

## **General Instructions**

Thank you for your participation in this study. All of the procedures used will be exactly as they are described in these instructions. The study should last approximately 20 minutes and must be completed in one sitting. Before beginning, please remove any distractions that may affect your ability to complete the study. Others may be completing the study at a later time, so please do not discuss the study with anyone. During the study, you will not be able to go "back" to previous screens.

This is a study on decision making in an organizational setting. You will receive \$6.00 as a participation fee. Additionally, you will earn money based on a task you complete during the study, as explained to you in these instructions. As long as you complete all parts of the study, you will receive your compensation, regardless of the decisions you make during the study.

Your decisions will remain completely anonymous. We will not be able to relate your responses to you individually.

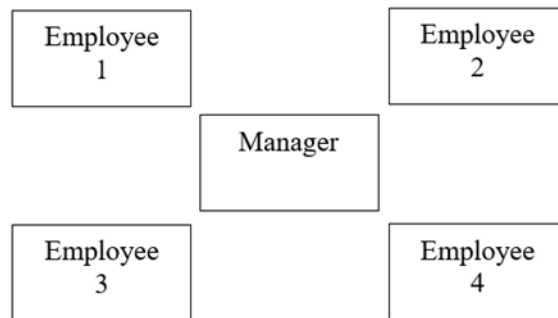
Prior to completing your task, you will read a set of instructions that describe the task and your compensation for the task, and you will complete a brief quiz to check your understanding of the instructions. Following the task, you will complete a brief questionnaire.

Please proceed to view your task instructions.

## Task Instructions

### Role

You, and every other participant in this study, have been randomly assigned the role of either **Employee** or **Manager** in a manufacturing company. The company is organized into teams of five, made up of four employees and one manager. The company is more successful when its teams produce higher output.



You have been randomly assigned the role of **Manager**.

Each team of four Employees and one Manager will remain matched together for the duration of the study.

You will not need to communicate with any other participants at any time during the study, and you will all remain anonymous to each other and to others throughout the study and after.

### **Primary Task Completed by Employees**

The Employees on each team will complete the same task. The task consists of deciding how to use individual resources (expressed as points), which affect each Employee's individual and team output. Employees will complete this task for one period.

Each Employee begins the period with 50 points from each of two pools of resources – which will be referred to as “A” and “B.” Points can be used in any proportion the Employee chooses to either:

1. Increase their own total output or
2. Increase the total output of another member (or other members) of their team of their choosing.

Points used are converted into output points based on a multiplier.

Specifically, A points used to increase an Employee's own total output have a multiplier of 2.0 and therefore generate output of 2 points per point used in this manner. A points used to increase the total output of another member of an Employee's team have a multiplier between 1.5 and 2.5, which will be randomly determined separately for any Employee who chooses to use points in this way.

B points used to increase an Employee's own total output have a multiplier of 1.0. B points used to increase the total output of another member of an Employee's team have a multiplier between 0.5 and 1.5, which will be randomly determined separately for any Employee who chooses to use points in this way.

The output generated by the use of each A and B point is summarized below:

Resource (point) type:	Output generated per point if used to increase the Employee's own total output:	Randomly determined output generated per point if used to increase the total output of another member of the Employee's team:
A	2.0 points	Between 1.5 and 2.5 points
B	1.0 points	Between 0.5 and 1.5 points

To illustrate, suppose on a given team that Employee 1 chooses to use 35 A points and 35 B points to increase their own total output, and chooses to use their remaining points (15 of each type) to increase the output of Employees 2, 3, and 4 (i.e., 5 points of each type used to increase each of these Employees' output). Employee 1's decision would have the following effects on their own total output and the output of their teammates:

Effect on Employee 1's total output:

Resource (point) type:	Points used to increase own total output	Output generated
A	35	$(35 \times 2 = )$ 70 points
B	35	$(35 \times 1 = )$ 35 points
Total		$(70 + 35 = )$ 105 points

\*Suppose also that Employees 2, 3, and/or 4 use a total of 12 points to increase the total output of Employee 1, and that these points generated output of 10 points. Employee 1's total output would include these 10 points.

Effect of points used by Employee 1 to increase the total output of Employee 2:

Resource (point) type:	Points used to increase total output	Output generated
A	5	Between 7.5 and 12.5 points
B	5	Between 2.5 and 7.5 points
Total		Between 10 and 20 points

**Recall that the output generated per point used to increase the output of another Employee is randomly determined separately for any Employee who chooses to use points in this way and ranges between 1.5 and 2.5 for A points and 0.5 and 1.5 for B points.**

Suppose, for example, that the random draw results in multipliers of 1.5 for A points and 0.8 for B points. In that case, the points used by Employee 1 would generate the following output for teammates:

	Points used and output generated for:					
	Employee 2		Employee 3		Employee 4	
Resource type:	Points	Output generated	Points	Output generated	Points	Output generated
A	5	7.5 points	5	7.5 points	5	7.5 points
B	5	4 points	5	4 points	5	4 points
Total		11.5 points		11.5 points		11.5 points

If an Employee chooses to use points to increase the total output of another Employee (or other Employees) on their team, **the other Employee(s)** will learn:

1. Someone used points to increase their total output on their behalf.
2. How many points were used in this manner.
3. How much output was generated by these points.

However, they will never learn who increased their total output. Additionally, **the Employee** will learn how much output was generated for the benefit of their teammate(s) by any points they choose to use in this manner.

**All of this information will be provided to each Employee at the end of the study**, along with feedback about what their total output was and their resulting compensation.

## **Performance Evaluation**

In your role as Manager, you will be responsible for completing performance evaluations for each of your assigned team's Employees and allocating the team's discretionary bonus pool.

Specifically, you will rate the overall performance of each Employee on a scale of 1-100 (with 1 representing poor performance and 100 representing outstanding performance) and allocate a discretionary bonus pool of 400 points between the team's four Employees in any proportion you choose. Employees will learn the results of your performance evaluations and discretionary bonus pool allocations only after the study has concluded, and will never know that you were the Manager of the group.

To assist in the performance evaluation and bonus processes, you will be provided with the following information:

1. The total output for each Employee. As discussed earlier, this includes output generated by the Employee themselves, as well as any output generated for their benefit by other Employees.

Thus, while each Employee can choose to use points to increase the total output of any other Employee on the team, you will not learn whether any Employee used points in this manner or whether any Employee's output was increased by points used in this manner.

For example, you may receive the following information pertaining to the period:

Employee	Employee total output
1	136
2	136
3	158
4	125

## **Payoffs and Compensation**

As Manager, you will receive a fixed salary of \$5.00 for completing your task. This means that you will receive \$11.00 in guaranteed compensation for completing the study.

Your primary task is to complete the performance evaluations and bonus allocations for Employees on your assigned team.

Employees' total compensation for the study will include their participation fee of \$3.00 plus additional compensation based on the total points earned (50 points = \$1.00) from the task they complete.

This compensation will include the following:

1. Points (output) generated by any points an Employee uses to increase their own total output.
2. Points (output) generated by any points any teammate(s) of the Employee use to increase the Employee's total output. As previously mentioned, the sum of (1) and (2) is equal to the Employee's total output for the period.
3. Any points you allocate to the Employee from your team's discretionary bonus pool of 400 points.

---

## **Example**

For illustrative purposes, consider the example presented to you earlier.

Suppose on a given team that Employee 1 chooses to use 35 A points and 35 B points to increase their own total output, and chooses to use their remaining points (15 of each type) to increase the output of Employees 2, 3, and 4 (i.e., 5 points of each type used to increase each of these Employees' output).

Suppose also that Employees 2, 3, and/or 4 use a total of 12 points to increase the total output of Employee 1, and that these points generated output of 10 points. Employee 1's total output would include these 10 points.

Results would be determined as follows:

Effect on Employee 1's total output of Employee 1's use of points:

	Points used by Employee A to increase their own total output	Output generated
A	35	$(35 \times 2 = )$ 70 points
B	35	$(35 \times 1 = )$ 35 points
Sub-total		$(70 + 35 = )$ 105 points
Output generated from the <u>12</u> points used by teammates to increase Employee 1's total output		10 points
<b>Employee 1's total output</b>		$(105 + 10 = )$ 115 points

Effect of points used by Employee 1 to increase the total output of Employees 2, 3, and 4:

Resource (point) type:	Points used to increase total output	Output generated
A	5	Between 7.5 and 12.5 points
B	5	Between 2.5 and 7.5 points
Total		Between 10 and 20 points

The group's Manager would see the following information for Employee 1 (note that the Manager would see the same information for the other Employees on the team as well):

Employee	Employee total output
1	115

Recall that Managers know each Employee can choose to use points to increase the total output of any other Employee on the team, but will not learn whether any Employee used points in this manner or whether any Employee's output was increased by points used in this manner.

In addition, suppose the team's Manager rates Employee 1's performance at 75 (1-100) and chooses to allocate 100 points from the company's discretionary bonus pool to Employee 1.

Employee 1's compensation would include:

Points earned from total output:	115
Points allocated by Manager from the bonus pool:	100
Total points	215

Compensation earned:  $(215 / 50 \times \$1.00 = )$  \$4.30 plus participation fee

**Thus, your primary task is to complete performance evaluations on a scale of 1-100 and allocate the discretionary bonus pool of 400 points for each Employee in your assigned team.**

You will receive the following information for each Employee.

Employee	Employee total output
1	Output generated by the Employee's use of their own points plus any output generated by points used to benefit the Employee by teammates.
2	
3	
4	

**Since they do not receive your evaluations and discretionary bonus allocations until after the study has concluded, employees have already been working on their task so that you do not have to wait for them to finish.**