

APPENDIX: FOR ONLINE PUBLICATION

Gender Differences in the Allocation of Low-Promotability Tasks: The Role of Backlash

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Appendix A: Instructions

Instructions

Introduction

Thank you for participating in our study. This is an experiment about decision making. The other people in this room are also participating in the experiment. You must not talk to them or communicate with them in any way. If you have a question please raise your hand and one of us will come to where you are sitting to answer you in private.

During the experiment you will make decisions in 10 rounds. In each round you will be randomly matched with three other people to form a group of four. Your earnings will depend on the decisions made by you and by your group members. At the end of the experiment you will be paid in private and in cash. Your payment will equal the sum of your earnings from each of the 10 rounds plus \$6 for showing up to the experiment.

Identity and roles

We will use the information you provided at the beginning of the experiment to create your individual profile. In each round we will show you the individual profiles of the three other group members you are matched with. At the beginning of each round you and your group members will be randomly assigned roles. One member of the group will be assigned the role of red player and the remaining three members of the group will be assigned the role of green players. Green players form an investment group and can make an investment. The red player cannot make an investment. The earnings of all four group members depend on the investment choices made by the three green players.

Decisions and Earnings

In each round the three green players form an investment group and have 120 seconds to individually decide whether to invest in the group account. The round ends when the 120 seconds are up or when someone invests. If no one invests, each group member earns \$1 for the round. If a green player invests before the 120 seconds are up, then that individual earns \$1.25 for the round and the other group members each earn \$2 for the round. If multiple green players invest at the exact same time, then it is randomly determined which player's investment choice counts and therefore which player earns \$1.25.

If you are selected to be a red player, you earn \$2 if a green player invests and you earn \$1 if no green player invests. As a red player you cannot invest. However, as the red player you can ask a green player to invest. In each round you will indicate which player you would like to ask before it is determined whether you are the red player. That is, prior to knowing your role, all members will indicate which green player they would like to ask to invest.

[BACKLASH: Conditional on the outcome of the investment round, you will also make a decision about whether and how you would like to decrease the earnings of the green player you asked to invest. It will cost you 1 cent to deduct 3 cents from the earnings of the group member you asked to invest. For example, if you deduct 30 cents from the earnings of the green player you asked to invest, your earnings will decrease by 10 cents and the green player's earnings will decrease by 30 cents. You can deduct up to 75 cents of the green player's earnings.]

When the round begins, one group member is randomly selected to be the red player, and it is revealed which green player the red player asked to invest. After each round all participants learn if an investment was made and whether the green player who was asked to invest made the investment. [BACKLASH: Conditional on the outcome of the investment round, all players learn if and how much the red player chose to decrease the earnings of the green player who was asked to invest.]

Request Screen

Below you see a screenshot of the request stage. In the upper left corner you see the round number. The profiles of the three other members of your group are shown below. The order of the profiles and their group member number differs within the group. You can indicate who you would like to ask to invest by marking your preferred option. Your choice is only revealed to the other members of your group if you are randomly assigned the role of red player.

The screenshot displays the 'Request Stage' interface for 'Round: 1'. At the top, it says 'Request Stage'. Below that, a message reads: 'The three other members of your group are shown below. If you are selected to be the red player for this round, who would you like to ask to invest? (mark your preferred option)'. There are three boxes representing group members, each with a title and a list of attributes: 'Group member 1' (Age, Gender, Born in the US, Year in school, Major), 'Group member 2' (Age, Gender, Born in the US, Year in school, Major), and 'Group member 3' (Age, Gender, Born in the US, Year in school, Major). Below each box is a small square checkbox. In the bottom right corner, there is a red 'OK' button.

[BACKLASH: Earnings Deduction Screen

The earnings deduction screen indicates which group member you would like to ask to invest if you are assigned the role of red player. The screen also gives you the opportunity to decrease this player’s earnings conditional on all possible outcomes of the investment round. It will cost you 1 cent to deduct 3 cents from the earnings of the group member you asked to invest. The deductions that you make must be divisible by 3. You can deduct up to 75 cents in each possible scenario.

Round: 1 **Earnings Deduction Stage**

The group member you have chosen to ask to invest if you are assigned the role of red player is:

Group member 1

Age
Gender
Born in the US
Year in school
Major

Group member 2

Age
Gender
Born in the US
Year in school
Major

Group member 3

Age
Gender
Born in the US
Year in school
Major

For each of the following scenarios, please indicate below if and how you would like to decrease the earnings of the group member you asked to invest. It will cost you 1 cent to deduct 3 cents from the earnings of this group member. Enter the amount you would like to deduct (note that the numbers you enter must be divisible by 3). You may deduct up to 75 cents in each scenario.

Scenario	Description	Earnings deduction to group member 3 (cents)	Cost to you (cents)
A	The group member you asked makes the investment	<input style="width: 80%;" type="text"/>	
B	A group member you did not ask makes the investment	<input style="width: 80%;" type="text"/>	
C	No one makes an investment	<input style="width: 80%;" type="text"/>	

At the bottom of the screen there is “Calculate” button. When you have entered deductions for all three scenarios you may push it to learn the cost that you will incur to decrease the earnings of the green player you asked to invest. You can revise deductions and recalculate costs until you are ready to finalize your decision. Once you have made your decision click the “Finalize Decision” button to proceed.]

Red Player Assignment Screen

The computer randomly selects one group member to be assigned the role of red player. The remaining three group members are assigned the role of green players. A sample of the screenshot revealing this information is shown below. The red player's profile is shown on the first row and the profiles of the three green players forming the investment group are shown on the second row. Investments can only be made by green players, who form the investment group. Any member of the investment group may invest. The screen also reveals which green player the red player asked to invest in the round.

Round: 1

Red Player Assignment and Request

The person randomly selected to be the red player:

<u>Group member 2</u> Age Gender Born in the US Year in school Major	<input checked="" type="checkbox"/>
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The investment group:

<u>You</u> Age Gender Born in the US Year in school Major	<input type="checkbox"/>
<u>Group member 1</u> Age Gender Born in the US Year in school Major	<input checked="" type="checkbox"/>
<u>Group member 3</u> Age Gender Born in the US Year in school Major	<input type="checkbox"/>

The red player asked this group member to invest.

OK

Decision Screen

The decision screen records the investment decisions for the green players. Listed in the upper right corner is the number of seconds that remain in a round. The button in the center of the screen is used to make your investment decision. Please click this button if you want to invest. The round ends and the decision screen disappears as soon as you or a member of your investment group chooses to invest.

[CONTROL]

Remaining time [sec]: 118

Round: 1

Decision Stage

Click here if you want to invest.

You have 120 seconds to decide whether you want to invest. If no member of your investment group invests then you will each make \$1. If a member of your investment group invests then that member will make \$1.25, and the other two members of the investment group will each make \$2.00. The red player will make \$1 if no one invests and \$2 if a member of the investment group invests.

[BACKLASH]

Remaining time [sec]: 118

Round: 1

Decision Stage

Click here if you want to invest.

INVEST

You have 120 seconds to decide whether you want to invest. If no member of your investment group invests then you will each make \$1. If a member of your investment group invests then that member will make \$1.25, and the other two members of the investment group will each make \$2.00. The red player will make \$1 if no one invests and \$2 if a member of the investment group invests. If you were asked to invest the red player may, depending on the outcome of the investment round, opt to decrease your earnings.

Summary

1. The experiment consists of 10 rounds.
2. At the beginning of each round you see the profiles of the three other members of your group.
3. One group member is randomly assigned the role of red player and the three others are assigned the role of green players.
4. Green players form an investment group and any green player can invest. The red player cannot invest. All group members are affected by the green players' investment choices.
5. Members of the investment group have 120 seconds to decide whether to invest. The round ends once someone chooses to invest or when the 120 seconds are up.
6. If no one invests, each group member earns \$1 for the round. If someone invests, that person earns \$1.25 and the three other group members each earn \$2.
7. Before selecting which member is assigned the role of red player, everyone must indicate which group member they want to ask to invest if they are selected to be the red player. [BACKLASH: In addition, for each outcome of the investment round, everyone must choose an amount between 0 and 75 cents that they wish to deduct from the earnings of this green player. It costs 1 cent to deduct 3 cents from the earnings of this player.]
8. Before each round the computer reveals which group member was randomly selected to be a red player and which group member was asked by the red player to invest.
9. When the round ends you learn whether an investment was made and whether it was made by the green player who was asked to invest. [BACKLASH: In addition, you learn how much the red player chose to deduct from the green player who was asked to invest.]

Please raise your hand if you have any questions before we begin.

Appendix B: Tables

Table B1. Distribution of investment times by treatment

Seconds remaining at time of investment	Control			Backlash		
	Rounds 1-10	Rounds 1-5	Rounds 6-10	Rounds 1-10	Rounds 1-5	Rounds 6-10
Less than 1	0.5	0.0	1.1	1.6	1.1	2.1
1	23.8	12.2	35.8	25.7	11.0	39.6
2	20.7	17.4	24.2	12.3	14.3	10.4
3-10	12.4	14.3	10.5	8.6	8.8	8.3
11-20	3.6	4.1	3.2	1.6	2.2	1.0
21-30	1.6	2.0	1.1	2.1	1.1	3.1
31-40	2.1	2.0	2.1	0.5	1.1	0.0
41-50	1.0	1.0	1.1	1.6	2.2	1.0
51-60	2.6	3.1	2.1	1.6	3.3	0.0
61-70	1.6	3.1	0.0	1.6	2.2	1.0
71-80	1.0	2.0	0.0	3.2	4.4	2.1
81-90	1.6	3.1	0.0	2.7	3.3	2.1
91-100	5.2	9.2	1.1	4.8	7.7	2.1
101-110	3.1	4.1	2.1	5.9	9.9	2.1
111-120	19.2	22.5	15.8	26.2	27.5	25.0
Percent groups investing	96.5	98.0	95.0	93.5	91.0	96.0
N group decisions	200	100	100	200	100	100

Table B2. Requests received via the strategy method (OLS)

	Control (1)	Backlash (2)	Both (3)
Female	1.521 (0.060)	1.924 (0.075)	1.638 (0.015)
Age	0.718 (0.496)	0.468 (0.630)	0.486 (0.348)
Born in the US	-2.509 (0.250)	-2.240 (0.002)	-2.334 (0.058)
Year in school	0.364 (0.640)	0.603 (0.764)	0.647 (0.292)
Business major	-1.911 (0.116)	0.862 (0.116)	-0.193 (0.890)
Other major	-3.594 (0.214)	-0.801 (0.638)	-1.883 (0.250)
Backlash			-0.243 (0.467)
Backlash X Female			0.193 (0.841)
Constant	0.341 (0.974)	1.482 (0.764)	2.416 (0.724)
N	80	80	160

Note: *p*-values are in parentheses. Standard errors are clustered at the session level using wild bootstrapping procedures that test the null hypothesis that the coefficients on female, backlash, and backlash X female equal zero.

Table B3. Mean earnings deductions when no one invests, Backlash treatment

	Male	Female	P-value
Deductions by gender of red player (std. error)	18.893 (1.374)	6.413 (0.673)	0.003
Deductions by male red player by gender of the green player asked (std. error)	18.105 (2.233)	19.331 (1.743)	0.139
Deductions by female red player by gender of the green player asked (std. error)	7.020 (0.963)	5.823 (0.941)	0.190

Notes: Two-sided subject-level t-test *p*-values reported in table.