# Experienced vs. Inexperienced Participants in the Lab: Do They Behave Differently?

# V. Benndorf, C. Moellers, and H.-T. Normann

## **Online** appendix

### A Instructions

A.1 General part

Hello and welcome to our experiment. You are participating in an experiment on decision making. If you follow the instructions and apply them carefully, you can earn a considerable amount of money. We will pay you  $\in$ 7 in any case, but you can earn more money on top of that.

From now on you are not allowed to talk to any participant in the experiment. If you have a question, please raise your hand and one of the instructors will attend you. Please do not speak out aloud. Thank you.

Today's experimental session consists of five parts and an additional questionnaire at the end. You will get instructions for every part separately. You will not get any feedback on the decision you have taken during the experiment. But you will get to know the decision of your counterpart at the end of the experiment.

At the end of the session, the computer will randomly choose one of the five parts of the experiment based on which you are paid.

You should take your time to make your decision. All the information you provide will be anonymous.

A.2 Trust game

In this part, the situation is as follows:

Person A and Person B are each called to make a decision that affects their payoffs. You are randomly paired with another participant and also the roles of Person A and Person B will be randomly determined by the computer.

Person A has two options: Person A can choose either "D" or "E" as seen in Figure 1.

Person B has to choose between "x" and "y", but only in the case where A has chosen "D".

Together the choices of A and B determine each person's payoff as shown in Figure 1:

If A chooses "E", both persons receive  $\in 5$ .

If A chooses "D" and B chooses "x", they get  ${\in}7$  each.

If person A chooses "D" and B chooses "y", the payoff is  $\in 3.50$  and  $\in 8.50$  for A and B, respectively.

You will get in any case the show-up fee of  $\notin$ 7 if this part of the experiment is selected for the payment.

Before making your decisions please read carefully the following paragraph and take your time to analyse Figure 1.





You will have to make decisions as if you were Person A and also as if you were Person B. In the latter case, for each of A's possible decisions ("D" or "E") you will also have to choose between "x" and "y".

In the case that this section is selected to determine your earnings, the computer will randomly pair you with another participant in the room and will assign the roles. The matching and roles assignment will remain anonymous. Once the computer had determined your role, only your decision in that role will be taken into account to determine your payoff.

Example 1: You have chosen "E" in case you have to make a decision for person A and "x" in case you are assigned the role of person B. You are randomly paired with another participant and your role is randomly chosen to be person B. Since your counterpart has chosen "D" in case she is person A and you chose "x", both of you receive  $\in$ 7 in addition to the show-up fee of  $\in$ 7.

Example 2: You have chosen "E" in case you have to make a decision for person A and "y" in case you are assigned the role of person B. You are randomly paired with another participant and your role is randomly chosen to be person B. Since your counterpart has chosen "D" in case she is person A and you chose "y", you get  $\in 8.50$  and person A gets  $\in 3.50$  in addition to the show-up fee of  $\notin 7$ .

#### A.3 Beauty contest

#### In this part, the situation is as follows:

In this part of the experiment you are randomly paired with another participant. Both are asked to choose a number between 0 and 100. (The number can have up to two decimal points.) The person who chooses a number that is closest to 2/3 of the mean of the numbers chosen in that pair will receive  $\leq 10$ .

The winner will be determined as follows: First, the average number of both participants' choices will be computed. A target number will then be determined by multiplying the average of a pair's choices by two-thirds. The winner of this part of the experiment is the participant who is closest to the target number.

Remember that you will just choose a number but you won't get to know the choice of your counterpart. Only if this part is selected for the payment at the end of the experiment you will learn both numbers and the winner. If this part is chosen for the payment the winner of each pair receives  $\in 10$ . In the case of a tie, the points are divided between the winners, that is, each receives  $\in 5$  in addition to the show-up fee of  $\in 7$ .

#### A.4 Ultimatum game

#### In this part, the situation is as follows:

Person A is asked to choose one out of eleven possible distributions of money between her and Person B. Person B knows that A has been called to make these decision, and may either accept the distribution chosen by A, or reject it.

If Person B accepts A's proposed distribution, it will be implemented. If B rejects the offer, both receive nothing.

The roles of Person A and Person B will be randomly determined by the computer. Person A and B will remain anonymous.

Periode		
1 ven 1		Verbleibende Zeit [sec] 28
	Teil 3A	
	Bitte treffen Sie hier Ihre Entscheidung als Person A.	
	<ul> <li>10 Euro für Sie, 0 Euro für Person B</li> <li>9 Euro für Sie, 1 Euro für Person B</li> <li>8 Euro für Sie, 2 Euro für Person B</li> </ul>	
	C 7 Euro für Ste, 3 Euro für Person B C 6 Euro für Ste, 4 Euro für Person B C 5 Euro für Ste, 5 Euro für Person B C 4 Euro für Ste, 5 Euro für Person B	
	3 Euro für Sie, 7 Euro für Person B     2 Euro für Sie, 8 Euro für Person B     1 Euro für Sie, 9 Euro für Person B	
	C DEGICIUS SKY, TO EGICIUS PYRSON D	
		Weiter

Fig. 2 Ultimatum game, first mover. Translation of the text: Part 3A; Please make your decision as Person A. The entries in the list have the form xEuro for you, 10 - x Euro for Person B. The button says Continue.

Before making your decision please read carefully the following paragraphs.

In the case that this section is selected to determine your earnings, the computer will randomly pair you with another participant in the room and will randomly assign the A/B roles. The matching and roles assignment will remain anonymous.

You will have to make decisions as if you were Person A and also as if you were Person B.

In the first case you have to choose between a list of 11 different distributions of  $\in 10$  between the participant you are matched with and yourself.



Fig. 3 Ultimatum game, second mover. Translation of the text: Part 3B; Please make your decision as Person B. Please enter the minimum offer of Person A for which you would accept the allocation. The entries in the list have the form Always accept; Accept starting at Euro x; Only accept Euro 10. The button says Continue.

For person B, you will have to choose your minimum acceptable offer, i.e. the lowest amount money you would accept if it was proposed by Person A. This of course implies rejection of all lower offers. Thus, if the amount of money offered Person A is lower than your minimum acceptable offer you and Person A will both earn zero profits.

If this part is chosen for the payment and you are assigned the role of Person A, you will earn the payoff you chose for yourself if the Person B that you are paired with accepts your offer. Otherwise, both will earn nothing.

If this part is chosen for the payment and you are assigned the role of Person B, you will earn the payoff that Person A that you are paired with chose for B, only if you had accepted that particular offer. Otherwise, you both earn nothing.

You will get in any case the show-up fee of  $\in$ 7 if this part of the experiment is selected for the payment.

#### A.5 Travelers' dilemma

#### In this part, the situation is as follows:

You and the person you are matched with will each have to choose an amount of money to claim, and your claim can be any number from 500 to 1000 cents. If your claims are equal, then you each get what you claimed. But if your claims are different, you each get an amount that is equal to the minimum of the two claims. In addition, the person making the larger claim is penalized and must give back 75 cents, and the person making the lower claim is rewarded and will receive an additional 75 cents. To summarize,

 $\begin{array}{ccc} Payoff=claim & if & Both \ claims \ equal \\ Payoff=claim \ counterpart - 75 \ Cents & if & Your \ claim \ is \ larger \ than \ the \ claim \ of \ your \ counterpart \end{array}$ 

if

If this part is selected for the payment, you will be paired with another person, using a random draws by the computer. You will make a single decision, and your earnings will be determined by your decision and the decision of the person with whom you are matched.

Your claim is lower than the claim of your counterpart

You will get in any case the show-up fee of  $\in$ 7 if this part of the experiment is selected for the payment.

Payoff = your claim + 75 Cents

Example: You claimed 800 cents and the person you are matched with has claimed 650 cents. That means, the other person claimed less, so you are penalized and have to pay 75 cents to your counterpart. Therefore, you get the lower claim, i. e. 650 cents, minus 75 cents which is 575 cents. The person you are paired with gets her claim, i. e. 650 cents, plus 75 cents which is 725 cents.

### A.6 Lying task

This part, you will play on your own and not with another participant. The situation is as follows:

We will soon equip you with a die. Please throw the die as soon as you are asked to. The first throw decides on how much money you will receive (if this part is chosen at the end). If you throw a "6" you receive  $\in 10$ . If you get any other number, that is "1", "2", "3", "4" or "5", you receive nothing.

We will allow you to throw the die more often afterwards to convince you that the die is working properly. However, only the first throw counts for your payoff.

If this part is chosen for payment, you get (in addition to the show-up fee of  $\in$ 7) the following payoff depending on the number you have thrown the first time:

Die shows	Payment
1	0€
2	0€
3	0€
4	0€
5	0€
6	10€

Table 1 Lying task

#### A.7 Questionnaire

This part, you will also play on your own and not with another participant. Moreover, this part is purely hypothetical, you will not receive payments from this part, it is excluded from the randomization described on the first page.

The Figure 4 summarizes 10 different binary lotteries. You have to take as-if decisions for each lottery. In each case you can either opt for Option A or for Option B.

Nr.	Option A	Entscheidung	Option B
1.	EUR 2,- mit 10% Wahrscheinlichkeit oder EUR 1,60 mit 90% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 10% Wahrscheinlichkeit oder EUR 0,10 mit 90% Wahrscheinlichkeit.
2.	EUR 2,- mit 20% Wahrscheinlichkeit oder EUR 1,60 mit 80% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 20% Wahrscheinlichkeit oder EUR 0,10 mit 80% Wahrscheinlichkeit.
3.	EUR 2,- mit 30% Wahrscheinlichkeit oder EUR 1,60 mit 70% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 30% Wahrscheinlichkeit oder EUR 0,10 mit 70% Wahrscheinlichkeit.
4.	EUR 2,- mit 40% Wahrscheinlichkeit oder EUR 1,60 mit 60% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 40% Wahrscheinlichkeit oder EUR 0,10 mit 60% Wahrscheinlichkeit.
5.	EUR 2,- mit 50% Wahrscheinlichkeit oder EUR 1,60 mit 50% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 50% Wahrscheinlichkeit oder EUR 0,10 mit 50% Wahrscheinlichkeit.
6.	EUR 2,- mit 60% Wahrscheinlichkeit oder EUR 1,60 mit 40% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 60% Wahrscheinlichkeit oder EUR 0,10 mit 40% Wahrscheinlichkeit.
7.	EUR 2,- mit 70% Wahrscheinlichkeit oder EUR 1,60 mit 30% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 70% Wahrscheinlichkeit oder EUR 0,10 mit 30% Wahrscheinlichkeit.
8.	EUR 2,- mit 80% Wahrscheinlichkeit oder EUR 1,60 mit 20% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 80% Wahrscheinlichkeit oder EUR 0,10 mit 20% Wahrscheinlichkeit.
9.	EUR 2,- mit 90% Wahrscheinlichkeit oder EUR 1,60 mit 10% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 90% Wahrscheinlichkeit oder EUR 0,10 mit 10% Wahrscheinlichkeit.
10.	EUR 2,- mit 100% Wahrscheinlichkeit oder EUR 1,60 mit 0% Wahrscheinlichkeit.	Option A C C Option B	EUR 3,85 mit 100% Wahrscheinlichkeit oder EUR 0,10 mit 0% Wahrscheinlichkeit.
			Weiter

Fig. 4 Risk aversion. Translation of the text: The column headers are: No., Option A, Decision, Option B. The lotteries are presented in the form: Euro x with a probability of p% or Euro y with a probability of (100-p)%. The button says Continue.

Please make your decisions as if they were actually paid.

## **B** Additional tables and figures



Fig. 5 The left panel shows the proposers' offers and their expected profits from choosing any offer in the UG given the observed responder behavior. The right panel illustrates choices and expected profits in the TD for any claim given the behavior of the participants.

Option A	Option B	Expected Payoff Difference
$\begin{array}{c} 1/10 \text{ of } \in 2.00, \ 9/10 \text{ of } \in 1.60\\ 2/10 \text{ of } \in 2.00, \ 8/10 \text{ of } \in 1.60\\ 3/10 \text{ of } \in 2.00, \ 7/10 \text{ of } \in 1.60\\ 4/10 \text{ of } \in 2.00, \ 6/10 \text{ of } \in 1.60\\ 5/10 \text{ of } \in 2.00, \ 5/10 \text{ of } \in 1.60\\ 6/10 \text{ of } \in 2.00, \ 4/10 \text{ of } \in 1.60\\ 7/10 \text{ of } \in 2.00, \ 3/10 \text{ of } \in 1.60\\ 8/10 \text{ of } \in 2.00, \ 2/10 \text{ of } \in 1.60\\ 9/10 \text{ of } \in 2.00, \ 1/10 \text{ of } \in 1.60\\ 10/10 \text{ of } \in 2.00, \ 0/10 \text{ of } \in 1.60\\ \end{array}$	$\begin{array}{c} 1/10 \text{ of } \in 3.85, \ 9/10 \text{ of } \in 0.10\\ 2/10 \text{ of } \in 3.85, \ 8/10 \text{ of } \in 0.10\\ 3/10 \text{ of } \in 3.85, \ 7/10 \text{ of } \in 0.10\\ 4/10 \text{ of } \in 3.85, \ 7/10 \text{ of } \in 0.10\\ 5/10 \text{ of } \in 3.85, \ 5/10 \text{ of } \in 0.10\\ 6/10 \text{ of } \in 3.85, \ 4/10 \text{ of } \in 0.10\\ 7/10 \text{ of } \in 3.85, \ 3/10 \text{ of } \in 0.10\\ 8/10 \text{ of } \in 3.85, \ 1/10 \text{ of } \in 0.10\\ 9/10 \text{ of } \in 3.85, \ 1/10 \text{ of } \in 0.10\\ 10/10 \text{ of } \in 3.85, \ 0/10 \text{ of } \in 0.10\\ \end{array}$	$\begin{array}{c} \in 1.17 \\ \in 0.83 \\ \in 0.50 \\ \in 0.16 \\ \in -0.18 \\ \in -0.51 \\ \in -0.85 \\ \in -1.18 \\ \in -1.52 \\ \in -1.85 \end{array}$

Table 2 Lottery choices taken from Holt and Laury (2002).