## Instructions for and Appendix to

# Bad luck vs. self-inflicted neediness An experimental investigation of gift giving in a solidarity game

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## **Instructions**<sup>1</sup>

## **General Instructions:**

Welcome and thank you very much for participating in this experiment. Please read the instructions carefully. If you have any questions please do not ask aloud but raise your hand and wait until an experimenter will come to your place. Then you can discuss your question with him personally. During the whole experiment, starting now, communication with other participants is strictly forbidden. Following this rule is very important. In case of non-compliance, we must exclude you from the experiment and all payoffs.

## THE EXPERIMENT

- You receive 2.50 € for your participation irrespective of your decisions during this experiment. Additionally, you can earn more money in this experiment. How much you earn depends on both your decisions and the decisions of other participants.
- The experiment consists of two independent parts. First, the first part is conducted, followed by the second part. At the end of the experiment only one part will be paid out; it will be the same part for all participants. Either the first or the second part is chosen for payment with an equal probability (50%) **after both parts were conducted**. A six sided dice will be thrown at the end of the experiment:
  - if the dice shows one of the numbers 1, 2, or 3, the **first part** of the experiment will be paid out
  - if the dice shows one of the numbers 4, 5, or 6, the second part of the experiment will be paid out
- Your interaction partners in the experiment will be randomly assigned to you in the first as well as in the second part of the experiment.

<sup>&</sup>lt;sup>1</sup> Translated from German. These are the instructions of session 1, where the first part consists of the RT and the second part consists of the ST. The instructions of session 2 are analogous.

• Please follow the instructions in both parts; all instructions are identical for each participant. This is also true for the questionnaires you have to fill in during this experiment: they are identical for everybody as well.

The first part of the experiment starts now.

## Instructions for the first part of session 1:

## **<u>1ST PART OF THE EXPERIMENT</u>**

Each participant is a member of a randomly formed group of three persons. At no time before, during or after the experiment the identity of your group members is revealed to you. In this part of the experiment you have to make two decisions.

## FIRST DECISION

Each participant has the choice between two options A or B. This choice and the two options are identical for each participant. The chosen option will be separately conducted for each participant.

Please choose an option:
Option A: You receive 10 € for sure
Option B: A ten-sided dice will be thrown (0-9)

if the dice shows one of the numbers 1, 2, 3, 4 or 5 you receive 0 €
(probability of 50%).
if the dice shows one of the numbers 6, 7, 8 or 9 you receive 10 €
(probability of 40%).
if the dice shows 0 you receive 60 €
(probability of 10%).

Thus, the following results are possible for each participant:

- You receive  $10 \notin (You chose either option A or option B)$
- You receive  $0 \in (You chose option B)$
- You receive **60**  $\in$  (You chose option *B*)

### SECOND DECISION

The payoffs of each participant are ascertained. Participants who chose option *A* receive  $10 \in$  For *each* participant who chose option *B* a dice will be thrown separately.

**Before** the dice is thrown all participants have to make the following decision: In case you **receive** 10  $\in$  and only in this case, how much would you give voluntarily to other members of your threeperson-group who receive  $0 \in$  Participants who won  $60 \in$  cannot give any money to group members. Each participant has to make his decision on three cases: How much money would you give to group members who receive  $0 \notin$  if you receive 10  $\notin$  yourself and:

- *one* member of the group receives  $0 \in$  and the other member receives  $10 \in$
- one member of the group receives  $0 \in$  and the other member receives  $60 \in$
- *both* group members receive  $0 \in$

The total amount you give to your group members has to be between  $0 \in$  and  $10 \in$ 

Your group members have to make the same decision. The other participants will not get to know your decisions.

This means:

- In case you choose <u>option A</u> (you receive 10 € for sure), you can give money to your group members who choose <u>option B</u> and receive 0 €
- In case you choose <u>option B</u> and win 10 €, you can give money to your group members who choose <u>option B</u> and receive 0 €
- In case you choose <u>option B</u> and receive 60 € you *cannot give any money* to your group members.
- In case you choose <u>option B</u> and you receive 0 €, you *cannot give any money* to your group members. You receive money which your group members might give to you in case they receive 10 €

### YOUR PAYOFFS

Your final pay off depends on your decision and on the decisions of the other participants in the experiment. If the first part of the experiment will be paid out you receive additional to  $2.50 \in$ 

•	In case you receive 10 €	$10 \in $ <b>minus</b> the amount you decided to give to
		potential losers ( $0 \in$ ) in your group
•	In case you receive 0 €	$0 \in \mathbf{plus}$ the amount you get from potential winners of
		10 €in your group
•	In case you receive 60 €	60 €

#### PROCEDURE

- 1. Now the experimenters distribute a control sheet to make sure that every participant understood the instructions.
- 2. Afterwards, the experimenters will distribute an envelope containing a decision form to each participant. Please open your envelope and check your control number **top right** on the form. Fill in the decision form completely and write **on top of the envelope** which option (*A* or *B*) you decided for. If you forget to write down your decision you will *not* be paid after the experiment! After you filled in the form, put the form back into the envelope and close it. After all participants having filled in their decision forms the experimenters will collect all the envelopes in a box.
- 3. Then the experimenters will distribute a further form with your control number top right on the form. Please check your number and fill in the form completely. As soon as all participants filled in their forms, the experimenters will collect them.
- 4. The experimenters will then draw the envelopes containing the decision forms one by one from the box. If option *B* is chosen the experimenters will throw a ten-sided dice to acquire how much each particular control number wins. The experimenters know which option you chose, because of your decision on the envelope. The experimenters will write

down on each envelope how much money each control number won. Afterwards all envelopes will be put back into the box and will be mixed properly.

- 5. The experimenters draw envelopes from the box again. The envelopes will be randomly arranged in groups of three. For each group the experimenters will open the envelopes and calculate the payoffs each participant gets if the first part of the experiment will be paid out.
- 6. After this, the second part of the experiment begins.

Are there any further questions?

## Instructions for the second part of session 1:

#### **2ND PART OF THE EXPERIMENT**

Again, each participant is a member of a *new* randomly formed group of three persons. The probability that you are in exactly the same group as in the previous part of the experiment is smaller than 1%. At no time before, during or after the experiment the identity of your group members is revealed to you.

Each member of the group can win  $10 \notin$  with a certain probability or receive  $0 \notin$  with the counter probability.

A six-sided dice will be thrown for *each* participant:

- If the dice shows one of the numbers 1 or 2 you receive 0 €
   (probability of 1/3)
- If the dice shows one of the numbers 3, 4, 5, or 6 you receive 10 €
   (probability of 2/3)

A dice will be thrown for *each* participant of the group individually defining whether the person receives  $0 \notin \text{or } 10 \notin \text{One of the following four scenarios will occur:}$ 

- 1. All three members of the group win  $10 \in$
- 2. One member of the group wins  $10 \notin$  and the other two lose  $(0 \notin)$ .
- 3. Two members of the group win 10  $\in$  and the third one loses (0  $\in$ ).
- 4. All three members of the group lose (all receive  $0 \in$ ).

## YOUR DECISION

Before you get to know whether you win  $(10 \oplus)$  or lose  $(0 \oplus)$  you decide how much you would voluntarily give to losers in your group in case you win. You have to distinguish between two possible situations: You have to decide how much you would give to *one* member of your group in case that only *one* other member receives  $0 \in$  And you have to decide how much you would give to *two* members of your group in case both receive  $0 \in$  The total amount you give to your group members has to be between  $0 \notin$  and  $10 \notin$  Your group members have to make the same decision. The other participants will not get to know your decisions.

#### YOUR PAYOFFS

Your final pay off depends on your decision and on the decisions of the other participants in the experiment. If the second part of the experiment will be paid out you receive additional to 2.50 €

•	In case you receive 10 €	10 $\in$ minus the amount you decided to give to potential
		losers (0 €) in your group
•	In case you receive $0 \in$	$0 \in \mathbf{plus}$ the amount you get from potential winners in
		your group

## THE PROCEDURE

- 1. Now the experimenters distribute a control sheet to make sure that every participant understood the instructions.
- 2. Afterwards, the experimenters will distribute an envelope containing a decision form to each participant. Please open your envelope and check your control number **top right** on the form. Fill in the decision form completely, put it back into the envelope and close it. After all participants having filled in their decision forms the experimenters will collect all the envelopes in a box.
- 3. Then the experimenters will distribute a further form with your control number top right on the form. Please check your number and fill in the form completely. As soon as all participants filled in their forms, the experimenters will collect them.
- Subsequently, the experimenters distribute another short questionnaire. Please check again your control number and complete the form.
- 5. The experimenters will then draw the envelopes containing the decision forms one by one from the box. For each envelope they will throw a six-sided dice to acquire whether the

particular control number wins or loses. The experimenters will write down on each envelope whether the control number won or lost. Afterwards all envelopes will be put back into the box and will be mixed properly.

- 6. The experimenters draw envelopes from the box again. The envelopes will be randomly arranged in groups of three. For each group the experimenters will open the envelopes and calculate the payoffs each participant gets if the second part of the experiment will be paid out.
- Now, the experimenters throw a six-sided dice to define the part that will be paid out. Afterwards, they will call on the control numbers separately and disburse the payoffs to the participants.

Are there any further questions?

## Appendix

## Some selected statements from the questionnaire:<sup>2</sup> RT:

"I decided to take possibility A. I give  $0 \notin to$  other participants, because everybody had the free choice to choose the secure possibility. Those choosing possibility B nevertheless, have to bear their risk alone/themselves."

"I give less, because the others decided for the lottery and therefore choose the risk consciously."

"All participants wanting a secure payment could have chosen possibility A. All participants choosing B as myself, are soldiers of fortune and let luck/chance decide. Therefore they receive nothing."

"Those who are greedy and therefore take risks, have to take the responsibility for it."

"Choosing possibility *A* I have no chance to get something from others and therefore I do not give anything, too. Moreover, I do not want to support others' risk loving behavior, if I decided for the safe state."

"I give nothing to other participants choosing possibility *B*, because they took a chance by playing the lottery. Therefore it is their own fault."

## <u>ST:</u>

"In this case one could not control his own risk and therefore I decided in case I win to pay an amount as consolation."

"Here I give more, because it is no one's fault if he loses."

"Game of chance, now I give a minimal amount to my group members."

"I want all three group members to receive similar amounts, because winning is only due to the dice."

"Because I also lose with a probability of 1/3, I am probably dependent on the pity of others and therefore I am also generous myself."

"I share, because everybody has the same chance."

<sup>&</sup>lt;sup>2</sup> Translated from German.