

Punishment, Cooperation, and Cheater Detection in “Noisy” Social Exchange
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This document contains the following **experimental materials**:

1. Recruiting advertisement
2. Instructions
3. Typical debriefing
4. Screen shots

All the material was translated into English from the original Hebrew.

1. Recruiting advertisement

The participants were recruited by emailing invitations to eligible subjects in RatioLab's subject pool and handing out flyers around the university.

Example of an invitation email:

Dear Student,

RatioLab invites you to take part in a profitable and interesting experiment in decision making, which will take place in room 3703 on the following dates:

. . . List of dates here . . .

If you wish to participate in this experiment, please sign up at ratiolab.huji.ac.il .

You can only participate in this experiment once. The number of participants is limited.

Regards,

The RatioLab team

Examples of recruiting flyers:

Example 1:

Fascinating and PROFITABLE experiment!

Next sessions:

... List of dates here ...

Sign up now:

ratiolab.huji.ac.il

Example 2:

Tired of working?!?

Come participate in a decision-making experiment!!!

Great chance to earn tens of Shekels, + credit !!!

To sign up , go to ratiolab.huji.ac.il

2. Instructions

Experiment in decision making

This is an experiment in decision making. During the experiment participants will make decisions which will determine their payoff, according to rules which will be described shortly.

You will be paid at the end of the experiment exactly according to the rules.

There are 12 participants in the experiment. The experiment is computerized. All decisions are made by via the computer.

You are required to keep completely quiet during the experiment. In case of questions, raise your hand and one of the experimenters will assist you.

The experiment includes multiple decision rounds.

At the beginning of the experiment the computer will randomly divide the 12 participants into three four-person groups. The composition of each group will remain the same throughout the experiment, but you cannot know which of the other participants in the room is in your group. The other group members are identified on the screen by numbers, which remain constant throughout the experiment. “Number 1” in your group is the same person throughout the experiment, and the same holds for “Number 2”, “Number 3” and “Number 4”.

On each decision round each participant will receive an endowment which can be any whole number of points from 1 to 9. The endowment is determined randomly by the computer, independently for each participant in each round.

At the beginning of each round you will receive a message about the size of your endowment for this round, and you will decide how many points to invest in the group pool. You may invest any number between from zero to the total amount of your endowment in the round.

After all the participants have made their decisions, the computer will sum up the investments of the four group members in the group pool. This sum will be multiplied by two and distributed equally among the four group members.

In addition, each group member will keep the points not invested in the group pool.

At the end of the round you will receive feedback about:

- The number of points each group member invested in the group pool.
- The size of each group member’s endowment. ONLY IN ‘PUBLIC’ CONDITION.

- Your profit from the group pool (after it was doubled and distributed equally among all group members).
- Your total profit for the round (points you kept + points from the group pool).

Afterwards the next round will begin.

At the end of the experiment the computer will sum up all the points you've earned in all the rounds. We will pay you in cash according to an exchange rate of 4 points = 1 Shekel.

Example:

Group member	1	2	3	4
Endowment	9	5	2	7
Investment in group-pool	7	0	1	4

Group-pool
total:

12

Multiplied by
2:

24

Profit from group-pool	6	6	6	6
Points kept	2	5	1	3
Total profit in this round	8	11	7	9

Note: This is just an example.

FOLLOWING THE 18TH ROUND, PARTICIPANTS RECEIVED INSTRUCTIONS FOR STAGE 2:

Experiment in decision making: part 2

This is the second and final part of the experiment. As in the first part, you and the other participants will make decisions, and these decisions will determine your payoff.

The group composition remains the same as in the first part. You are still part of the same group, but cannot know which of the other participants in the room is in your group. The other group members are identified on the screen by numbers, which remain constant throughout both parts of the experiment. “Number 1” in your group is the same person throughout the experiment, and the same holds for “Number 2”, “Number 3” and “Number 4”.

Part 2 of the experiment involves multiple decision rounds, which are similar to those in part 1.

In addition, at the end of each round, after receiving feedback, you will have the opportunity to fine one of your group members. For this you may use up to 5 of the points that you’ve earned so far in the experiment. Each point used for a fine will deduct 3 points from the fined group member’s total.

For example, if you use 5 points to fine group member 2, 15 points will be deducted from his account, and 5 points will be deducted from yours. Similarly, if group member 3 chooses to use 2 points to fine you, you will lose 6 points and he/she will lose 2 points.

After all group members have made their decisions about the fines, you will receive final feedback for the round, which will include:

- Your profit in the round before fining (points you kept + points from the group-pool).
- The number of points you used for fining.
- The number of points you lost when other group members fined you.
- Your final profit in the round.

Afterwards the next round will begin.

At the end of the experiment the computer will sum up all the points you’ve earned in all the rounds. We will pay you in cash according to an exchange rate of 4 points = 1 Shekel. Your earnings in part 2 will be added to your earnings in part 1.

3. **Typical debriefing**

- Thank you for participating in the experiment.
- In a nutshell, the purpose of the experiment was to examine cooperation under uncertainty. If you have specific questions, or wish to know more about the experiment, please let us know in a few moments, when you are paid.
- Please consider the very high costs of running an experiment like this. Obviously, if future participants have prior knowledge about the experiment it will greatly diminish the usefulness of the data we collect. Therefore, we ask you to refrain from disclosing information about the experiment to anyone who might be a future participant.
- We would be happy, of course, if you referred your friends to participate in our experiments in the future.
- We will now call you one by one to the room next door, where you will receive your payment and be dismissed.
- Again, thank you for your participation, and we hope to see you in the future in another experiment.

4. Screen shots

The original screen shots in Hebrew are displayed below. The translation is in blue, beneath or to the left of the original text.

- The screen shots are from the PRIVATE condition.
- The ONLY difference between the two conditions is in screen 2 – in the PUBLIC condition the actual endowments of other group members appear instead of the question marks. The question marks in screen 1 appear in both conditions.
- Although these screenshots present “Round 1” with punishment, in the experiment there was no punishment (fining) option in rounds 1-18. In rounds without punishment there were only two screens, and the second screen did not include the lower section dealing with punishment.
- Hebrew is written from right to left.

Screen 1:



סבוב: 1
Round: 1
מספר נקודות מצטבר: 0
Accumulated points: 0
רווח מצטבר בשקלים: 0
Total profit in Shekels: 0

לרשותך בסיבוב זה 5 נקודות
Your endowment in this round is 5 points

ברצוני להשקיע _____ נקודות
I wish to invest _____ points

אשר
Approve

לרשות משתתף/ת 2: ? נקודות
Participant 2 has ? points
לרשות משתתף/ת 3: ? נקודות
Participant 3 has ? points
לרשות משתתף/ת 4: ? נקודות
Participant 4 has ? points

אנא קבל החלטה
Please make a decision

Screen 2 (bottom part only in rounds with punishment):

2.25 רווח מצטבר בשקלים: Total profit in Shekels:	9 מספר נקודות מצטבר: Accumulated points:	1 סיבוב: Round:	בסיבוב זה In this round אני השקעתי: I invested: משתתף/ת 2 השקיע/ה: Participant 2 invested: משתתף/ת 3 השקיע/ה: Participant 3 invested: משתתף/ת 4 השקיע/ה: Participant 4 invested:
	5 נקודות. points.	2 מתוך out of	
	? נקודות. points.	1 מתוך out of	
	? נקודות. points.	9 מתוך out of	
	? נקודות. points.	0 מתוך out of	

12

 נקודות
points

6

 נקודות
points

3

 נקודות
points

9

 נקודות
points

במאגר הקבוצתי הושקעו סה"כ
Total investment in the group pool was

המאגר הוכפל ב 2 וחולק באופן שווה בין חברי הקבוצה
The pool was multiplied by 2 and divided equally among all group members

החלק שלי במאגר
My share of the pool

הנקודות שלא השקעתי
Points I did not invest

סה"כ נקודות שהרווחתי בסיבוב זה:
Total points earned in this round:

Now you have the opportunity to use up to 5 points to impose a fine on one of your group members. Each point will deduct 3 points from the fined group member.

המשך

Continue

כעת יש לך אפשרות לקנוס את אחד המשתתפים באחרים בקבוצתך בעלות של עד 5 נקודות להזכירך כל נקודת קנס תפחית 3 נקודות מהמשתתף שנקנס

אני רוצה לקנוס את משתתף מספר בעלות של נקודות
I want to fine participant number with a cost of points

אני לא רוצה לקנוס את המשתתפים האחרים
I do not want to fine any of the other participants

Screen 3 (only in rounds with punishment):

סיבוב: Round:	1
מספר נקודות מצטבר: Accumulated points:	3
רווח מצטבר בשקלים: Total profit in Shekels:	.75

נקודות Points	9	מספר נקודות בסיבוב לפני קנסות Points in this round before fines
נקודות Points	0	אני בחרתי לקנס בעלות של I chose to impose a fine with a cost of
נקודות Points	6	קנסו אותי ב I was fined by
נקודות Points	3	סה"כ נקודות שהרווחתי בסיבוב זה Total points I earned in this round

המשך
Continue