will be used in the next round.
- If your payoffs are determined by the **Blue Table** in the current round and **either** you **or** the other participant select **A**, payoffs will be determined by the **Blue Table** again in the next round. If **both** of you select **B** then the **Red Table** will be used in the next round.
- After a cycle ends, you will be randomly paired with another participant for the next cycle.