

## **Appendix D: Instructions**

### **Overview**

#### **Teams**

In this experiment, you will interact anonymously with two other participants in a team of three. Your randomly composed team will remain the same throughout the experiment. We assign a label to everyone in the team to be able to give accurate feedback. Therefore, each team has a group member triangle, square and circle.

#### **Rounds**

During the experiment, you can earn points for your team in a total of 20 rounds. To do this, you must make the right decisions in your team. All team members will receive the points earned by everyone for the team. This means that all team members will have the same amount of points in the end. The points earned will yield your earnings in this round.

#### **Payments**

At the end of the experiment we randomly choose one of the 20 rounds. Hereby, each round is drawn with equal probability. Your earnings from the experiment will be the points earned in this round. 100 points correspond to 50 euro cents. In addition, you will receive 5,00 € for showing up on time.

### **Team interaction in one round**

You will now learn how your team can earn points in each round. To do this, you have to solve so-called "tasks" in the team. These tasks are not actual tasks. You do not need to apply or learn any real skills to solve them.

#### **Roles**

In each team, the team members can take on the role of an employee or a manager. Employees are each assigned 100 tasks, which they may be able to complete themselves. Managers are not assigned their own tasks, but they can help employees with uncompleted tasks. Everyone in your team decides simultaneously whether they want to take on the role of an employee or a manager. The role you choose will then be effective for that round. In the next round all participants can choose their respective roles again.

## **Tasks**

Each employee is assigned 100 tasks in each round.  
There are two different types of tasks, orange and silver.  
Of the 100 tasks, 55 [75] tasks always have the task type orange.  
The remaining 45 [25] tasks have the task type silver.  
The orange task type is therefore more common than the silver task type.

## **Solving tasks**

After choosing their role, everyone in the team decides simultaneously for which type of task they want to "prepare".  
They do not yet know which roles the others in the team have chosen.  
An employee can directly complete the tasks for whose task type he has prepared himself.  
For the tasks that he cannot solve himself, he can send a request for help to his team.  
Such a request for help results in communication costs of 25 points for the team.  
In case of requests for help, a manager can solve the tasks for whose task type he has prepared himself.  
In total, a manager or an employee can solve a maximum of 100 tasks in each round.

## **Earnings**

For each solved task the team and therefore each team member earns 10 points.  
Any communication costs that may be incurred are deducted from this amount.

## **Round 1 of the experiment**

Now the 1st round of a total of 20 rounds begins.  
You are the team member triangle/square/circle in your team for the whole experiment.  
In each round all team members choose again whether they want to be employee or manager.  
Likewise, each team member chooses again for which task type they want to prepare.

## **Selection of the role in the team and preparation of a task type**

You must now decide what role you want to take on in your team for this round.  
You must also decide which type of task you want to prepare for.  
Employees are assigned 100 tasks in each round.  
Of these, 55 [75] are orange tasks and 45 [25] are silver tasks.  
Employees can complete the tasks for whose type they have prepared.  
Managers are not assigned their own tasks, but they can help employees with uncompleted tasks.

What role do you want to take on in your team?

- Employee
- Manager

What type of task do you want to prepare for?

- Orange
- Silver

## Your tasks

*(Employee)* You are assigned 100 tasks.

Of these, 55 [75] are orange tasks and 45 [25] are silver tasks.

As you have prepared for the orange/silver task type, you can solve 55/45 [75/25] tasks.

You will therefore earn 550/450 [750/250] points for your team.

You must now decide whether you want to submit a request for help for the 45/55 [25/75] unsolved tasks in your team.

A help request generates communication costs of 25 points for your team.

These costs are incurred even if no manager can solve your tasks.

Without a help request, however, these tasks will certainly remain unsolved.

Would you like to ask for help in your team?

- Yes
- No

*(Manager)* Since you are in the role of a manager, no tasks are assigned to you.

## Help requests from your team members *(Manager, example)*

You have prepared for task type silver.

Team member triangle is an employee and has requested help for 45 silver tasks.

You were able to help an employee to solve 45 tasks of type silver.

## Result of round 1 *(example)*

### Behavior in the group

You are the team member square in your team for the whole experiment.

You were a manager this round.

You have prepared for the task type silver.

You have not been assigned your own tasks as a manager.

There was a request for help in group 1.

In total you could help to solve 45 tasks.

Group member triangle was an employee.

He prepared for the task type orange.

He was assigned 55 orange tasks and 45 silver tasks.

So he could solve 55 tasks.

For the remaining tasks he asked for help.

Group member circle was an employee

He has prepared himself for the orange task type.

He has been assigned 55 orange tasks and 45 silver tasks.

He could therefore solve 55 tasks.

For the remaining tasks he did not ask for help.

## **Earnings in this round**

In your team 155 tasks could be solved.

By solving tasks, your team has thus achieved 1550 points.

There was 1 request for help, which resulted in communication costs of 25 points.

The group earnings less the costs are 1550 points - 25 points = 1525 points.

Each group member will receive 1525 points if this round is selected at the end.

## **Final results** (*example*)

The main part of the experiment is now completed.

Round 1 was randomly selected to determine your payoff.

In this round you received 1525 points.

100 points correspond to 50 euro cents.

Including your participation fee of 5,00 €, your payoff rounded up to 5 Eurocent is 12,65 €.

Now you need to briefly fill out a few questionnaires.

Then we call you with the number of your computer to the front and pay you there.