

Online Supplementary Material

Appendix A. Additional Regression Analysis

Regression Analysis: the Weakest Link Game

We conduct OLS, Random effects GLS, and Tobit regressions to investigate whether subjects' contributions differ across treatments.¹ In Model 1, we control for the Manager treatment (Manager=1 if the treatment is Manager and 0 otherwise), and the Exemplar treatment (Exemplar=1 if the treatment is Exemplar and 0 otherwise).² The other explanatory variables are Period (Period = 0, ..., 20), Period*Exemplar, Period*Manager, and Above Min which is the difference between a subject's contribution and the minimum contribution in the previous period. Standard errors in all regressions are clustered at the group level to control for the potential dependency of decisions within groups. The results are presented in Table 1.

Management treatment shows marginally higher contributions compared to the baseline treatment at the beginning, while the Exemplar treatment does not. Contributions in the baseline treatment, however, decrease over time while those of the exemplar and management treatment show a slight but steady increase. This is consistent with our MW rank sum test results from the text which suggest that both leadership treatments improve contributions compared to the Baseline treatment. Contributions above the minimum in previous periods are discouraging to subjects. Controlling for socio-economic characteristic did not significantly change our results in any of our regressions.³

¹ We first conducted Random Effects censored panel regressions using STATA routine "xttobit" but we were unable to get an estimation due to a non-concave log-likelihood function. As an alternative we conducted Tobit together with Random Effect GLS regressions to see how different the estimated results are.

² The excluded treatment is Baseline (=1 if the treatment is Baseline and 0 otherwise).

³ Our socio-economic variables include subjects' gender, race, marital status, relative income, academic major, GPA, number of econ classes attended, number of siblings, and frequency of attending religious services.

Regression Analysis: the Linear Public Good Game

We conduct OLS, Random effect GLS, and Tobit regressions to investigate whether subjects' contributions differ across treatments. The models are similar to the ones used for the weakest link game except here we use the variable "Above Ave" (the difference between a subject's contribution and the average contribution in the previous period) instead of Above Min. Standard errors in all regressions are clustered at the group level to control for the potential dependency of decisions within groups. The results are presented in Table 1.

None of the leadership treatments show higher contributions compared to the baseline treatment at the beginning. Contributions in the baseline treatment, however, decrease slightly over time while those of the exemplar and management treatment remain relatively steady. Controlling for socio-economic characteristic did not significantly change our results in any of our regressions.

Table A1: Regression Results- All Treatments Combined

Dep Variable: Contribution ^b	Weakest link			Linear public good game		
	OLS	Tobit	RE GLS	OLS	Tobit	RE GLS
Constant	6.7040* (0.213)	5.4396* (0.548)	5.0300* (0.518)	6.9699* (0.257)	6.9532* (0.268)	6.8745* (0.132)
Period	-0.1169* (0.030)	-0.1169* (0.030)	-0.0906* (0.030)	-0.0253* (0.001)	-0.0286* (0.000)	-0.0253* (0.002)
Period*Manager	0.1045* (0.040)	0.1042* (0.041)	0.0936* (0.006)	0.0315 (0.055)	0.0338 (0.060)	0.0043 (0.046)
Period*Exemplar	0.1799* (0.006)	0.1807* (0.006)	0.1713* (0.001)	0.0356 (0.022)	0.0326 (0.024)	0.0173 (0.032)
Exemplar Treatment	0.2346 (0.426)	0.2049 (0.398)	0.5131 (0.531)	-0.4628 (0.333)	-0.4529 (0.365)	-0.1952 (0.440)
Manager Treatment	1.2850+ (0.732)	1.2935+ (0.728)	1.5576+ (0.901)	-0.6553 (0.561)	-0.7252 (0.590)	-0.1932 (0.725)
Above Min/ Above Ave ^a	-.3713* (0.003)	-0.3754* (0.003)	-0.1061* (0.024)	0.0101 (0.010)	0.0109 (0.024)	-0.0117 (0.024)
R ²	0.22		0.18	0.009		0.006
Pseudo R ²		0.05			0.002	
Observations	4799	4799	4799	4799	4799	4799

The numbers in parentheses show the standard errors of the estimated coefficients. Standard errors are clustered at the group level.

^aVariable “Above Min” applies to the weakest link and “Above Ave” applies to the linear public good game.

^bVariables: Period=number of rounds from 1 to 20; Manager=1 if the treatment is Manager and 0 otherwise; Exemplar = 1 if the treatment is Exemplar and 0 otherwise; Above Min = the difference between a subject’s contribution and the minimum contribution in the previous period; Above Ave= the difference between a subject’s contribution and the average contribution in the previous period; Leaders’ initiative= leaders’ contribution for the Exemplar treatment and leader’s suggestion for the Manager treatment.

*Significant at 5%; + Significant at 10%

Table A2: Average Contributions by Treatment

	Leaders	Followers	Total
Weakest link Base line	NA	NA	4.49
Weakest link Manager	7.47	7.50	7.53
Weakest link Exemplar	7.67	7.21	7.15
Linear public good Base line	NA	NA	6.14
Linear public good Manager	6.80	6.59	6.63
Linear public good Exemplar	7.73	6.35	6.65

Figure A1- Weakest Link- Average Contributions-Followers

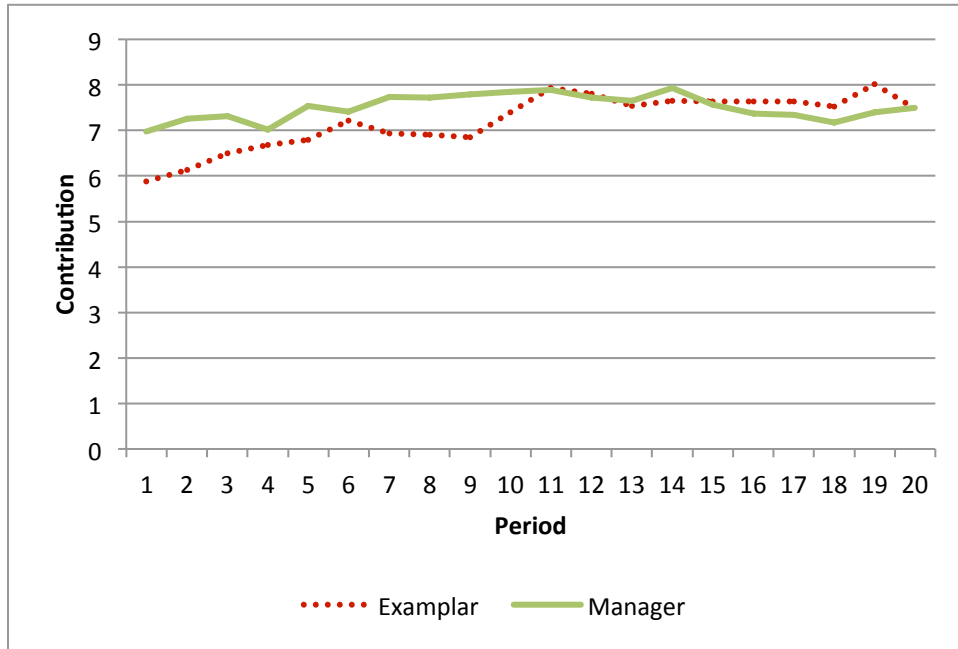


Figure A2-Weakest Link- Average Contributions-Leaders

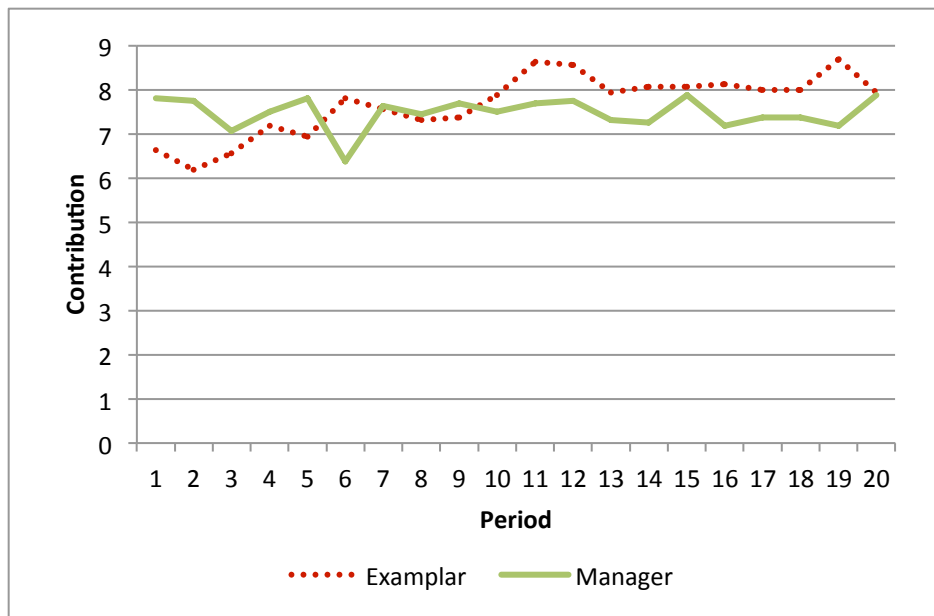


Figure A3- Linear public good game- Average contributions- Followers

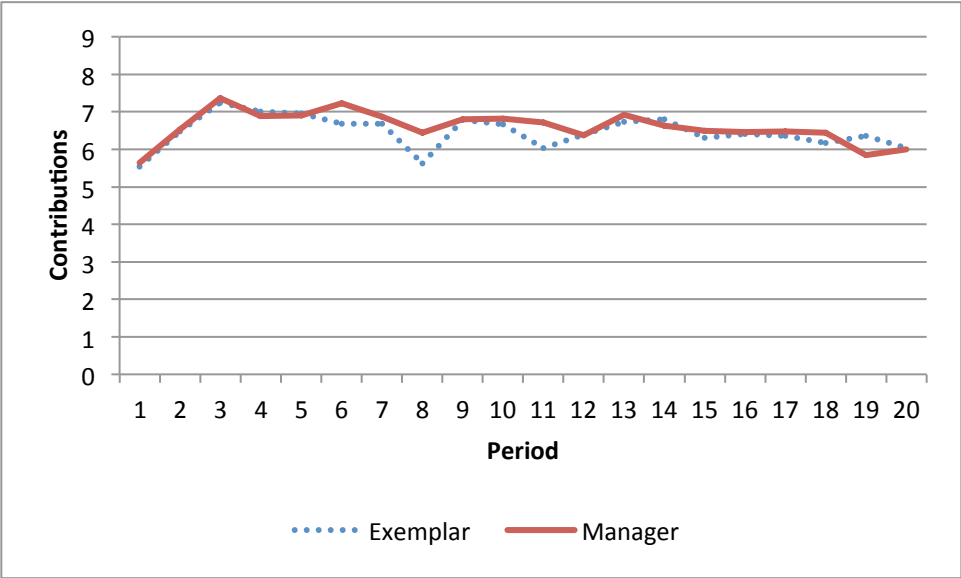
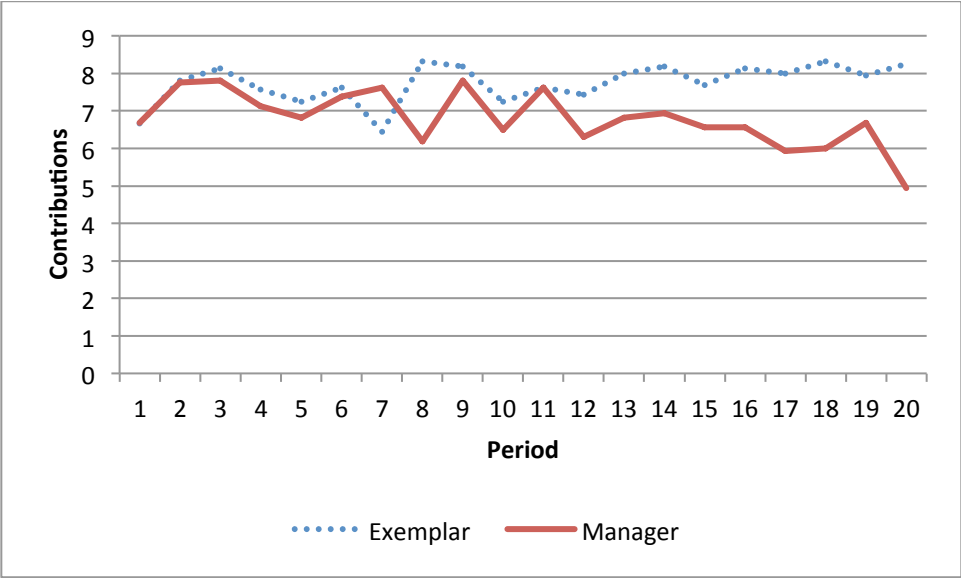


Figure A4- Linear public good game- Average contributions- Leaders



Appendix B: Experimental Design and Instructions.

Table B1: Comparisons of the main steps in each of the experiments

Baseline Treatment	Exemplar Treatment (Leading by example)	Manager Treatment (Leading by "cheap talk")
1. Examine the costs and production level tables.	If you are the Leader	If you are the "Leader"
2. Decide your contribution level and enter this number.	1. Examine the costs and production level tables.	1. Examine the costs and production level tables.
3. Wait for everyone in your team to complete the decision process.	2. Decide your contribution level and enter this number.	2. Make a suggestion for the contribution level of each team member.
4. Notice the production level and your earnings.	3. Everyone observes your decision and make his or her own after that.	3. Decide your contribution level and enter this number.
5. This completes the period	4. Wait for everyone in your team to complete the decision process.	4. Wait for everyone in your team to complete the decision process.
	5. Notice the production level and your earnings.	5. Notice the production level and your earnings.
	6. This completes the period	6. This completes the period
	Otherwise	Otherwise
	1. Wait for the leader's decision	1. Wait for leader's suggestion to you.
	2. Examine the costs and production level tables.	2. Examine the costs and production level tables.
	3. Decide your contribution level and enter this number.	3. Decide your contribution level and enter this number.
	4. Wait for everyone in your team to complete the decision process.	4. Wait for everyone in your team to complete the decision process.
	5. Notice the production level and your earnings.	5. Notice the production level and your earnings.
	6. This completes the period	6. This completes the period

Instructions (variations are shown in boxes):

This is a compilation of the instructions for all treatments. The instructions include a common component, and separate components for each treatment combination. Each treatment included an option from the **Group Composition** section, and one from the **How does the game work?** section.

Greetings!

Today you are going to participate in an economic decision-making experiment. If you make good decisions, you can earn a considerable amount of money. You will be paid in cash, in private, at the end of the experiment.

This decision process will proceed as a series of periods. In each period the level of production will be determined and financed. Your total earnings will be first calculated in experimental dollars. At the end of all periods today the total amount of experimental dollars you make during the experiment will be exchanged for US dollars according to the following formula:

1 Experimental dollar = \$0.10 or 10 cents

Example: Suppose at the end of today you accumulated a total of 96 experimental dollars. This is \$9.60 (during the experiment every reference to “dollars” is to experimental dollars).

The experiment is divided into 20 periods. In each period you have to make a decision.

In this experiment there are a total of 6 participants in your group. As you can see, there are 12 participants in this room. The computer is going to randomly assign you to one of the two groups with 6 people in each group. Once determined, your group will remain the same until the experiment is completed.

During the experiment, communication with the other participants is strictly forbidden. If you have a question at any time during the experiment, please raise your hand and an experimenter will come to you. Failure to adhere these rules will result in exclusion from the experiment and all payments.

Group Composition (Variations)

Baseline: In this experiment there are a total of 6 participants in each group. As you can see there are 12 participants in this room. The computer is going to randomly assign you to one of the two groups with 6 people in each group. This is your TEAM. Once determined, your Team will remain the same until the experiment is completed.

Exemplar: In this experiment there are a total of 6 participants in each group. As you can see there are 12 participants in this room. The computer is going to randomly assign you to one of the two groups with 6 people in each group. This is your TEAM. Once determined, your Team will remain the same until the experiment is completed.

In each team there is going to be one Player A, and five team members. Player A is going to move first and the team members will follow.

After Player A reaches a decision, as a team member, you will have a chance to observe his/her decision and then make your own. You do not have to make the same decision, but you can if you want to. You are only required to see Player A's decision before you make your own.

Player A will be the subject who gets the highest score on the multiple choice questions, and the rest will be team members.

Manager: In this experiment there are a total of 6 participants in each group. As you can see there are 12 participants in this room. The computer is going to randomly assign you to one of the two groups with 6 people in each group. This is your TEAM. Once determined, your Team will remain the same until the experiment is completed. In each team there is going to be one Player A, and five team members. Player A is going to move first and the team members will follow.

Player A is going to make a suggestion for the contribution level for each of the team members. Player A can make the same or a different suggestion for each of the team members. Team members, before making their decisions are going to see Player A's suggestion to them.

Team members are free to follow Player A's suggestion or not. They are only required to observe the suggestion and make their own decisions.

At the beginning of a new period, before Player A makes new suggestions, s/he will be able to see the past suggestions that s/he made and the actual decisions of each team member.

Player A will be the subject who gets the highest score on the multiple choice questions, and the rest will be team members.

How does the game work?

Linear public goods: At the beginning of each period, you will be asked to choose a contribution level to go to team production. This contribution will have a cost to you. After everyone makes his or her contributions, the level of production and the respective payoffs will be determined.

Each period you will be given an opportunity to choose between different contribution levels to go to team production. There are 10 contribution levels numbered from 0 to 9. Each level has its own cost. The cost of each contribution level is given in Table 1 below. (Note that your cost depends on your contribution level and not the overall production level).

The average contribution level by all team members (the total contributions divided by 6) will determine the level of production achieved, and thus the payoffs. If, for example the average contribution level is 4, then production will be at level 4, and earnings will be determined as shown in Table 2 below. (This table is for illustrative purposes only; average contribution may be anywhere between 0 and 9, and will not necessarily be a whole integer.)

Weakest Link Public Good: At the beginning of each period, you will be asked to choose a contribution level to go to team production. This contribution will have a cost to you. After everyone makes his or her contributions, the level of production and the respective payoffs will be determined.

Each period you will be given an opportunity to choose between different contribution levels to go to team production. There are 10 contribution levels numbered from 0 to 9. Each level has its own cost. The cost of each contribution level is given in Table 1 below. (Note that your cost depends on your contribution level and not the overall production level).

The lowest contribution level by a team member will determine the level of production achieved, and thus the payoffs. If, for example level 4 is the lowest contribution level, then production will be at level 4, and earnings will be determined as shown in Table 2 below.

What are net earnings?

Net Earnings = (Earnings from achieved production level) - (Cost of the contribution level you chose)

Notice that each team member will earn the same amount from Team Production. Your net earnings will depend on the cost of your contribution.

Instructions Table 1: Costs of Contribution Levels

Contribution Level	Cost of Contribution Level (Dollars)
0	0.00
1	0.25
2	0.50
3	0.75
4	1.00
5	1.25
6	1.50
7	1.75

8	2.00
9	2.25

Instructions Table 2: Sample Earnings of Production Levels (for integers only)

Level of Production	Earnings for Each Team Member (Dollars)
0	0.00
1	1.25
2	2.50
3	3.75
4	5.00
5	6.25
6	7.50
7	8.75
8	10.00
9	11.25

Appendix C: Consent form/Information Sheet:

Informed Consent

Consent to participate in research

Investigator

Catherine Eckel
972-883-4880

Purpose

The purpose of this research is to better understand decision making.

Possible Risks

There are no risks to participation above and beyond what could be expected to occur in daily living.

Possible Benefits to the Participant

There are no direct benefits to you for participating other than the payment you may receive. Sometimes, you will be paid according to the decisions that you make. Other times, your payment may be based on chance or you may receive a flat rate payment for participation.

Participation

You must be 18 years of age or older to participate.

All participation is voluntary. You may discontinue participating at any time if you wish with no penalty. Your decision whether or not to participate or withdraw will not prejudice your future relations with or adversely affect your standing in any class or program at UTD.

Payment

In some parts of the study you may earn money depending on the decisions that you make or on chance.

Records of Participation in this Research

Information Stored at the University of Texas at Dallas

All the information participants provide to investigators as part of this research will be protected and held in confidence within the limits of law and institutional regulation. Data will be stored by code number only, and will be available only to the researchers. We will not share any personal contact information.

Information Available to Others

Members and associated staff of the Institutional Review Board (IRB) of the University of Texas at Dallas may review the records of your participation in this research. An IRB is a group of people who are responsible for assuring the community that the rights of participants in research are respected. A representative of the UTD IRB may contact you to gather information about your participation in this research. If you wish, you may refuse to answer questions the representative of the IRB may ask.

Publications Associated with this Research

The results of this research may appear in publications but individual participants will not be identified.

Contact People

Participants who want more information about this research may contact the investigator listed above. Participants who want more information about their rights as a participant or who want to report a research related injury may contact:

Sanaz Okhovat, Research Compliance Manager, 972-883-4579
UTD Office of Vice President for Research & Graduation Education

Additional information, including the nature and details of the researcher's, or the research entity's, financial interests, are available upon request.

By registering on this website, the participant indicates that they have read the information provided above and that they have received answers to their questions. The participant also indicates that they have freely decided to participate in this research and that they know they have not given up any of their legal rights.

A participant may request that their information be removed from the database at any time by emailing cbees@utdallas.edu.