

Gender Differences in the Cost of Corrections in Group Work

Online Appendix

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Appendix A Advantages and drawbacks of quasi-laboratory format

The quasi-laboratory experimental format I use in this paper has advantages and drawbacks over the standard online and physical laboratory format.

Over standard online format The main advantage over standard online experimental format is that we can mostly avoid attrition, which is the main problem of online interactive experiments (Arechar, Gächter, and Molleman 2018). The reason is that compared to platforms such as MTurk and Prolific where participants' identity is fully anonymous by their rule, we have participants' personal information and participants know it as we recruit them from our standard laboratory subject pool. Also, they are connected to us via Zoom throughout the experiment. In my experiment, I experienced no participant attrition.

Another advantage is that we can fully control who will participate in the experiment. For instance, we can screen out participants who have participated in particular kinds of experiments, such as experiments involving deception, which is another problem of online experiments (Arechar, Gächter, and Molleman 2018). In my case, I have excluded participants who have participated in gender-related experiments in the past. This allows us to collect cleaner data.

The key drawback is the difficulty of collecting a large number of observations. Unlike MTurk or Prolific, the experimenter has to be present and respond to participants, if necessary, throughout the experiment. We could recruit a large number of participants at once, for example several hundred, but it weakens the connection between the experimenter and the participants and can induce attrition.

Over physical laboratory format The main advantage over physical laboratory format is logistical convenience both for the experimenter and the participants: we can run and join experiments from our offices or home as long as we have a computer and an internet connection. It primarily benefited me to comply with the COVID-19 precautions. However, it also means that we can run laboratory experiments even if we do not have a physical laboratory in our university, for example in universities in low-income countries, as long as we set up ORSEE (Greiner 2015) or other subject management systems, many of which are free.

Another advantage is that since participants can join the experiments from anywhere in the world, we can potentially run experiments with non-standard subjects or what Harrison and List (2004) call artefactual field experiments. For instance, non-student subjects or subjects in other countries. Although there can be regulation issues we have to overcome, it increases the kind of questions we can answer.

There are already a few studies that use a quasi-laboratory format, for example, Goeschl, Oestreich, and Soldà (2021). Also, there are several guidelines about how to conduct quasi-laboratory experiments (Danz et al. 2021; Li et al. 2021; Zhao et al. 2020).

Appendix B Heterogeneity by gender bias

I have pre-specified in the pre-analysis plan that investigated heterogeneous responses to women’s corrections by the degree of gender bias measured by the six hostile and benevolent sexism questions used in Stoddard, Karpowitz, and Preece (2020), selected from Glick and Fiske (1996). Although I could not detect a meaningful variation, I present the results here.

I estimate the following model with OLS.

$$\begin{aligned} Select_{ij} = & \beta_1 CorrectedGood_{ij} + \beta_2 CorrectedBad_{ij} + \beta_3 Female_j \\ & + \beta_4 CorrectedGood_{ij} \times HighBias_i + \beta_5 CorrectedBad_{ij} \times HighBias_i \quad (B1) \\ & + \delta_1 Contribution_j + \delta_2 Contribution_j \times HighBias_i + \mu_i + \epsilon_{ij} \end{aligned}$$

where each variable is defined as follows:

- $HighBias_i \in \{0, 1\}$: an indicator variable equals 1 if i ’s gender bias score from the six hostile and benevolent sexism questions is above median among participants with the same gender (female or male), 0 otherwise.

Other variables are as defined in equation 6.

Table B1 presents the regression results of equation B1. As Table 3, columns 1-2 include all participants’ willingness to collaborate. Columns 3-4 the corresponding results for women and columns 5-6 for men.

In columns 1, 3, and 5, the coefficient estimate on the interaction among any correction, female partner, and high bias is negative but statistically insignificant. Also, in columns 2, 4, and 6, the coefficient estimate on the interaction between good correction, female partner, and high bias as well as on the interaction between bad correction, female partner, and high bias is mostly negative but statistically insignificant. Thus, while the gender bias measure may detect some of the gender bias of participants, it is not variable enough to capture any meaningful heterogeneity among participants.

Appendix C Results with the original contribution measure

In the main text, I changed the definition of contribution from the one in the pre-analysis plan because there was truncation in the original contribution measure in more than 10% of the puzzle.

Table B1: Response to corrections made by women vs. men: Heterogeneity by gender bias

Dependent variable:	Willing to collaborate (yes=1, no=0)					
Sample:	All		Female		Male	
	(1)	(2)	(3)	(4)	(5)	(6)
Good correction		-0.180*** (0.046)		-0.260*** (0.058)		-0.066 (0.071)
Bad correction		-0.196*** (0.071)		-0.185** (0.094)		-0.201* (0.104)
Any correction	-0.215*** (0.041)		-0.267*** (0.053)		-0.137** (0.065)	
Female partner	0.023 (0.029)	0.004 (0.029)	0.022 (0.039)	0.014 (0.040)	0.025 (0.041)	-0.006 (0.042)
Partner's contribution	0.088*** (0.006)	0.087*** (0.006)	0.094*** (0.008)	0.094*** (0.008)	0.082*** (0.007)	0.079*** (0.008)
Good correction x Female partner		-0.030 (0.060)		0.053 (0.080)		-0.151* (0.088)
Bad correction x Female partner		0.241** (0.096)		0.179 (0.127)		0.312** (0.143)
Any correction x Female partner	0.036 (0.055)		0.086 (0.076)		-0.044 (0.079)	
Partner's contribution x Female partner	-0.005 (0.007)	0.001 (0.008)	-0.007 (0.010)	-0.004 (0.010)	-0.002 (0.010)	0.007 (0.011)
Good correction x High bias		-0.018 (0.071)		0.027 (0.093)		-0.076 (0.106)
Bad correction x High bias		0.036 (0.100)		-0.069 (0.129)		0.173 (0.146)
Any correction x High bias	0.019 (0.063)		0.011 (0.089)		0.017 (0.091)	
Female partner x High bias	-0.027 (0.044)	-0.015 (0.044)	-0.050 (0.064)	-0.039 (0.065)	-0.010 (0.058)	0.008 (0.059)
Partner's contribution x High bias	-0.009 (0.008)	-0.008 (0.009)	-0.008 (0.012)	-0.010 (0.012)	-0.010 (0.010)	-0.006 (0.011)
Good correction x Female partner x High bias		-0.003 (0.089)		-0.025 (0.118)		0.060 (0.134)
Bad correction x Female partner x High bias		-0.177 (0.137)		-0.170 (0.186)		-0.257 (0.198)
Any correction x Female partner x High bias	-0.048 (0.082)		-0.073 (0.114)		-0.011 (0.118)	
Partner's contribution x Female partner x High bias	0.007 (0.011)	0.003 (0.011)	0.011 (0.016)	0.008 (0.016)	0.005 (0.014)	-0.000 (0.014)
Individual FE	✓	✓	✓	✓	✓	✓
Baseline mean	0.781	0.781	0.783	0.783	0.779	0.779
Baseline SD	0.414	0.414	0.413	0.413	0.415	0.415
Adj. R-squared	0.333	0.335	0.363	0.368	0.304	0.305
Observations	3173	3173	1670	1670	1503	1503
Individuals	463	463	244	244	219	219

Notes: This table presents the regression results of equation B1. Columns 1-2 include all participants willingness to collaborate. Columns 3-4 present the corresponding results for women and columns 5-6 for men. Baseline mean and standard deviation are participants' willingness to collaborate with partners who do not make any corrections. Standard errors in parentheses are clustered at the individual level. Significance levels: * 10%, ** 5%, and *** 1%.

Nonetheless, the same results hold when I use the original contribution measure, reported in Tables C1, C2, C3, and C4. Although the original measure is relative to one's pair while the measure I use in this paper is absolute, whether a measure is relative or absolute does not matter because I add

individual fixed effects.

Table C1: Response to corrections: The original contribution measure

Dependent variable:	Willing to collaborate (yes=1, no=0)							
Sample:	All				Female		Male	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Good correction	-0.208*** (0.028)	-0.238*** (0.030)		-0.272*** (0.026)		-0.304*** (0.035)		-0.230*** (0.038)
Bad correction	-0.518*** (0.031)	-0.508*** (0.034)		-0.160*** (0.037)		-0.234*** (0.048)		-0.065 (0.054)
Any correction			-0.267*** (0.024)		-0.313*** (0.033)		-0.213*** (0.033)	
Female partner	-0.003 (0.016)	-0.001 (0.017)	0.006 (0.014)	0.008 (0.014)	0.001 (0.019)	0.004 (0.019)	0.012 (0.021)	0.012 (0.022)
Partner's contribution			1.181*** (0.054)	1.192*** (0.058)	1.171*** (0.076)	1.164*** (0.078)	1.196*** (0.076)	1.234*** (0.084)
Individual FE		✓	✓	✓	✓	✓	✓	✓
P-value: Good correction =Bad correction	0.000	0.000		0.013		0.252		0.014
Baseline mean	0.780	0.780	0.780	0.780	0.783	0.783	0.778	0.778
Baseline SD	0.414	0.414	0.414	0.414	0.413	0.413	0.416	0.416
Adj. R-squared	0.104	0.100	0.309	0.314	0.320	0.330	0.300	0.300
Observations	3180	3180	3180	3180	1670	1670	1510	1510
Individuals	464	464	464	464	244	244	220	220

Notes: This table reports the same estimation results as Table 3 but with the original contribution measure specified in the pre-analysis plan, and shows that the results are robust to using the original measure. The p-values (F-test) for the differences of the coefficient across columns: 0.127 for any correction in column 5 and column 7, 0.064 for good correction in column 6 and column 8, and 0.385 for bad correction in column 6 and column 8. Baseline mean and standard deviation are participants' willingness to collaborate with partners who do not make any corrections. Standard errors in parentheses are clustered at the individual level. Significance levels: * 10%, ** 5%, and *** 1%.

Table C2: Response to corrections of high vs. low ability people: The original contribution measure

Dependent variable:	Willing to collaborate (yes=1, no=0)					
Sample:	All		Female		Male	
	(1)	(2)	(3)	(4)	(5)	(6)
Good correction		-0.216*** (0.033)		-0.269*** (0.044)		-0.168*** (0.047)
Bad correction		-0.178*** (0.051)		-0.291*** (0.068)		-0.055 (0.069)
Any correction	-0.224*** (0.031)		-0.284*** (0.045)		-0.167*** (0.042)	
Female partner	0.006 (0.014)	0.007 (0.014)	0.001 (0.019)	0.002 (0.018)	0.011 (0.021)	0.010 (0.021)
Partner's contribution	1.200*** (0.068)	1.196*** (0.073)	1.208*** (0.101)	1.196*** (0.101)	1.195*** (0.089)	1.222*** (0.098)
Good correction x High ability		-0.137*** (0.052)		-0.079 (0.070)		-0.192** (0.076)
Bad correction x High ability		0.049 (0.072)		0.144 (0.094)		-0.051 (0.108)
Any correction x High ability	-0.101** (0.047)		-0.060 (0.066)		-0.130** (0.065)	
Partner's contribution x High ability	-0.039 (0.112)	-0.004 (0.118)	-0.088 (0.152)	-0.070 (0.154)	0.025 (0.167)	0.064 (0.183)
Individual FE	✓	✓	✓	✓	✓	✓
Baseline mean	0.780	0.780	0.783	0.783	0.778	0.778
Baseline SD	0.414	0.414	0.413	0.413	0.416	0.416
Adj. R-squared	0.310	0.315	0.320	0.331	0.301	0.303
Observations	3180	3180	1670	1670	1510	1510
Individuals	464	464	244	244	220	220

Notes: This table reports the same estimation results as Table 4 but with the original contribution measure specified in the pre-analysis plan, and shows that the results are robust to using the original measure. The p-values (F-test) for the differences of the coefficient across columns: 0.612 for any correction in column 3 and column 5, 0.526 for good correction in column 4 and column 6, 0.238 for bad correction in column 4 and column 6, 0.167 for any correction times high ability in column 3 and column 5, 0.069 for good correction times high ability in column 4 and column 6, and 0.296 for bad correction times high ability in column 4 and column 6. Baseline mean and standard deviation are participants' willingness to collaborate with partners who do not make any corrections. Standard errors in parentheses are clustered at the individual level. Significance levels: * 10%, ** 5%, and *** 1%.

Table C3: Response to corrections made by women vs. men: The original contribution measure

Dependent variable:	Willing to collaborate (yes=1, no=0)					
Sample:	All	Female		Male		
	(1)	(2)	(3)	(4)	(5)	(6)
Good correction		-0.268*** (0.038)		-0.338*** (0.049)		-0.180*** (0.058)
Bad correction		-0.232*** (0.054)		-0.275*** (0.069)		-0.167** (0.084)
Any correction	-0.277*** (0.034)		-0.348*** (0.049)		-0.192*** (0.048)	
Female partner	-0.053 (0.049)	-0.072 (0.052)	-0.099 (0.070)	-0.090 (0.074)	-0.011 (0.069)	-0.063 (0.072)
Partner's contribution	1.115*** (0.082)	1.109*** (0.085)	1.064*** (0.116)	1.070*** (0.114)	1.159*** (0.116)	1.147*** (0.125)
Good correction x Female partner		-0.008 (0.046)		0.063 (0.061)		-0.090 (0.071)
Bad correction x Female partner		0.143* (0.077)		0.085 (0.108)		0.188* (0.105)
Any correction x Female partner	0.023 (0.044)		0.069 (0.063)		-0.035 (0.062)	
Partner's contribution x Female partner	0.124 (0.107)	0.163 (0.113)	0.201 (0.152)	0.182 (0.159)	0.061 (0.150)	0.168 (0.157)
Individual FE	✓	✓	✓	✓	✓	✓
Baseline mean	0.780	0.780	0.783	0.783	0.778	0.778
Baseline SD	0.414	0.414	0.413	0.413	0.416	0.416
Adj. R-squared	0.309	0.314	0.321	0.331	0.299	0.301
Observations	3180	3180	1670	1670	1510	1510
Individuals	464	464	244	244	220	220

Notes: This table reports the same estimation results as Table 5 but with the original contribution measure specified in the pre-analysis plan, and shows that the results are robust to using the original measure. The p-values (F-test) for the differences of the coefficient across columns: 0.740 for any correction in column 3 and column 5, 0.858 for good correction in column 4 and column 6, 0.748 for bad correction in column 4 and column 6, 0.321 for any correction times female partner in column 3 and column 5, 0.117 for good correction times female partner in column 4 and column 6, and 0.218 for bad correction times female partner in column 4 and column 6. Baseline mean and standard deviation are participants' willingness to collaborate with partners who do not make any corrections. Standard errors in parentheses are clustered at the individual level. Significance levels: * 10%, ** 5%, and *** 1%.

Table C4: Response to corrections made by women vs. men: Heterogeneity by gender bias, the original contribution measure

Dependent variable:	Willing to collaborate (yes=1, no=0)					
Sample:	All		Female		Male	
	(1)	(2)	(3)	(4)	(5)	(6)
Good correction		-0.254*** (0.051)		-0.327*** (0.063)		-0.151* (0.083)
Bad correction		-0.211*** (0.067)		-0.173* (0.091)		-0.268*** (0.096)
Any correction	-0.275*** (0.045)		-0.318*** (0.059)		-0.213*** (0.072)	
Female partner	0.020 (0.061)	-0.004 (0.065)	-0.006 (0.086)	0.005 (0.092)	0.041 (0.086)	-0.029 (0.087)
Partner's contribution	1.254*** (0.097)	1.247*** (0.103)	1.246*** (0.138)	1.275*** (0.139)	1.251*** (0.137)	1.203*** (0.149)
Good correction x Female partner		-0.047 (0.066)		0.025 (0.087)		-0.159 (0.102)
Bad correction x Female partner		0.161* (0.094)		0.042 (0.130)		0.327** (0.129)
Any correction x Female partner	0.001 (0.059)		0.046 (0.080)		-0.064 (0.089)	
Partner's contribution x Female partner	-0.020 (0.130)	0.033 (0.140)	0.021 (0.186)	0.007 (0.202)	-0.047 (0.182)	0.100 (0.186)
Good correction x High bias		-0.037 (0.076)		-0.037 (0.100)		-0.054 (0.117)
Bad correction x High bias		-0.040 (0.104)		-0.188 (0.132)		0.175 (0.159)
Any correction x High bias	-0.014 (0.069)		-0.074 (0.100)		0.035 (0.098)	
Female partner x High bias	-0.166* (0.099)	-0.152 (0.104)	-0.198 (0.139)	-0.191 (0.143)	-0.135 (0.139)	-0.095 (0.145)
Partner's contribution x High bias	-0.303* (0.164)	-0.299* (0.167)	-0.382* (0.226)	-0.404* (0.217)	-0.212 (0.236)	-0.148 (0.254)
Good correction x Female partner x High bias		0.085 (0.094)		0.089 (0.125)		0.134 (0.141)
Bad correction x Female partner x High bias		-0.026 (0.151)		0.068 (0.212)		-0.225 (0.200)
Any correction x Female partner x High bias	0.053 (0.089)		0.061 (0.128)		0.067 (0.124)	
Partner's contribution x Female partner x High bias	0.322 (0.214)	0.289 (0.225)	0.382 (0.301)	0.354 (0.311)	0.272 (0.303)	0.186 (0.318)
Individual FE	✓	✓	✓	✓	✓	✓
Baseline mean	0.781	0.781	0.783	0.783	0.779	0.779
Baseline SD	0.414	0.414	0.413	0.413	0.415	0.415
Adj. R-squared	0.310	0.315	0.322	0.332	0.298	0.299
Observations	3173	3173	1670	1670	1503	1503
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Notes: his table reports the same estimation results as Table B1 but with the original contribution measure specified in the pre-analysis plan, and shows that the results are robust to using the original measure. Baseline mean and standard deviation are participants' willingness to collaborate with partners who do not make any corrections. Standard errors in parentheses are clustered at the individual level. Significance levels: * 10%, ** 5%, and *** 1%.

Appendix D Experimental instructions: English translation

App: pt0

Page: Reg

Registration

Please fill out the following information in order for us to pay you after the session. Please make sure that they correspond to the information you registered on ORSEE.

N.B. Please capitalize only the first letter of your first name and last name.

Good examples: Marco Rossi; Maria Bianchi; Anna Maria Gallo

Bad examples: MARCO ROSSI; maria bianchi; Anna maria Gallo

- First name: [Textbox]
- Last name: [Textbox]
- Email address registered on ORSEE: [Textbox]

[Check if there are any same first names. If so, add an integer (starting from 2) at the end of the first name]

Page: Draw

Draw a coin

Please draw a virtual coin by clicking the button below.

[Draw]

[Assign random number ranging from 1 to 40]

Page: Wait

Your coin

You drew the following coin.



Please wait until the session starts.

Page: Excess

Please click an appropriate button

[I was chosen to participate]

[I was chosen to leave]

Page: Intro

General instructions

Overview: This study will consist of **3 parts** and a follow-up survey and is expected to take **1 hour**. At the beginning of each part, you will receive specific instructions, followed by a set of understanding questions. You must answer these understanding questions correctly to proceed.

Your payment: For completing this study, you are guaranteed **2€** for your participation, but can earn up to **25€** depending on how good you are at the tasks. The tasks involve solving sliding puzzles, like the one shown below.

1	2	
4	5	3
7	8	6

puzzle_2_0.png

Confidentiality: Other people participating in this study can see your first name. Aside from your first name, other participants will not see any information about you. **At the conclusion of the study, all identifying information will be removed and the data will be kept confidential.** If there is more than one participant with the same first name, we add a number at the end of your first name (e.g. Marco2).

General rules: During the study, please turn off your camera and microphone, and do not communicate with anyone other than us. Also, please do not reload the page or close your browser because it may make your puzzle unsolvable. If you have any questions or face any problems, please send us a private chat on Zoom.

App: pt1

Page: Intro

Instructions for part 1 out of 3

In this part, you will solve the puzzle alone to familiarize yourself with it. You can solve as many puzzles as possible (but a maximum of 15 puzzles) in **4 minutes**. You will earn **0.2€ for each puzzle** you solve.

Your goal is to move the tiles and order them as follows:

1	2	3
4	5	6
7	8	

puzzle_goal.png

Before you start, please go through the three examples below to understand how to solve the puzzle.

Example 1:

First, consider the following puzzle.

1	2	3
4	5	
7	8	6

puzzle_1.png

You can only move the tiles next to an empty cell and the tile you choose is moved to the empty cell. So, in this puzzle, there are 3 moves you can make: move 3 down, move 5 right, and move 6 up.

Among the 3 moves, moving 6 up is the only correct move: by moving 6 up, you can solve the puzzle. The other moves do not solve the puzzle.

When you click a tile next to an empty cell, the tile will be moved to the empty cell. So, in this case, you should click 6 to move it up.

Example 2:

Next, consider the following puzzle.

1	2	
4	5	3
7	8	6

puzzle_2_0.png

First, there are 2 moves you can make: move 2 right and move 3 up. Which moves should you make?

Observe that the only tiles that are not in the correct order are 3 and 6. So, you should move 3 up.

After moving 3 up, the puzzle will look like the one in example 1. Then you should move 6 up and the puzzle will be solved.

Example 3:

Finally, consider the following puzzle.

1	2	3
8	7	5
4		6

puzzle_3_0.png

This puzzle is a bit complicated but observe that the top row is already in the correct order. So, let's keep the top row as is, and think about the remaining part. **When the top row is in the correct order, you should always keep it as is.** So, think of this puzzle as the following simpler puzzle.

8	7	5
4		6

puzzle_3_0_2x3.png

You could solve the puzzle by trial and error. However, **after making the top row in the correct order, you should next make the left column in the correct order** to solve the puzzle faster. There are two moves you can make: move 4 right and move 7 down. Which is the faster way to make the left column in the correct order?

Let's try moving 4 right.

1	2	3
8	7	5
	4	6

puzzle_3_1_bad_0.png

Now the only tile you can move is 8. So, let's move it down.

1	2	3
	7	5
8	4	6

puzzle_3_1_bad_1.png

Now, if you ignore the top row which is already in the correct order, the only tile you can move is 7. So, let's move it to the left.

1	2	3
7		5
8	4	6

puzzle_3_1_bad_2.png

Then move 4 up, move 8 right, and move 7 down. Then you have made the left column in the correct order. You have moved tiles seven times until now.

1	2	3
4		5
7	8	6

puzzle_3_1_bad_3.png

Now let's also keep the left column as is.

	5
8	6

puzzle_3_1_bad_3_2x2.png

Then you can solve the puzzle by moving 5 left and then 6 up. With this method, **you have moved tiles nine times in total.**

Let's go back to the initial puzzle.

1	2	3
8	7	5
4		6

puzzle_3_0.png

This time, let's try moving 7 down.

1	2	3
8		5
4	7	6

puzzle_3_1_good.png

Then move 8 right, 4 up, and 7 left. Now you have made the left column in the correct order only with four moves.

1	2	3
4	8	5
7		6

puzzle_3_4_good.png

Let's keep the left column as is (as well as the top row).



puzzle_3_4_good_2x2.png

Now it's easy to solve the puzzle: move 8 down, 5 left, and 6 up. With this method, **you have only moved tiles seven times in total.**

Because there is a time limit, it's better to solve the puzzle with the minimum number of moves. **We call a move a good move if it makes a puzzle closer to the solution, and a bad move if it makes a puzzle far from the solution. There are no neutral moves: all moves are either good or bad.**

In summary: when you solve the puzzle, first make the top row in the correct order, then make the left column in the correct order. Always try to make the number of moves as small as possible.

Understanding questions:

Before you proceed, please answer the following understanding questions. After you answer, please click Next.

1. Which of the following statements is true?

- ☒ In this part, I will work on the puzzles individually for 4 minutes and earn 0.2€ for each puzzle I solve.
- ☐ In this part, I will work on the puzzles in pairs for 4 minutes and earn 0.2€ for each puzzle we solve.
- ☐ In this part, I will work on the puzzles individually for 4 minutes, but I will not earn anything.

2. Which of the following puzzles is in the correct order?

- ☐ A
- ☒ B

A

1	2	
4	5	3
7	8	6

puzzle_2_0.png

B

1	2	3
4	5	6
7	8	

puzzle_goal.png

3. What is the strategy you should use to solve the puzzle as fast as possible?

- First, make the left column in the correct order, then the bottom row. Always minimize the number of moves I make.
- First, make the top row in the correct order, then the right column. Always minimize the number of moves I make.
- ✓ First, make the top row in the correct order, then the left column. Always minimize the number of moves I make.

4. Look at the following puzzle. Which is the good move?

- Move 4 down.
- ✓ Move 7 left.

1	2	3
4	8	5
	7	6

puzzle_3_3_good.png

5. Consider the puzzle in question 4. What is the minimum number of moves to solve the puzzle?

- 2
- 3
- ✓ 4

6. Look at the following puzzle. Which is the good move?

- ✓ Move 5 left.
- Move 8 up.

1	2	3
4		5
7	8	6

puzzle_3_5_good.png

7. Consider the puzzle in question 6. What is the minimum number of moves to solve the puzzle?

- ✓ 2
- 3
- 4

Page: Ready

Be ready

[5 seconds time count]

Please be ready for the individual round.

Page: Game

Individual round

[4 minutes time count]

[max. 15 puzzles with increasing difficulty]

Page: Proceed

The individual round is over

The individual round is over. You have solved **xx puzzles**.

Please click Next to proceed.

App: pt2

Page: Intro

Instructions for part 2 out of 3

In this part, you will **choose your partner for part 3**, the next part.

Although you will not earn anything in this part, it is important to choose the best partner possible: in part 3, you will work on the puzzles for 12 minutes in a pair by moving the tiles in turn, and both you and your partner will earn 1€ for each puzzle you two solve. There is a maximum of 20 puzzles you and your partner can solve (so the maximum earning is 20€).

You will **meet 7 other people** participating in this session one by one and solve 1 puzzle together by moving tiles in turn as you would do in part 3. One of you will be randomly chosen to make the first move at the beginning of each puzzle. You will have a **2-minute limit** for each puzzle.

After solving the puzzle, you will **choose whether you want to work with this person in part 3 too**. This person or other people in this session will not see your choice. **You can choose as many people as you want.**

After you meet all the 7 people and state your choices, we will check all the choices you and the 7 other people have made, and decide each person's partner for part 3 as follows:

1. We randomly choose 1 person out of you and the other 7 people. Call this person Giovanni.
2. We then check if Giovanni has a "match": among people Giovanni has chosen, we check whether these people also have chosen Giovanni. If there is such a person, we make Giovanni and this person as partners for part 3.
3. If Giovanni has more than one match, we randomly choose one of the matches and make them as partners for part 3.
4. If Giovanni has not chosen anyone, the people Giovanni has chosen have not chosen Giovanni, or those people already have their partner, we put Giovanni on a waiting list and repeat points 1-3 above.
5. After we choose all people, we randomly match people on the waiting list as partners for part 3.

So, even if you choose a particular person, you may not be able to work with that person in part 3. So, choose everyone whom you want to work with in part 3.

Understanding questions:

Before you proceed, please answer the following understanding questions. After you answer, please click Next.

1. Which of the following statements is true?
 - ☒ In this part, I will choose my partner for part 3.
 - In this part, I will work on the puzzles for 12 minutes in a pair by moving the tiles in turn.

2. How many people can you choose whom you want to work with in part 3?

- 1 person.
- 2 people.
- ✓ As many people as you want.

3. Why is it important to choose the best partner for part 3?

- ✓ because how many puzzles I can solve in part 3 depends on my partner's moves.
- because my partner will solve puzzles for me.

4. Suppose you have chosen Giovanni and Valeria. However, while Valeria has chosen you, Giovanni has not. If we have randomly chosen you first, who will be your partner for part 3?

- Giovanni
- ✓ Valeria
- Someone on the waiting list
- Randomly chosen from Giovanni and Valeria

5. Suppose you have chosen Giovanni and Valeria. However, unlike question 4, while Giovanni has chosen you, Valeria has not. If we have randomly chosen you first, who will be your partner for part 3?

- ✓ Giovanni
- Valeria
- Someone on the waiting list
- Randomly chosen from Giovanni and Valeria

6. Suppose you have chosen Giovanni and Valeria. Also, both Giovanni and Valeria have chosen you. If we have randomly chosen you first, who will be your partner for part 3?

- Giovanni
- Valeria
- Someone on the waiting list
- ✓ Randomly chosen from Giovanni and Valeria

7. Suppose you have chosen Giovanni and Valeria. Also, both Giovanni and Valeria have chosen you. However, we already matched Valeria with Giovanni before we choose you. Who will be your partner for part 3?

- Giovanni
- Valeria
- ✓ Someone on the waiting list
- Randomly chosen from Giovanni and Valeria

8. Suppose you have not chosen anyone. Also, both Giovanni and Valeria have chosen you. If we have randomly chosen you first, who will be your partner for part 3?

- Giovanni
- Valeria

- ✓Someone on the waiting list
- Randomly chosen from Giovanni and Valeria

9. Suppose you have chosen Giovanni and Valeria. However, neither Giovanni nor Valeria has chosen you. If we have randomly chosen you first, who will be your partner for part 3?

- Giovanni
- Valeria
- ✓Someone on the waiting list
- Randomly chosen from Giovanni and Valeria

Page: Puzzle

Puzzle 1/2/3/4/5/6/7 out of 7

You are playing the puzzle with [this person's ID]

[2 minutes time count]

Page: Pref

Puzzle 1/2/3/4/5/6/7 out of 7

You have played the puzzle with [this person's ID]. Do you want to work with [this person's ID] in part 3?

[Yes, No]

App: pt3

Page: Partner

Your partner for part 3

Based on your and the 7 other people's choices, [the partner's ID] became your partner for part 3.

Page: Intro

Instructions for part 3 out of 3

In this part, you will work on the puzzles with your partner for **12 minutes** by moving the tiles in turn, and both you and your partner will earn **1€ for each puzzle** you two solve. There is a maximum of 20 puzzles you and your partner can solve (so the maximum earning is 20€). As in part 2, one of you will be randomly chosen to make the first move at the beginning of each puzzle.

Understanding questions:

Before you proceed, please answer the following understanding questions. After you answer, please click Next.

1. Which of the following statements is true?

- ✓ In this part, you and your partner will both earn 1€ for each puzzle you two solve, which means you will earn 1€ for each puzzle you two solve.
- In this part, you and your partner will earn 1€ for each puzzle you two solve, which means you will earn 0.5€ for each puzzle you two solve.

2. You and your partner...

- ✓ will work on the puzzles for 12 minutes by moving the tiles in turn. Which of you will make the first move is randomly determined at the beginning of each puzzle.
- will work on the puzzles for 12 minutes. Which of you will make the first move is randomly determined at the beginning of this part and fixed afterward.

Page: Ready

Be ready

[5 seconds time count]

Please be ready for the group round.

Page: Game

Puzzle 1/2/3/.../20

Your partner: [the partner's ID]

[12 minutes time count]

[max. 20 puzzles with increasing difficulty]

Page: Proceed

The group round is over

The group round is over. You have solved xx puzzles.

Please click Next to proceed.

App: pt4

Page: Intro

A follow-up survey

As the last task, we will ask you a series of questions in which there are no right or wrong answers. We are only interested in your personal opinions. We are interested in what

characteristics are associated with people's behaviors in this study. **The answers you provide will in no way affect your earnings in this study and are kept confidential.**

Please click Next to start the survey.

Page: SurveyASI

Survey page 1 out of 2

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement.

- Women are too easily offended.
- Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality."
- Men should be willing to sacrifice their own wellbeing in order to provide financially for the women in their lives.
- Many women have a quality of purity that few men possess.
- No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.
- Women exaggerate problems they have at work.

[Choices: Strongly agree, Agree a little, Neither agree nor disagree, Disagree a little, Strongly disagree]

Page: SurveyDem

Survey page 2 out of 2

Please tell us about yourself and your opinion about this study.

- Your age: [Integer]
- Gender: [Male, Female]
- Region of origin: [Northwest, Northeast, Center, South, Islands, Abroad]
- Field of study: [Humanities, Law, Social Sciences, Natural Sciences/Mathematics, Medicine, Engineering]
- Degree program: [Bachelor, Master/Post-bachelor, Bachelor-master combined (1st, 2nd, or 3rd year), Bachelor-master combined (4th year or beyond), Doctor]
- What do you think this study was about? [Textbox]
- Was there anything unclear or confusing about this study? [Textbox]
- Were the puzzles difficult? [Difficult, Somewhat difficult, Just right, Somewhat easy, Easy]
- Do you have any other comments? (optional) [Textbox]

Page: ThankYou

Thank you for your participation

Thank you for your participation. You have completed the study.

Your earnings:

- 2€ for your participation.
- xx.x€ for the puzzles you solved in part 1.
- xx€ for the puzzles you and your partner solved in part 3.

Thus, you have earned xx.x€ in this study. We will pay you your earnings via PayPal within 2 weeks. If you haven't received your earnings after 2 weeks, please contact us.

Optional: If you would like to know the results of this study, we are more than happy to send you the working paper via email once we finish this study.

[No, I do not want to receive the working paper] [Yes, I want to receive the working paper]

App: pt99

Page: ThankYou

Thank you for showing up

Thank you for showing up in this study. You will receive the show up fee of 2€ via PayPal within 2 weeks. If you haven't received your earnings after 2 weeks, please contact us.

References for Online Appendix

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