Appendix B: Baseline and TS Instructions
BASELINE INSTRUCTIONS[1]

[1ST SCREEN] {Introduction}

WELCOME!
PLEASE WAIT UNTIL THE EXPERIMENTER TELLS YOU TO START

You are about to participate in an experiment in interdependent decision making. Universities and research foundations have provided the funds for this experiment. If you follow the instructions and pass the Understanding Test, you will be allowed to continue in the experiment. If you make good decisions, you may then earn a considerable additional amount of money, between \$4 and \$40. This additional amount will be determined both by your decisions and by those of other participants in the experiment. Before making your decisions, you will have the opportunity to gather information about how your earnings and the other participants' earnings depend on your and their decisions. All that you earn is yours to keep, and will be paid to you in private, in cash, after today's session.

(Click on the bar at the bottom of this screen to move on to the next screen)

[2ND SCREEN] {Silence}

It is important to remain silent and not to 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. Otherwise, if you talk, laugh, exclaim out loud, etc., YOU WILL BE ASKED TO LEAVE. Thank you.

(Click on the bar at the bottom of this screen to move on to the next screen)

[3RD SCREEN] {Games}

The experiment consists of 18 rounds. In each round, you will be anonymously matched with one of the other participants, a different one in each round. We will refer to the other participant as "s/he". In each round, you and s/he will be presented with a decision problem. Each of you, separately and independently, will make a DECISION. Together, the two decisions will determine the numbers of POINTS each of you earn that round, which may be different. Earning more points increases your payment at the end of the experiment, as explained below.

Once a round is over, you will not be able to change your decision in that round. Neither you nor the other participants will learn anyone else's decisions in any round until the entire session is over.

The next screen displays an illustrative decision problem and its table of points. IT IS ONLY AN ILLUSTRATION; the decision problems you will face in the 18 rounds will be different from this one, and will change each round. AS YOU LOOK AT THIS PROBLEM, READ THE FIRST PAGE OF THE PRINTED HANDOUT.

(Click on the bar at the bottom of this screen to move on to the next screen)

[4TH SCREEN] {2x2 table display}

[The following Table for Row subjects (or a variant for Column subjects, as explained below) will be shown to the subject on the computer screen with the boxes open.**]**

	S/He: &	S/He: @	S/He: &	S/He: @
You: #	53	21	84	22
You: *	87	49	38	65
	YOUR POINTS		HER/HIS POINTS	
I am done				

[The following is the first page of the handout.]

<u>DO NOT START READING THIS PAGE UNTIL INSTRUCTED ON THE SCREEN TO DO SO</u>

In the actual decision problems, you will be shown a table like this (but with different numbers of points) on your screen, and asked to choose one of your decisions, here labeled # and *. The other participant with whom you are matched will be asked, independently, to choose one of her/his decisions, here labeled & and @.

The combination of your decision and her/his decision is called an OUTCOME. The number of points you and s/he receive for an outcome will be whole numbers from 0 to 99. Your points appear in the boxes on the left side of the table, labeled "YOUR POINTS" underneath. Her/His points appear in the boxes on the right side of the table, labeled "HER/HIS POINTS" underneath. To interpret the table, consider the results of the possible outcomes (that is, combinations of decisions):

- If you choose # and s/he chooses @, **s/he** earns 22 points.
- If you choose * and s/he chooses @, **you** earn 49 points.
- If you choose # and s/he chooses &, **you** earn 53 points.
- If you choose * and s/he chooses &, **s/he** earns 38 points.
- If you choose # and s/he chooses &, **s/he** earns 84 points.
- If you choose # and s/he chooses @, **you** earn 21 points.
- If you choose * and s/he chooses &, **you** earn 87 points.
- If you choose * and s/he chooses @, **s/he** earns 65 points.

In each round of the actual decision problems, you will see a new table and you will be matched with a different participant. As in this problem, the points that you and s/he earn will depend on both your decisions.

Please be sure you understand the table. Raise your hand if you would like further explanation. Otherwise, move to the next screen by clicking on the box "I am done".

<u>DO NOT TURN TO THE NEXT PAGE BEFORE INSTRUCTED ON THE SCREEN TO DO SO.</u>

[This completes the first page of the handout.]

[5TH SCREEN] {Covered-boxes explanation}

In the actual experiment, the points in a table, like the one on the previous screen, will not be openly displayed. Instead they will be "hidden" in the boxes, as if the boxes were covered. However you will be able to open any box, just by POINTING AT it with the mouse (that is, moving the cursor into the box by sliding the mouse) and CLICKING the LEFT button of the mouse. You may open as many or as few boxes as you wish, as often and as long as you wish, and in any order. However, you will be able to have only one box open

at a time. If you want to open a new box, you will have to close the previous box first by CLICKING the RIGHT button of the mouse. YOU ARE NOT ALLOWED TO WRITE DOWN THE NUMBERS IN THE BOXES. If you would like to know the number of points in a box that you do not remember, just open that box again.

The points will also be hidden on her/his screen, and s/he will be able to open the boxes in the same way, subject to the same restrictions.

The next screen displays the same illustrative table as before, but with the boxes covered. Use the mouse to practice opening boxes until you feel comfortable with the procedure. Then move on to the following screen by CLICKING the box "Next Screen". For further explanation, raise your hand.

(Click on the bar at the bottom of this screen to move on to the next screen)

[6TH SCREEN] {2x2 table display}

[The table displayed below will be shown on the computer screen with the boxes covered.]

	S/He: &	S/He: @	S/He: &	S/He: @
You: #	53	21	84	22
You: *	87	49	38	65
	YOUR POINTS		HER/HIS POINTS	
	Next Screen			

[7TH SCREEN] {Different table formats}

In some rounds of the experiment, you will be asked to choose one of THREE possible decisions, labeled #, *, and ^; while the other participant with whom you are matched will be asked to choose from TWO decisions, as before. Thus, the table of points will have an extra row of boxes. In some other rounds, s/he will be asked to choose one of THREE possible decisions, labeled &, @, and %; while you will be asked to choose from TWO decisions. Thus, the table of points will have two extra columns of boxes (one for your points, one for her/his points). The following screen illustrates the case when you have three possible decisions and s/he has two. Please raise your hand if you have any questions. Otherwise move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[8TH SCREEN] {Example of a 3x2 table}

[The Table below will be shown to the subject with the boxes closed.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: *	54	67	64	42
You: ^	89	21	35	13
You: #	35	82	91	68
	YOUR POINTS		HER/HIS POINTS	
	Next Screen			

[9TH SCREEN] {Making decisions}

To complete a given round, you must make a decision. (Remember that the number of points you obtain in any given round will depend on both your AND her/his decisions). Your possible decisions will be displayed in decision boxes below the table of points. To make a decision, use the mouse to point at the chosen decision, then click any button on the mouse. The screen will then ask you to confirm your decision. At that time, you can change your mind by pointing to and clicking on a different decision box, after which you will again be asked to confirm your decision. Once you confirm a decision, you cannot change it.

The next screen displays the same illustrative table as before, but with decision boxes. Notice the boxes in which the possible decisions are displayed, under the table of points. For practice, point at one of them and click on the mouse. Then either confirm the decision or, if you wish, change the decision and then confirm. Raise your hand if you have questions.

(Click on the bar at the bottom of this screen to move on to the next screen)

[10TH SCREEN] {Practicing decisions in a 3x2 table}

[The Table below will be shown to the subject with the boxes closed.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: *	54	67	64	42
You: ^	89	21	35	13
You: #	35	82	91	68
	YOUR POINTS		HER/HIS POINTS	
	You: *	You: ^	You: #	

[11TH SCREEN] {Different table formats}

In some rounds of the experiment, you will be asked to choose one of FOUR possible decisions, labeled #, *, ^, and <>; while the other participant with whom you are matched will be asked to choose from TWO decisions, as before. Thus, the table of points will have four rows of boxes. In some other rounds, s/he will be asked to choose one of FOUR possible decisions, labeled &, @, %, and /\; while you will be asked to choose from TWO decisions. Thus, the table of points will have eight columns of boxes (four for your points,

four for her/his points). Please raise your hand if you have any questions. Otherwise move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[12TH SCREEN] {Understanding Test}

UNDERSTANDING TEST

You will now take a short UNDERSTANDING TEST. After you finish the TEST it will be graded and you will only be allowed to continue in the experiment if you have answered ALL the QUESTIONS CORRECTLY.

Turn to the SECOND page of the handout, which contains the test questions, and move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[13TH SCREEN] {Test using a 2x3 table}

[The Table below will be shown to the subject with the boxes closed.]

	S/He: %	S/He: @	S/He: &	S/He: %	S/He: @	S/He: &
You: *	25	64	63	35	29	53
You: #	97	41	32	19	68	12
	YOUR POINTS			HER/HIS POINTS		
	You: *			You: #		

[The following questions will be written on the 2nd page of the handout.]

Please write your identification number just above. Then, by reference to the table of points on the screen, answer the following questions. Note that the screen allows two choices for you and three for her/him.

Questions:

1. If you choose * and s/he chooses @, how many points will **you** earn? _____.
2. If you choose # and s/he chooses &, how many points will **you** earn? _____.
3. If you choose # and s/he chooses @, how many points will **s/he** earn? _____.
4. If you choose # and s/he chooses %, how many points will **s/he** earn? _____.

After you have answered the questions, please point at one of the decision boxes, click on it, and confirm it. In the actual experiment you will click on the box corresponding to the decision you want to choose.

YOU HAVE JUST COMPLETED THE TEST.

Please raise your hand until the experimenter sees you. He will come to collect your test.

DO NOT TURN TO THE NEXT PAGE BEFORE INSTRUCTED ON THE SCREEN TO DO SO.

[This sentence completes the second page of the handout.]

[14TH SCREEN] {Matching protocol}

In each round of the experiment, you will be anonymously matched with a different participant and both of you will face the same interdependent decision problem. Your decisions in a round will not influence the matching of participants or assignment of decision problems in later rounds. Your identity and the identities of

the other participants will never be revealed. Each participant you are matched with will receive the same instructions as you and will face the same kind of screen display.

At the conclusion of each round, you will see a screen asking you to proceed to the next round. If you wish, you may rest before proceeding. However, we ask you not to rest during a round. This screen will also tell you how many possible decisions you and the participant assigned to you in the next round will have to choose from.

After each round the computer will record the number of points you earned, but will not report the number to you. Your point earnings for each individual round will be reported to you (and only to you) at the end of the experiment. Your point earnings will then be used to determine your payment, as described next.

(Click on the bar at the bottom of this screen to move on to the next screen)

[15TH SCREEN] {Payment}

PAYMENT

After you have made your decisions for all 18 rounds, your payment will be determined according to the number of points you earned, as follows:

One of the 18 rounds will be selected at random, and you will be paid $.40 (forty cents) per point for your points on that round. The selection of the round will take place as follows. Tokens numbered 1 to 18 will be placed in a container and shaken. You will draw a token at random, and the number you draw will be the round for which your points determine your earnings.

You will be paid your earnings in cash, in private, after the experiment.

To illustrate the payment we will now work through two examples so that you fully understand how the payment is determined.

Suppose that in the round randomly chosen one of the two following outcomes happened:

- You chose # and s/he chose &, and you earned 20 points and s/he earned 50 points. At $0.40 per point you will receive $8 and s/he will receive $20.

- You chose * and s/he chose @, and you earned 70 points and s/he earned 30 points. At $0.40 per point you will receive $28 and s/he will receive $12.

(Click on the bar at the bottom of this screen to move on to the next screen)

[16TH SCREEN] {Practice rounds}

PRACTICE ROUNDS

Before you start playing the actual decision problems for money, you will have the opportunity to practice for **4** rounds. During the practice games we will use different labels for the decisions (**T**, **V**, and **W** for you, and **X**, **Y**, and **Z** for her/him) from the ones that will be used throughout the experiment and that you have already seen (#, *, ^, and <> for you, and &, @, %, and ~ for her/him).

Turn to the THIRD page of the handout, where YOU will WRITE DOWN YOUR DECISION for each of the practice rounds and move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[17TH SCREEN] {Practice round 1 - Introductory screen}

In this first practice round (Round 1):

You will have TWO decisions to choose from.

S/he will have TWO decisions to choose from.

PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY

(Click on the bar at the bottom of this screen to move on to the next screen)

[18TH SCREEN] {Practice round 1}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: X	S/He: Y	S/He: X	S/He: Y
You: T	78	32	54	81
You: V	21	56	23	49
	YOUR POINTS		HER/HIS POINTS	
	You: T		You: V	

[19TH SCREEN] {Practice round 2 - Introductory screen}

In this practice round (Round 2):

You will have TWO decisions to choose from.

S/he will have THREE decisions to choose from.

PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[20TH SCREEN] {Practice round 2}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: Z	S/He: Y	S/He: X	S/He: Z	S/He: Y	S/He: X
You: V	54	21	98	85	43	21
You: T	79	45	67	45	76	52
	YOUR POINTS			HER/HIS POINTS		
	You: V			You: T		

[21ST SCREEN] {Practice round 3 - Introductory screen}

In this practice round (Round 3):

You will have THREE decisions to choose from.

S/he will have TWO decisions to choose from.

PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[22ND SCREEN] {Practice round 3}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: X	S/He: Y	S/He: X	S/He: Y
You: W	87	43	53	82
You: V	39	76	21	44
You: T	17	54	95	12
	YOUR POINTS		HER/HIS POINTS	

You: W	You: V	You: T

[23RD SCREEN] {Practice round 4 - Introductory screen}

In this practice round (Round 4):

>You will have TWO decisions to choose from.

>S/he will have THREE decisions to choose from.

>PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[24TH SCREEN] {Practice round 4}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: X	S/He: Y	S/He: Z	S/He: X	S/He: Y	S/He: Z
You: T	81	35	42	67	25	92
You: V	23	74	68	39	61	32
	YOUR POINTS			HER/HIS POINTS		

You: T	You: v

(The screens 16th to 24th for the Column subjects are displayed in **APPENDIX COLUMN**)

[25TH SCREEN] {Last Screen of the Instructions input file}

You have now completed all practice rounds. Please raise your hand until the experimenter sees you, and please remain in your seat. An experimenter will come to collect your handout with your decisions for the practice rounds. You will then take a short break before starting the actual decision problems. Please remain in your seat.

THE END

(Click on the bar at the bottom of this screen to exit the program)

[VARIATION FOR COLUMN SUBJECTS]

[16TH SCREEN] {Practice rounds}

PRACTICE ROUNDS

Before you start playing the actual decision problems for money, you will have the opportunity to practice for **4** rounds. During the practice games we will use different labels for the decisions (**X**, **Y**, and **Z** for

you, and **T**, **V**, and **W** for her/him) than the ones that will be used throughout the experiment and that you have already seen (#, *, ^, and <> for you, and &, @, %, and ~ for her/him).

Turn to the THIRD page of the handout, where YOU will WRITE DOWN YOUR DECISION for each of the practice rounds and move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[17TH SCREEN] {Practice round 1 - Introductory screen}

In this practice round (Round 1):

> You will have TWO decisions to choose from.
>
> S/he will have TWO decisions to choose from.
>
> PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[18TH SCREEN] {Practice round 1}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: T	S/He: V	S/He: T	S/He: V
You: X	54	23	78	21
You: Y	81	49	32	56
	YOUR POINTS		HER/HIS POINTS	
	You: X		You: Y	

[19TH SCREEN] {Practice round 2 - Introductory screen}

In this practice round (Round 2):

> You will have THREE decisions to choose from.
>
> S/he will have TWO decisions to choose from.
>
> PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[20TH SCREEN] {Practice round 2}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: V	S/He: T	S/He: V	S/He: T
You: Z	85	45	54	79
You: Y	43	76	21	45
You: X	21	52	98	67
	YOUR POINTS		HER/HIS POINTS	
	You: Z	You: Y	You: X	

[21ST SCREEN] {Practice round 3 - Introductory screen}

In this practice round (Round 3):

You will have TWO decisions to choose from.

S/he will have THREE decisions to choose from.

PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[22ND SCREEN] {Practice round 3}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He: W	S/He: V	S/He: T	S/He: W	S/He: V	S/He: T
You: Y	53	21	95	87	39	17
You: X	82	44	12	43	76	54
	YOUR POINTS			HER/HIS POINTS		
	You: Y			You: X		

[23RD SCREEN] {Practice round 4 - Introductory screen}

In this practice round (Round 4):

You will have THREE decisions to choose from.

S/he will have TWO decisions to choose from.

PROCEED TO THE TABLE OF POINTS ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[24TH SCREEN] {Practice round 4}

[The table displayed below will be shown on the computer screen with the boxes closed.]

	S/He T:	S/He: V	S/He T:	S/He: V
You: X	67	39	81	23
You: Y	25	61	35	74
You: Z	92	32	42	68
	YOUR POINTS		HER/HIS POINTS	
	You: X	You: Y	You: Z	

[1ST SCREEN] {Introduction}

WELCOME!

PLEASE WAIT UNTIL THE EXPERIMENTER TELLS YOU TO START

You are about to participate in an experiment in interdependent decision making. Universities and research foundations have provided the funds for this experiment. If you follow the instructions and pass the Understanding Test, you will be allowed to continue in the experiment, and you may earn a considerable additional amount of money, up to $35.50. All that you earn is yours to keep, and will be paid to you in private, in cash, after today's session.

(Click on the bar at the bottom of this screen to move on to the next screen)

[2ND SCREEN] {Silence}

It is important to remain silent and not to 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. Otherwise, if you talk, laugh, exclaim out loud, etc., YOU WILL BE ASKED TO LEAVE. Thank you.

(Click on the bar at the bottom of this screen to move on to the next screen)

[3RD SCREEN] {Games}

The experiment consists of 18 rounds. Each round concerns an INTERDEPENDENT DECISION PROBLEM. In an interdependent decision problem two people ("You", and someone else, henceforth "S/He"), separately and independently make DECISIONS. Together, the two decisions determine the numbers of POINTS you and s/he earn that round, which may be different. Each person is assumed to want to maximize her/his own number of points, given her/his expectations about the other's decision.

In each round, you will be asked to select a decision, using a criterion explained below. Once a round is over, you will not be able to change your selection in that round. You will be paid only for the number of rounds in which you correctly select the decision that satisfies the criterion, as explained below.

The next screen displays a sample decision problem and its table of points. THIS PROBLEM IS ONLY AN ILLUSTRATION; the problems you will face in the 18 rounds will be different from this one, and will change each round. AS YOU LOOK AT THIS PROBLEM, READ THE FIRST PAGE OF THE PRINTED HANDOUT.

(Click on the bar at the bottom of this screen to move on to the next screen)

[4TH SCREEN] {2x2 table display}

[The table below will be shown (screen) to the subject with the boxes open.]

	S/He: &	S/He: @	S/He: &	S/He: @
You: #	53	21	84	22
You: *	87	49	38	65
	YOUR POINTS		HER/HIS POINTS	
	I am done			

[The following explanation will be given to subjects on the first page of a two-page handout.]

<u>DO NOT START READING THIS PAGE UNTIL INSTRUCTED ON THE SCREEN TO DO SO</u>

In the actual decision problems, you will have a table like this (but with different numbers of points) on your screen, and you will be asked to select a decision from decisions like # and *. S/He will be asked, independently, to choose one of her/his decisions from decisions like & and @.

The combination of your decision and her/his decision is called an OUTCOME. The number of points you and s/he receive for an outcome will be whole numbers from 0 to 99. Your points appear in the boxes on the left side of the table, labeled "YOUR POINTS" underneath. Her/His points appear in the boxes on the right side of the table, labeled "HER/HIS POINTS" underneath. To interpret the table, consider the results of the possible outcomes (combinations of decisions):

- If you choose # and s/he chooses @, **s/he** earns 22 points.
- If you choose * and s/he chooses @, **you** earn 49 points.
- If you choose # and s/he chooses &, **you** earn 53 points.
- If you choose * and s/he chooses &, **s/he** earns 38 points.
- If you choose # and s/he chooses &, **s/he** earns 84 points.
- If you choose # and s/he chooses @, **you** earn 21 points.
- If you choose * and s/he chooses &, **you** earn 87 points.
- If you choose * and s/he chooses @, **s/he** earns 65 points.

In each round of the actual decision problems, you will have a new table. As in this problem, the points that you and s/he earn will depend on both your decisions.

Please be sure you understand the table. Raise your hand if you would like further explanation. Otherwise, move to the next screen by clicking on the box "I am done".

<u>DO NOT TURN TO THE NEXT PAGE BEFORE INSTRUCTED ON THE SCREEN TO DO SO.</u>

[This sentence completes the first page of the handout.]

[5TH SCREEN] {Different table formats}

In some rounds of the experiment, you will be asked to choose one of THREE or FOUR possible decisions, labeled #, *, ^, and (if there are four) <>; while s/he will have TWO possible decisions, as before. Thus, the table of points will have one or two extra rows of boxes. In some other rounds, s/he will have THREE or FOUR possible decisions, labeled &, @, %, and (if there are four) ~; while you will be asked to choose from TWO decisions. Thus, the table of points will have two or four extra columns of boxes, one or two for your points, and one or two for her/his points. The following screen illustrates the case when you have three possible decisions and s/he has two. Please raise your hand if you have any questions. Otherwise move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[6TH SCREEN] {Example of a 3x2 table}

[The Table below will be shown to the subject with the boxes <u>open</u>.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: *	54	67	64	42
You: ^	89	21	35	13
You: #	35	82	91	68
	YOUR POINTS		HER/HIS POINTS	

Next Screen

[7TH SCREEN] {Making decisions}

To complete a given round, you must select a decision. Your possible decisions will be displayed in decision boxes below the table of points. To select a decision, use the mouse to point at the chosen decision, then click any button on the mouse. The screen will then ask you to confirm your decision. At that time, you can change your mind by pointing to and clicking on a different decision box, after which you will again be asked to confirm your decision. Once you confirm a decision, you cannot change it.

The next screen displays the same table as before, but with boxes in which the possible decisions are displayed under the table of points. For practice, point at one of them and click on the mouse. Then either confirm the decision or, if you wish, change the decision and then confirm. Raise your hand if you have questions.

(Click on the bar at the bottom of this screen to move on to the next screen)

[8TH SCREEN] {Practicing decisions in a 3x2 table}

[The table below will be shown to the subject with the boxes <u>open</u>.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: *	54	67	64	42
You: ^	89	21	35	13
You: #	35	82	91	68
	YOUR POINTS		HER/HIS POINTS	

You: *	You: ^	You: #

[9TH SCREEN] {Understanding Test - 1st part}

UNDERSTANDING TEST - (PART 1)

You will now take the 1st part of an UNDERSTANDING TEST. After you finish this part of the test, it will be graded. YOU WILL ONLY BE ALLOWED TO CONTINUE IN THE EXPERIMENT IF YOU HAVE ANSWERED ALL THE QUESTIONS CORRECTLY.

Turn to the SECOND page of the handout, which contains the questions, and move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[10TH SCREEN] {Test using a 2x3 table}

[The Table below will be shown to the subjects with the boxes <u>open</u>.]

	S/He: %	S/He: @	S/He: &	S/He: %	S/He: @	S/He: &
You: *	25	64	63	35	29	53
You: #	97	41	32	19	68	12
	YOUR POINTS			HER/HIS POINTS		
	You: *			You: #		

[The following questions will be written on the 2nd page of the handout.]

<div align="center">UNDERSTANDING   TEST</div>   Identification number**: _____**.

Please write your identification number in the upper right hand corner of this page. Then, by using the table of points on the screen, answer the following questions. Note that the screen allows two choices for you and three for her/him.

Questions:

1. If you choose * and s/he chooses @, how many points will **you** earn? _____.

2. If you choose # and s/he chooses &, how many points will **you** earn? _____.

3. If you choose # and s/he chooses @, how many points will **s/he** earn? _____.

4. If you choose # and s/he chooses %, how many points will **s/he** earn? _____.

After you have answered the questions, please point at one of the decision boxes, click on it, and confirm it. In the actual experiment you will click on the box corresponding to the decision you want to select.

<div align="center">YOU HAVE JUST COMPLETED THE TEST.</div>

Please raise your hand until the experimenter sees you. Do not proceed until he has collected your test.

<div align="center">DO NOT TURN TO THE NEXT PAGE BEFORE INSTRUCTED ON THE SCREEN TO DO SO.</div>

[This sentence completes the <u>2nd</u> page of the handout.]

[11TH SCREEN] {Explanation of an equilibrium}

We now describe the criterion you are asked to use to select your decisions in the decision problems you will face. This description is repeated on your handout, which you will be allowed to keep for reference (but not to write on) during the experiment. The criterion is based on the idea that each person wants to get as many points as possible, taking into account the other person's decision as well as her/his own. A combination of decisions, one for each person, such that each person's decision gives her/him the largest number of points possible, given the other's decision, is called an EQUILIBRIUM. Your decision in an equilibrium is called your EQUILIBRIUM DECISION, and her/his decision in an equilibrium is called her/his EQUILIBRIUM DECISION. You are asked to select your EQUILIBRIUM DECISION in each round.

Turn to the next (THIRD) page of the handout, and read ONLY the FIRST paragraph, while you look at the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[The following will be written on the 3rd page of the handout.]

For example, in the decision problem displayed on the screen the combination of your decision * and her/his decision @ is an EQUILIBRIUM. This is because, if s/he chooses @, you would earn more points by choosing * (49) than by choosing # (21). And if you choose *, s/he would earn more points by choosing @ (65) than by choosing & (38).

[12TH SCREEN] {2x2 table display - Same as 2nd screen}

[The table below will be shown to the subjects with the boxes <u>open</u>.]

	S/He: &	S/He: @	S/He: &	S/He: @
You: #	53	21	84	22
You: *	87	49	38	65
	YOUR POINTS		HER/HIS POINTS	
	You: #		You: *	

[13TH SCREEN]

{Explanation of an equilibrium - continuation}

Some decision problems may have more than one equilibrium, so you may have more than one equilibrium decision. In such problems you are asked to select your decision in the equilibrium that gives you the most points of any equilibrium. Suppose, for example, that a decision problem (not shown on your screen) has two equilibria, (*,@) with 66 points for you and 34 points for her/him, and (#,&) with 41 points for you and 76 points for her/him. Then you must select *, your decision in the first equilibrium, because it gives you 66 points and the other equilibrium gives you only 41 points. Note that to be sure you have applied the criterion correctly, you may need to find all of the equilibria in the decision problem.

You will be paid only for the number of rounds in which you correctly select the decision that satisfies this criterion, NOT for the number of points your selected decision would earn you in the decision problem. Remember that once a round is over, you will not be able to change your selection in that round.

(Click on the bar at the bottom of this screen to move on to the next screen)

[14TH SCREEN] {Mentioning the existence of different methods to find equilibrium}

To correctly identify the decisions that satisfy the criterion, you will need to know how find the equilibria of the decision problems. There are several methods you may find helpful, which we will now explain. In each round, you should feel free to use whichever method or combination of methods is best for you. Your payment will not depend on which method you use, but only on the number of rounds in which you correctly select the decision that satisfies the criterion.

Please read the rest of the (THIRD) page of the handout now. DO NOT move on to the next screen until instructed on the handout to do so.

(Click on the bar at the bottom of this screen to move on to the next screen)

[The following will be <u>also</u> written on the 3rd page of the handout.]

We now restate the criterion you will be asked to use to select your decisions, and describe some methods you may find helpful in applying it.

You will be allowed to keep this handout for reference during the experiment. HOWEVER, IT IS IMPORTANT TO READ IT CAREFULLY AND UNDERSTAND IT NOW, BECAUSE YOUR UNDERSTANDING WILL BE TESTED NEXT, AND YOU WILL ONLY BE ALLOWED TO PARTICIPATE IN THE EXPERIMENT IF YOU PASS THE TEST.

Recall that a combination of decisions, one for each person, such that each person's decision gives her/him the largest number of points possible, given the other's decision, is called an EQUILIBRIUM. Your decision in an equilibrium is called your EQUILIBRIUM DECISION, and her/his decision in an equilibrium is called her/his EQUILIBRIUM DECISION. You are asked to select your EQUILIBRIUM DECISION in each round.

Some decision problems may have more than one equilibrium, so that you have more than one equilibrium decision. In such problems you are asked to select your decision in the equilibrium that gives you the most points of any equilibrium. Suppose, for example, that a decision problem (not shown on your screen) has two equilibria, (*,@) with 66 points for You and 34 points for Her/Him, and (#,&) with 41 points for You and 76 points for Her/Him. Then, you must select *, your decision in the first equilibrium, because it gives you 66 points and the other equilibrium gives you only 41 points. Note that to be sure you have applied the criterion correctly, you may need to find all of the equilibria in the decision problem.

To correctly identify the decisions that satisfy the criterion, you will need to know how to find the equilibria of the decision problems. There are several methods you may find helpful, which we will now explain. In each round, you should feel free to use whichever method or combination of methods is best for you. Your payment will not depend on which method you use, but only on the number of rounds in which you correctly select the decision the criterion yields.

<div align="center">

TURN TO THE NEXT PAGE AND READ IT.

PLEASE DO NOT MOVE ON TO THE NEXT SCREEN

</div>

[This sentence completes the 3rd page of the handout.]

[The following will be written on the 4th page of the handout.]

The methods are called: Dominance for Yourself, Dominance for Her/Him, Dominance Solvability (a combination of the previous two methods), and Equilibrium Checking.

DOMINANCE FOR YOURSELF: We say that one of your decisions is DOMINATED by another of your decisions if the other decision gives you more points no matter which decision s/he chooses. For example, in the decision problem displayed on the next screen (PLEASE MOVE ON TO THE NEXT SCREEN) your decision # is dominated by your decision *, because 87 is greater than 53 and 49 is greater than 21.

If eliminating decisions that are dominated for yourself reduces the decision problem to one in which you have only one decision left, then that decision (for example, * in the decision problem on your screen) is your only equilibrium decision.

(Make sure you understand the explanation of Dominance for Yourself before proceeding. Then read the next method, but DO NOT move to the next screen until instructed to do so.)

[15TH SCREEN] {2x2 table display - Same as 2nd screen}

[The table below will be shown to the subjects with the boxes <u>open</u>.]

	S/He: &	S/He: @	S/He: &	S/He: @
You: #	53	21	84	22
You: *	87	49	38	65
	YOUR POINTS		HER/HIS POINTS	
	You: #		You: *	

DOMINANCE FOR HER/HIM: We say that one of her/his decisions is <u>DOMINATED</u> by another of her/his decisions if the other decision gives her/him more points no matter which decision you choose.

For example, in the decision problem displayed on the next screen (PLEASE MOVE ON TO THE NEXT SCREEN) her/his decision & is dominated by her/his decision @, because 43 is greater than 21, and 76 is greater than 52.

(Make sure you understand the of Dominance for Her/Him above before proceeding. Then read the next method, but DO NOT move to the next screen until instructed to do so.)

[16TH SCREEN] {2x3 table display}

[The Table below will be shown to the subject with the boxes <u>open</u>.]

	S/He: %	S/He: @	S/He: &	S/He: %	S/He: @	S/He: &
You: *	54	21	98	85	43	21
You: #	79	45	67	45	76	52
	YOUR POINTS			HER/HIS POINTS		
	You: *			You: #		

DOMINANCE SOLVABILITY: We say that a decision problem is <u>DOMINANCE</u> <u>SOLVABLE</u> if it can be reduced to a problem with only one decision for each decision-maker by eliminating decisions that are dominated for yourself and/or her/him, decisions that become dominated once dominated decisions are eliminated, and so on.

For example, in the decision problem displayed on this screen (PLEASE DO NOT MOVE FROM THIS SCREEN) her/his decision & is dominated by her/his decision @, because 43 is greater than 21, and 76 is greater than 52.

<div align="center">TURN TO THE NEXT PAGE AND READ IT.</div>

[This sentence completes the <u>4th</u> page of the handout.]

[The following will be written on the <u>5th</u> page of the handout.]

Once her/his decision & is eliminated, your decision * is dominated by #, because 79 is bigger than 54 and 45 is bigger than 21. Once your decision * is eliminated, her/his decision % is dominated by @, because 76 is bigger than 45. So, eliminating her/his decision &, then eliminating your decision *, and then eliminating her/his

decision % reduces this decision problem to one in which her/his only decision is @ and your only decision is #. This means that the decision problem is dominance-solvable. As in the previous example, the only decision you have left, in this case #, is your only equilibrium decision.

(Make sure you understand the explanation of Dominance Solvability before proceeding. Then read the next method, but do not move to the next screen until instructed to do so.)

If eliminating dominated decisions, decisions that become dominated once dominated decisions are eliminated, and so on, does not reduce the decision problem to one with only one decision for each person, then you can find the equilibria by Equilibrium Checking.

EQUILIBRIUM CHECKING: As explained earlier, a combination of decisions, one for you and one for her/him, is an <u>EQUILIBRIUM</u> if your decision gives you the largest number of points possible, given her/his decision, AND her/his decision gives her/him the largest number of points possible, given your decision.

For example, in the decision problem displayed on the next screen (PLEASE MOVE ON TO THE NEXT SCREEN) there are no dominated decisions for yourself or for her/him, but the combination of your decision # and her/his decision & is an EQUILIBRIUM. This is because, if s/he chooses &, you would earn more points by choosing # (61) than by choosing ^ (39) or * (32). And if you choose #, s/he would earn more points by choosing & (74) than by choosing @ (35).

The combination of your decision * and her/his decision @ is NOT an EQUILIBRIUM, because if you choose *, s/he would earn more points by choosing & (68) than by choosing @ (42), and so s/he would choose & instead of @. By making similar comparisons, you can check that there are no other equilibria in this decision problem, so that (#,&) is the only equilibrium and # is your only equilibrium decision.

[17TH SCREEN] {3x2 table display}

[The Table below will be shown to the subjects with the boxes <u>open</u>.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: ^	67	39	81	23
You: #	25	61	35	74
You: *	92	32	42	68
	YOUR POINTS		HER/HIS POINTS	
	You: ^	You: #	You: *	

(Make sure you understand the explanation of Equilibrium Checking before proceeding. Then move on to the next screen.)

DO NOT TURN TO THE NEXT PAGE BEFORE INSTRUCTED ON THE SCREEN TO DO SO.

[This sentence completes the <u>5th</u> page of the handout.]

[18TH SCREEN] {Covered-boxes explanation}

In the actual experiment, the points in a table, like the one on the previous screen, will not be openly displayed. Instead they will be "hidden" in the boxes, as if the boxes were covered. However you will be able

to open any box, just by POINTING AT it with the mouse (that is, moving the cursor into the box by sliding the mouse) and CLICKING the LEFT button of the mouse. You may open as many or as few boxes as you wish, as often and as long as you wish, and in any order. However, you will be able to have only one box open at a time. If you want to open a new box, you will have to close the previous box first by CLICKING the RIGHT button of the mouse. YOU ARE NOT ALLOWED TO WRITE DOWN THE NUMBERS IN THE BOXES. If you would like to know the number of points in a box that you do not remember, just open that box again.

The next screen displays the same table as before, but with the boxes covered. Use the mouse to practice opening boxes until you feel comfortable with the procedure. Then move on to the following screen by CLICKING on one of the decision boxes. For further explanation, raise your hand.

(Click on the bar at the bottom of this screen to move on to the next screen)

[19TH SCREEN] {3x2 table display - Same as 16th screen}

[The Table below will be shown to the subjects with the boxes <u>closed</u>.]

	S/He: @	S/He: &	S/He: @	S/He: &
You: ^	67	39	81	23
You: #	25	61	35	74
You: *	92	32	42	68
	YOUR POINTS		HER/HIS POINTS	

You: ^	You: #	You: *

[20TH SCREEN] {Explanation of intermediate screen}

At the conclusion of each round, you will see a screen asking you to proceed to the next round. If you wish, you may rest before proceeding. However, we ask you not to rest DURING a round. This screen will also tell you how many possible decisions you and s/he will have to choose from.

(Click on the bar at the bottom of this screen to move on to the next screen)

[21ST SCREEN] {Payment}

<div align="center">

PAYMENT

</div>

You will be asked to select your equilibrium decision, using the criterion described above, in each of 18 interdependent decision problems. After you have selected your decisions for all 18 rounds, you will be paid $1.75 for each round in which you correctly selected the decision that satisfies the criterion.

You will be paid your earnings in cash, in private, after today's session.

[22ND SCREEN] {Understanding Test - 2nd part}

<div align="center">

UNDERSTANDING TEST - PART 2

</div>

Before you start selecting your actual decisions for money, you must take the 2nd part of the understanding test (where you will demonstrate your understanding of the methods explained above). After you finish this part of the test it will be graded. YOU WILL ONLY BE ALLOWED TO CONTINUE IN THE EXPERIMENT IF

YOU HAVE ANSWERED ALL THE QUESTIONS CORRECTLY, IN WHICH CASE YOU WILL EARN AN ADDITIONAL $4 JUST FOR PASSING THE TEST.

Turn to the SIXTH page of the handout, which contains the test questions, and move on to the next screen.

(Click on the bar at the bottom of this screen to move on to the next screen)

[23RD SCREEN] {Test Round 1 (3x2) - Introductory screen}

In this decision problem (Number 1):

You will have THREE decisions to choose from.

S/he will have TWO decisions to choose from.

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[24TH SCREEN] {Test Round 1 - 3x2}

[The Table below will be shown to the subjects with the boxes <u>closed</u>.]

	S/He: &	S/He: @	S/He: &	S/He: @
You: *	87	43	53	82
You: ^	39	76	21	44
You: #	17	54	95	12
	YOUR POINTS		HER/HIS POINTS	

You: *	You: ^	You: #

In the decision problem shown on the screen:

A) Identify a DOMINATED decision for <u>yourself</u>, if there is one; otherwise write "None". _____.

B) Identify a DOMINATED decision for <u>her/him</u>, if there is one; otherwise write "None". _____.

C) Is the decision problem DOMINANCE SOLVABLE? Answer "Yes" or "No". _____.

D) If so, reduce the decision problem to one decision for each decision-maker by eliminating DOMINATED decisions and so on, and write down the remaining decision for each decision-maker.   Your   Decision _____   Her/His Decision _____

E) Do the decisions * and @ form an EQUILIBRIUM? If not, explain. _____.

(Please move on to the next screen where you will find the next decision problem)

[25TH SCREEN] {Test Round 2 (2x3) - Introductory screen}

In this decision problem (Number 2):

You will have TWO decisions to choose from.

S/he will have THREE decisions to choose from.

PROCEED TO THE NEXT SCREEN ONLY WHEN YOU FEEL READY.

(Click on the bar at the bottom of this screen to move on to the next screen)

[26TH SCREEN] {Test Round 2 (2x3)}

[The Table below will be shown to the subjects with the boxes <u>closed</u>.]

	S/He: %	S/He: @	S/He: &	S/He: %	S/He: @	S/He: &
You: #	81	35	42	67	25	92
You: *	23	74	68	39	61	32

YOUR POINTS	HER/HIS POINTS
You: #	You: *

In the decision problem shown on the screen:

A) Identify an EQUILIBRIUM combination of decisions.

Your Decision _____. Her/His Decision _____.

B) Identify a DOMINATED decision for <u>yourself</u>, if there is one; otherwise write "None". _____.

C) Identify a DOMINATED decision for <u>her/him</u>, if there is one; otherwise write "None". _____.

D) Is the decision problem DOMINANCE SOLVABLE? Answer "Yes" or "No". _____.

[27TH SCREEN] {Last Screen of the Instructions input file}

You have now completed the second part of the test. Please raise your hand until the experimenter sees you, and please remain in your seat. An experimenter will come to collect your handout with your answers for the test. You will then take a short break before starting the actual decision problems. Please remain in your seat.

THE END

(Click on the bar at the bottom of this screen to exit the program)

Appendix C: Pilots

Our Baseline, OB, and TS treatments were preceded by one session each of three pilot treatments, P1 on 24 February 1997, P2 on 25 February 1997, and P3 on 27 February 1997. This Appendix describes the pilots and how they influenced our designs for the main treatments. All three pilots had 16 games, with strategic structures that paralleled the first 16 games in the main treatments, but with weaker payoff incentives. (The weaker incentives were unintended by-products of our attempt to use variations in out-of-equilibrium payoffs, as in Beard and Beil's (1994) extensive-form game experiments, to detect subtle aspects of sophistication. In a design like ours, this severely constrains the strength of incentives.) All payoffs were normally hidden, in "closed boxes." In pilot P1 subjects were paid for their total payoffs over all games, at a lower rate but with the same expected total payment; while in pilots P2 and P3 they were paid for their payoffs in one randomly selected game, as in the Baseline and OB treatments. In pilots P1 and P2 subjects received no feedback from practice rounds; while in pilot P3 they received feedback, as in the Baseline and OB treatments. In pilots P1 and P2 the payoff matrix was framed as in the Baseline, OB, and TS treatments, but in pilot P3 the locations of own and others' payoffs were interchanged, with all subjects still framed as Row players. The results for the pilots, which are available on request, were similar to the results for the Baseline but noisier, with P1's and P2's results much noisier than P3's. The noisiness seemed due mainly to subjects' lack of comprehension and weak payoff incentives. Pilot P1's alternative payment scheme made little difference, so from then on we followed the common practice of paying each subject a larger amount for his payoff in one randomly selected game. Pilot P3's alternative framing also made little difference, so we returned to P1's and P2's framing for the main treatments. (In pilot P3, subjects started looking in the left side 65% of the time, and their subsequent look-ups and decisions resembled those in P1 and P2. Comparing the 65% starting in the left side in P3 with the 73% observed in the Baseline suggests that for initial look-ups, many more subjects favored the left side than favored their own payoffs. Some such framing bias seems inevitable in any normal-form design with a two-dimensional display.) Pilot P3's feedback did reduce the noise significantly, but in our judgment not enough. To reduce the noise further, we combined this feedback with the strengthened incentives of our Baseline design.

Appendix D: Subjects' Decisions in Baseline, OB, and TS treatments

The first two characters in the subject code identify the treatment and/or run, the third identifies the subject's role (Row or Column), and the fourth and fifth are the subject's identification number (gaps in the number sequence correspond to subjects who were dismissed for failing the Understanding Test). Decisions are labeled by their order in the games (Figure II): T (Top), M (Middle), or B (Bottom) (or, when there are four decisions, T, M1, M2, or B) for Rows and L (Left), C (Center), or R (Right) (or L, C1, C2, or R) for Columns.

GAMES	2A	2B	3A	3B	4A	4B	4C	4D	5A	5B	6A	6B	7A	7B	8A	8B	9A	9B
SUBJECTS																		
OBR01	B	T	T	B	B	B	B	T	M	B	B	T	B	T	B	B	M1	B
OBR02	B	T	T	B	T	T	B	T	M	B	T	B	B	T	B	B	M1	B
OBR03	T	T	T	B	B	B	B	T	M	B	T	B	T	T	B	M	M1	B
OBR04	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	B	M1	B
OBR05	B	T	T	B	B	M	B	T	B	B	T	T	B	T	T	M	M1	B
OBR06	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
OBR07	B	T	T	B	B	T	B	T	M	B	T	B	T	B	B	B	M1	B
OBR09	T	T	T	B	B	B	B	T	M	B	T	B	T	B	B	B	M1	B
OBR21	B	T	B	T	T	B	B	T	M	B	B	T	B	T	B	B	M1	T
OBR22	T	T	B	T	T	B	B	T	M	T	B	T	B	B	B	T	M1	B
OBR23	B	T	T	B	B	T	B	T	M	B	T	B	T	B	B	B	M1	B
OBR24	B	T	T	B	B	T	B	T	M	B	T	B	T	B	T	M	M1	B
OBR25	B	T	T	B	B	B	B	T	M	B	T	B	T	B	B	B	M1	B
OBR26	B	T	T	T	B	B	B	T	M	T	T	T	T	T	B	B	M1	B
OBC11	R	R	L	L	C	R	L	L	R	R	R	R	L	L	R	R	L	C1
OBC12	R	R	L	L	R	R	R	L	R	R	R	R	L	M	L	R	L	C1
OBC14	R	R	R	L	R	R	L	R	R	L	R	R	L	L	L	L	R	L
OBC15	R	R	L	L	C	R	L	L	L	R	C	M	R	R	R	L	L	C1
OBC16	R	R	L	L	C	R	L	M	R	L	R	R	L	L	L	L	R	C1
OBC17	R	R	L	L	C	R	L	L	R	R	R	R	L	R	L	R	L	C1
OBC20	L	R	L	L	C	R	R	L	L	L	C	R	R	L	R	R	R	C1
OBC27	R	R	L	L	C	R	R	L	R	L	R	R	L	L	R	R	R	C1
OBC28	L	L	L	L	C	R	R	R	R	L	C	R	L	L	L	R	R	C1
OBC29	R	R	L	L	C	R	R	L	R	R	C	L	R	R	L	R	L	C1
OBC30	L	L	L	L	C	R	R	R	L	L	R	L	L	L	R	L	R	C1
OBC31	L	R	L	L	C	R	R	L	R	R	R	R	L	L	R	R	R	C1
OBC32	R	R	L	L	C	R	L	L	R	R	C	R	R	L	L	R	L	C1
TSR02	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR03	B	T	T	B	B	T	B	T	B	M	T	B	T	B	B	B	M1	B
TSR05	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR07	B	T	T	B	B	T	B	T	B	M	T	B	B	T	T	M	M1	B
TSR12	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR14	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR16	B	T	B	B	B	B	B	T	M	M	T	B	T	B	T	M	M1	B
TSR17	T	T	T	B	T	B	M	B	B	T	T	T	B	T	T	T	T	T
TSR18	B	T	T	B	B	T	B	T	B	T	B	T	B	T	M	B	M1	T
TSR19	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR20	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR21	B	T	T	B	B	T	B	B	M	B	B	B	B	T	T	M	T	T
TSR23	B	T	T	B	B	B	B	T	M	M	T	B	T	B	T	M	M1	B
TSR29	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B
TSR31	B	T	T	B	B	T	B	T	B	M	T	B	T	B	T	M	M1	B

GAMES	2A	2B	3A	3B	4A	4B	4C	4D	5A	5B	6A	6B	7A	7B	8A	8B	9A	9B
SUBJECTS																		
B1R01	B	T	T	B	B	T	B	T	M	B	T	T	B	B	B	B	M1	B
B1R02	B	T	T	B	T	T	B	T	M	B	T	B	B	B	B	B	M1	B
B1R03	B	T	B	T	B	T	M	B	B	T	B	B	B	T	T	M	T	T
B1R04	T	B	B	T	B	B	B	B	M	T	B	T	B	T	M	B	T	T
B1R05	B	T	B	B	T	B	B	T	M	B	B	T	B	T	B	B	M1	B
B1R06	T	T	T	T	T	B	M	T	M	B	T	B	T	T	B	B	M1	B
B1R09	B	T	T	B	B	M	B	T	M	M	T	B	B	B	B	B	M1	B
B1R10	B	T	T	B	B	T	B	B	M	B	T	B	T	B	B	B	M1	B
B1R21	T	B	B	T	T	B	M	B	T	M	B	T	B	T	M	T	T	T
B1R22	B	T	T	B	B	B	B	T	M	B	T	B	T	T	B	B	M1	B
B1R23	B	T	T	B	B	B	B	T	B	B	T	T	B	T	T	M	M1	B
B1R24	B	T	B	B	T	B	B	T	M	B	T	B	T	B	B	B	M1	B
B1C11	L	L	L	L	C	R	R	L	L	R	R	R	M	L	R	R	L	C1
B1C12	L	R	L	L	R	L	L	L	R	R	R	M	M	L	R	L	L	L
B1C13	R	R	L	L	C	R	L	L	R	R	R	R	L	L	L	L	L	C1
B1C14	R	R	L	L	C	R	L	L	L	R	R	R	L	L	R	L	L	C1
B1C15	L	R	L	R	R	L	L	L	L	R	R	L	R	R	L	R	L	C1
B1C16	R	R	L	L	C	R	L	L	R	R	R	R	L	L	R	R	L	C1
B1C18	L	R	L	L	C	R	L	L	R	R	R	R	L	L	L	L	L	C1
B1C20	R	R	L	L	R	L	L	L	L	L	R	R	L	L	L	L	L	L
B1C25	R	R	L	L	C	R	L	L	R	R	C	R	R	R	L	L	L	C1
B1C27	L	L	L	R	C	L	L	L	R	R	M	M	L	L	R	R	L	L
B1C28	L	L	L	L	C	R	R	R	L	L	R	R	L	L	R	R	R	C1
B1C30	R	L	L	L	C	R	L	L	L	R	R	L	L	L	L	R	L	C1
B2R01	B	T	B	B	T	B	B	T	M	B	T	B	B	B	B	B	M1	B
B2R03	B	T	T	B	B	T	B	T	M	T	T	B	T	B	B	B	M1	B
B2R05	T	T	B	B	B	B	B	T	M	B	T	T	B	T	B	B	M1	T
B2R06	B	T	T	T	B	B	B	T	M	B	B	T	B	T	T	M	M1	B
B2R07	B	B	B	T	T	B	B	T	M	B	B	T	B	T	M	T	M1	T
B2R08	B	T	T	T	B	T	B	T	M	B	T	T	T	B	B	B	M1	B
B2R09	B	T	T	B	B	T	B	T	B	B	B	B	T	B	T	M	M1	B
B2R10	T	T	B	B	B	B	B	T	M	B	T	B	T	B	T	B	M1	B
B2R21	B	T	T	B	B	T	B	T	M	B	T	B	T	B	B	B	M1	B
B2R22	T	T	T	B	T	B	B	T	M	B	B	B	T	B	B	B	M1	B
B2C11	R	R	L	L	C	R	L	L	R	R	R	R	L	L	R	L	L	C1
B2C12	R	R	L	L	C	R	L	L	R	R	R	R	L	L	L	L	L	L
B2C14	L	R	L	L	C	R	R	R	L	R	R	L	L	L	R	R	R	C1
B2C16	R	R	L	L	C	R	L	L	R	R	R	R	L	L	L	L	L	C1
B2C17	L	L	R	L	C	R	R	R	L	L	R	L	L	M	R	L	R	C1
B2C18	R	R	L	L	C	R	L	L	R	L	R	R	L	R	L	L	L	C1
B2C19	L	L	L	L	C	R	R	L	L	R	R	R	L	L	R	R	L	C1
B2C20	L	R	L	L	C	R	R	L	L	R	R	R	L	L	R	R	R	C1
B2C26	R	R	L	L	C	R	R	L	R	R	R	R	R	L	L	L	L	C1
B2C27	R	L	R	L	C	R	R	L	L	R	M	M	M	L	R	R	R	C1
B2C29	L	L	L	L	C	R	R	R	L	L	R	R	L	L	R	L	R	C1

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Appendix E: Posterior Distributions of Individual Subjects' Types

Table VI. Posterior Distributions of Baseline Subjects' Types
(Decisions alone with *Naïve* and *Optimistic* probabilities constrained equal, Decisions & information search)

Type / Subject	A	P	N	O	L2	D1	D2	E	S
B1R01	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.993, 1.000	0.007, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R02	0.000, 0.000	0.000, 0.000	0.000, 0.744	0.000, 0.000	0.993, 0.256	0.007, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R03	0.026, 0.000	0.000, 0.000	0.002, 1.000	0.002, 0.000	0.000, 0.000	0.972, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R04	0.968, 0.000	0.000, 0.000	0.023, 1.000	0.023, 0.000	0.000, 0.000	0.009, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R05	0.000, 0.000	0.000, 0.000	0.998, 1.000	0.998, 0.000	0.000, 0.000	0.002, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R06	0.000, 0.000	0.000, 0.000	0.071, 1.000	0.071, 0.000	0.157, 0.000	0.771, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R09	0.000, 0.000	0.000, 0.000	0.000, 0.260	0.000, 0.000	0.958, 0.740	0.042, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R10	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	1.000, 1.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R21	1.000, 1.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R22	0.000, 0.000	0.000, 0.000	0.000, 0.007	0.000, 0.000	0.992, 0.993	0.008, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1R23	0.000, 0.000	0.000, 0.000	0.006, 0.000	0.006, 0.000	0.008, 0.000	0.929, 0.000	0.000, 0.000	0.057, 0.000	0.000, 1.00
B1R24	0.000, 0.000	0.000, 0.000	0.004, 0.994	0.004, 0.000	0.985, 0.006	0.011, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C11	0.000, 0.000	0.000, 0.000	0.860, 1.000	0.860, 0.000	0.002, 0.000	0.138, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C12	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.027, 1.000	0.973, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C13	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	1.000, 1.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C14	0.000, 0.000	0.000, 0.000	0.000, 1.000	0.000, 0.000	0.993, 0.000	0.007, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C15	0.000, 0.000	0.000, 1.000	0.000, 0.000	0.000, 0.000	0.001, 0.000	0.993, 0.000	0.000, 0.000	0.005, 0.000	0.000, 0.00
B1C16	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.978, 1.000	0.022, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C18	0.000, 0.000	0.000, 0.000	0.000, 0.988	0.000, 0.000	1.000, 0.012	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C20	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.751, 1.000	0.249, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C25	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.052, 1.000	0.001, 0.000	0.000, 0.000	0.947, 0.000	0.000, 0.00
B1C27	0.000, 0.000	0.000, 0.000	0.000, 0.025	0.000, 0.000	0.000, 0.975	0.999, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C28	0.000, 0.000	0.000, 0.000	1.000, 1.000	1.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B1C30	0.000, 0.000	0.000, 0.000	0.002, 0.992	0.002, 0.000	0.845, 0.008	0.152, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R01	0.000, 0.000	0.000, 0.000	0.148, 1.000	0.148, 0.000	0.722, 0.000	0.130, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R03	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.999, 1.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R05	0.000, 0.000	0.000, 0.000	0.925, 1.000	0.925, 0.000	0.001, 0.000	0.074, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R06	0.000, 0.000	0.000, 0.000	0.742, 1.000	0.742, 0.000	0.001, 0.000	0.257, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R07	0.000, 0.000	0.000, 0.000	0.999, 1.000	0.999, 0.000	0.000, 0.000	0.001, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R08	0.000, 0.000	0.000, 0.000	0.000, 0.083	0.000, 0.000	0.998, 0.917	0.002, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R09	0.000, 0.000	0.000, 0.000	0.000, 1.000	0.000, 0.000	0.066, 0.000	0.005, 0.000	0.000, 0.000	0.929, 0.000	0.000, 0.00
B2R10	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.941, 1.000	0.059, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R21	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	1.000, 1.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2R22	0.000, 0.000	0.000, 0.000	0.005, 0.000	0.005, 0.000	0.944, 1.000	0.050, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C11	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.999, 1.000	0.001, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C12	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.999, 1.000	0.001, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C14	0.000, 0.000	0.000, 0.000	0.992, 0.000	0.992, 1.000	0.000, 0.000	0.008, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C16	0.000, 0.000	0.000, 0.000	0.000, 0.071	0.000, 0.000	1.000, 0.929	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C17	0.000, 0.000	0.000, 0.000	0.997, 1.000	0.997, 0.000	0.000, 0.000	0.003, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C18	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.997, 1.000	0.002, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C19	0.000, 0.000	0.000, 0.006	0.956, 0.994	0.956, 0.000	0.003, 0.000	0.041, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C20	0.000, 0.000	0.000, 0.000	0.956, 1.000	0.956, 0.000	0.003, 0.000	0.041, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C26	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.926, 1.000	0.012, 0.000	0.000, 0.000	0.062, 0.000	0.000, 0.00
B2C27	0.001, 0.000	0.000, 1.000	0.119, 0.000	0.119, 0.000	0.000, 0.000	0.880, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00
B2C29	0.000, 0.000	0.000, 0.000	1.000, 1.000	1.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.000	0.000, 0.00

Table VII. Posterior Distributions of OB Subjects' Types
(Decisions alone with *Naïve* and *Optimistic* probabilities constrained equal)

Type Subject	A	P	N	O	L2	D1	D2	E	S
OBR01	0.000	0.000	0.134	0.134	0.016	0.850	0.000	0.000	0.000
OBR02	0.000	0.000	0.000	0.000	0.027	0.973	0.000	0.000	0.000
OBR03	0.000	0.000	0.000	0.000	0.466	0.534	0.000	0.000	0.000
OBR04	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.988	0.000
OBR05	0.000	0.000	0.000	0.000	0.010	0.816	0.000	0.174	0.000
OBR06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
OBR07	0.000	0.000	0.000	0.000	0.987	0.013	0.000	0.000	0.000
OBR09	0.000	0.000	0.000	0.000	0.981	0.019	0.000	0.000	0.000
OBR21	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
OBR22	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
OBR23	0.000	0.000	0.000	0.000	0.987	0.013	0.000	0.000	0.000
OBR24	0.000	0.000	0.000	0.000	0.954	0.019	0.000	0.027	0.000
OBR25	0.000	0.000	0.000	0.000	0.984	0.016	0.000	0.000	0.000
OBR26	0.000	0.000	0.090	0.090	0.381	0.530	0.000	0.000	0.000
OBC11	0.000	0.000	0.000	0.000	0.033	0.967	0.000	0.000	0.000
OBC12	0.000	0.000	0.000	0.000	0.466	0.534	0.000	0.000	0.000
OBC14	0.000	0.000	0.008	0.008	0.950	0.042	0.000	0.000	0.000
OBC15	0.000	0.000	0.000	0.000	0.002	0.004	0.000	0.993	0.000
OBC16	0.000	0.000	0.000	0.000	0.976	0.023	0.000	0.000	0.000
OBC17	0.000	0.000	0.000	0.000	0.565	0.434	0.000	0.001	0.000
OBC20	0.000	0.000	0.992	0.992	0.000	0.008	0.000	0.000	0.000
OBC27	0.000	0.000	0.071	0.071	0.017	0.911	0.000	0.000	0.000
OBC28	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
OBC29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
OBC30	0.000	0.000	1.000	1.000	0.000	0.000	0.000	0.000	0.000
OBC31	0.000	0.000	0.071	0.071	0.017	0.911	0.000	0.000	0.000
OBC32	0.000	0.000	0.000	0.000	0.443	0.417	0.000	0.140	0.000