

## **Experimental Instruction for Participants of Experiment 1**

### **[The computer treatment]**

You are now taking part in an economics experiment. If you read the following instructions carefully, depending on your decisions, you can earn some more money in addition to the 10 Yuan, which is a show-up fee and you can keep in any case. The entire amount of money that you earn with your decisions will be added up and paid to you at the end of the experiment. These instructions are solely for your private information. You are not allowed to communicate during the experiment. Violation of this rule will lead to the exclusion from the experiment and all payments. If you have questions, please raise your hand. A member of the experimenter team will come to you and answer them in private.

We will not speak of Chinese Yuan during the experiment, but rather of MU (Monetary Units). Your whole income will first be calculated in MU. At the end of the experiment, the total amount of points you earned will be converted to Chinese Yuan at the following rate:

$$100 \text{ MU} = 40 \text{ Yuan}$$

We describe the exact experiment process below.

### The decision situation

You will learn how the experiment will be conducted later. We first introduce you to the basic decision situation. At the end of the description of the decision situation, you will find control questions to help you understand the decision situation.

You will be a member of a group consisting of 4 members. The other three members are computer players, not real people. The computer players will play the game according to pre-set instructions. Your decisions will have no effect on how computer players play. Each group member, i.e., you and three computer players, has to decide on the allocation of 20 MU. You can put these 20 MU into your private account or invest them fully or partially into a group project. Each MU that you do not invest into the project will automatically remain in your private account. The computer players will pick the decisions of the other three players in this experiment conducted earlier. The computer will pick their decisions randomly and separately (so each computer player will make its own random decision). You are the only real person in the group, and only you will receive any money.

### Your income from the private account:

You will earn one MU for each MU you put into your private account. For example, if you put 20 MU into your private account (and therefore do not invest into the project), your income will amount to exactly 20 MU out of your private account. If you put 6 MU into your private account, your income from this account will be 6 MU. No one except you earns something from your private account.

### Your income from the project:

Each group member will profit equally from the amount you invest into the project. On the other hand, you will also get a payoff from the other group members' investments. The income for each group member will be determined as follows:

$$\text{Income from the project} = \text{sum of all contributions} \times 0.5$$

If, for example, the sum of all contributions to the project is 60 MU, then you and the other members of your group each earn  $60 \times 0.5 = 30$  MU out of the project. If four members of the group contribute a total of 10 MU to the project, you and the other members of your group each earn  $10 \times 0.5 = 5$  MU out of the project.

### Total income:

Your total income is the sum of your income from your private account and that from the project:

$$\begin{aligned} \text{Total income} &= \text{Income from your private account} (= 20 - \text{contribution to the project}) \\ &\quad + \text{Income from the project} (= 0.5 \times \text{sum of all contributions to the project}) \end{aligned}$$

Remember, the other group members are just computer players. You are the only real person in the group, and only you will receive any money. Your earnings will be calculated as described above, i.e., by adding the income from the private account to the income from the group project.

Nobody but the experimenter after the experiment, will know what your contribution schedule here was, and even then, your decisions are anonymous. No other players will ever know of your decisions.

Control questions:

Please answer the following control questions. They will help you to gain an understanding of the calculation of your income, which varies with your decision about how you distribute your 20 MU. Please answer all the questions and write down your calculations (in MU).

(1) Assume that neither you nor any other group member contributes anything to the group project.

Question 1: What is your total income? \_\_\_\_\_

Question 2: What is the total income of each of your three group members? \_\_\_\_\_

(2) Assume that you and the other three group members each contribute 20 MU to the group project.

Question 3: What is your total income? \_\_\_\_\_

Question 4: What is the total income of each of your three group members? \_\_\_\_\_

(3) Assume that the other three group members contribute a total of 30 MU to the group project.

Question 5: What is your total income if in addition to that, you contribute 0 MU? \_\_\_\_\_

Question 6: What is your total income if in addition to that, you contribute 10 MU? \_\_\_\_\_

Question 7: What is your total income if in addition to that, you contribute 20 MU? \_\_\_\_\_

(4) Assume that you contribute 10 MU to the group project.

Question 8: What is your total income if in addition to that, the other three group members contribute a total of 10 MU to the group project? \_\_\_\_\_

Question 9: What is your total income if in addition to that, the other three group members contribute a total of 30 MU to the group project? \_\_\_\_\_

Question 10: What is your total income if in addition to that, the other three group members contribute a total of 50 MU to the group project? \_\_\_\_\_

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Question 4: What is the total income of each of your three group members? \_\_\_\_\_

(3) Assume that the other three group members contribute a total of 30 MU to the group project.

Question 5: What is your total income if in addition to that, you contribute 0 MU? \_\_\_\_\_

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## Screenshots of Experiment 1

### [The computer treatment]

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## Experiment instruction

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If you read the following instructions carefully, depending on your decisions, you can earn some more money.  
Decisions are anonymous. Please make your decisions carefully.  
At the end of the experiment, the total amount of MU you have earned will be converted to Chinese Yuan at the rate of 100 MU=40 RMB, and the experimenter will pay you immediately.

### Experimental framework

You will be a member of a group consisting of 4 members.  
The other 3 members are computer players, not real people. The computer players will play the game according to pre-set instructions.

Each group member, i.e., you and three computer players, has to decide on the allocation of 20 MU.

**Total income for each member=Income from one's private account (=20 - contribution to the project)**  
+ Income from the project  
**Income from the project (= 0.5 × sum of all contributions to the project)**

For example, if everyone put 0 MU into the project, one's income from the project will be 0 MU,  
the total income of each member will amount to  $(20-0)+0=20$  MU.  
If everyone put 20 MU into the project, one's income from the project will be  $0.5 \times (20+20+20+20)=40$  MU,  
the total income of each member will amount to  $(20-20)+40=40$  MU.

**You are the only real person in the group, and only you will receive any money.**

Please input your ID:

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## Control questions

Please answer the following control questions.  
They will help you to gain an understanding of the calculation of your income.

**Total income=Income from your private account (= 20 - contribution to the project)**  
+ Income from the project (= 0.5 × sum of all contributions to the project)

(1) Each group member has to decide on the allocation of 20 MU.  
Assume that the other three group members contribute a total of 60 MU to the group project.

Q1: What is your total income if in addition to that, you contribute 0 MU:   
Q2: What is your total income if in addition to that, you contribute 20 MU:

(2) Each group member has to decide on the allocation of 20 MU.  
Assume that you contribute 10 MU to the group project.

Q3: What is your total income if in addition to that, the other three group members contribute a total of 10 MU to the group project:   
Q4: What is your total income if in addition to that, the other three group members contribute a total of 50 MU to the group project:

Q5: In a one-shot game, given that the amount contributed to the project by the other three group members in your group is 30 MU, if you want to maximize your own benefit, how much should you contribute to the project (of course, your actual contribution may be different!)?

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## Task 1-1

You will now play this task for only one round.  
Total income for each member=Income from one's private account (=20 - contribution to the project)  
+ Income from the project (= 0.5 × sum of all contributions to the project)

You are the only real person in the group, and only you will receive any money.

Please give your contribution in the public project in each case where the average contribution in the project is known for the three computers.  
Based on your decision, the experimenter will randomly select one situation to calculate your payoff.

(1) computer players contribute, on average, 0 MU, your contribution:

(2) computer players contribute, on average, 5 MU, your contribution:

(3) computer players contribute, on average, 10 MU, your contribution:

(4) computer players contribute, on average, 15 MU, your contribution:

(5) computer players contribute, on average, 20 MU, your contribution:

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Did your decision depend on the contributions of other members of your group?

Yes    No

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Why the contributions of other members of your group affect your contribution decision?

I think most people would do the same thing if they face the same situation as me.  If I contribute too little, I will feel guilty or ashamed.  If I contribute too little, people might think I'm too selfish.  Other

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Why do the contributions of other members of your group have no effect on your contribution decision?

I only care about my own interests.  I think most people would do the same thing if they face the same situation as me.  Other

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<p style="text-align: center;"><b>Task 1-2</b></p> <p>You will now play this task for only one round. Total income for each member=Income from one's private account (=20 - contribution to the project) + Income from the project (<math>= 0.5 \times</math> sum of all contributions to the project)</p> <p>You are the only real person in the group, and only you will receive any money. The experimenter will calculate your payoff based on your decision.</p> <p>Please give your contribution in the public project without knowing the contributions of the three computers:</p> <input style="width: 100px; margin-left: auto; margin-right: auto;" type="text"/> <p style="text-align: right;"><span style="border: 1px solid red; padding: 2px;">Continue</span></p>	

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<p>Did your decision depend on the contributions of other members of your group?</p> <p><input type="radio"/> Yes   <input type="radio"/> No</p> <p style="text-align: right;"><span style="border: 1px solid red; padding: 2px;">Return</span> <span style="border: 1px solid red; padding: 2px;">Next</span></p>	

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Periode

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### Please answer the following questions

Your gender       Male       Female

Your age

Your major

Your per capita monthly household income

Your average monthly expenses

Humanities     Science     Engineering     Medicine     Agriculture     Economics and Management     Others

Less than 1000RMB     1000-3000RMB     3000-5000RMB     More than 5000RMB

Less than 1000RMB     1000-3000RMB     3000-5000RMB     More than 5000RMB

**Submit**

## [The human treatment]

Periods  
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 Each group member has to decide on the allocation of 20 MU.

**Total income for each member=Income from one's private account (=20 - contribution to the project)**  
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For example, if everyone put 0 MU into the project, one's income from the project will be 0 MU,  
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**Next**

Periode  
1 von 1

## Control questions

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## Task 1-1

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 + Income from the project (=  $0.5 \times$  sum of all contributions to the project)

Please give your contribution in the public project in each case where the average contribution in the project is known for the other three group members.

Based on your decision, the experimenter will randomly select one situation to calculate your payoff.

(1) others contribute, on average, 0 MU, your contribution:

(2) others contribute, on average, 5 MU, your contribution:

(3) others contribute, on average, 10 MU, your contribution:

(4) others contribute, on average, 15 MU, your contribution:

(5) others contribute, on average, 20 MU, your contribution:

**Next**

Periode

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Did your decision depend on the contributions of other members of your group?

Yes    No

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Periode

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Why the contributions of other members of your group affect your contribution decision?

I consider the interests of three group members    I think most people would do the same thing if they face the same situation as me.    If I contribute too little, I will feel guilty or ashamed.    If I contribute too little, people might think I'm too selfish.    Other

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Why do the contributions of other members of your group have no effect on your contribution decision?

I only care about my own interests.  I think most people would do the same thing if they face the same situation as me.  Other

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## Task 1-2

You will now play this task for only one round.  
Total income for each member=Income from one's private account (=20 - contribution to the project)  
+ Income from the project ( $= 0.5 \times$  sum of all contributions to the project)

The experimenter will calculate your payoff based on your decision.

Please give your contribution in the public project without knowing the contributions of  the other three members.

**Continue**

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Did your decision depend on the contributions of other members of your group?

Yes    No

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**Please answer the following questions**

Your gender  Male  Female

Your age

Your major

Your per capita monthly household income

Your average monthly expenses

Humanities and social science  Science  Engineering  Medicine  Agriculture  
 Economics and Management  Other

Less than 100RMB  1000-3000RMB  3000-5000RMB  More than 5000RMB  
 Less than 100RMB  1000-3000RMB  3000-5000RMB  More than 5000RMB

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