

Do competent women receive unfavorable treatment?

Experimental instructions

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December 8, 2020

Pre-experiment: Random desk assignment & photo taking

Upon arriving the laboratory, we check participants' ID one by one and ask them to draw a coin with a number on it from an opaque back. We ask participants to take a desk corresponding to the number of the coin they have just drawn and hand them the information and privacy form, which they have to sign in order to participate in the experiment. Then participants take their facial photo at a photo booth.

When the number of participants show up to the laboratory is not a multiple of 6, I randomly choose excess participants (e.g. 3 participants if the total number of participants is 21) and ask them to leave the laboratory without participating. Those who leave the laboratory receive 5€.

Once all participants finish these procedures and the excess participants leave the laboratory, we start the oTree program. Participants see the following screen in which they enter their desk number.

FIGURE 1: INTRODUCTION PAGE 1

Please enter your desk number and click "Next"

Your desk number:

Next

After that, they see the following screen in which they see their facial photo taken at the photo booth (they see their facial photo instead of the green circle in the actual screen). Then, they enter their first name. We go to each desk and check that the photo and the first name match the participant sitting in the desk to ensure all participants that other participants' photo and first name are real, following Isaksson (2018). After this check, we enter the digital signature and let the participants proceed to the next page.

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FIGURE 2: INTRODUCTION PAGE 2

Please check that the photo is yours



The photo you took is displayed above. Please check that the photo is yours. Please also enter your first name. We will come to each desk and check the photo and the first name.

Your first name:

Digital signature (please wait for us to sign you in):

Next

Participants then see the following screen, which we read aloud. The grey box appear in the bottom of every page after this page for their reference.

FIGURE 3: INTRODUCTION PAGE 3

Welcome!

You are participating in a study of the BLESS. For your participation, you will receive a fixed amount of 2,5€. There are 2 parts in which you can earn additional earnings. The expected length is 1 hour.

During the study, we use your photo and first name to identify you. Your photo and the first name will only be used in this session and deleted immediately afterwards. However, we may ask some of you to allow us to use their photo in another study, which you can opt out.

The study is computerized, meaning that the computer program will give you precise instructions in each task. In the following you will find general instructions of the study, which you can always find in the bottom of the screen.

General instructions

- Please turn off your mobile phone.
- Please do not communicate with other participants.
- Please only use paper and pencil.
- Once you understand the instructions or enter your decisions, please click "Next" to proceed unless instructed otherwise.
- If you have any questions, please raise your hand at any time.

If there is no question, we will start the study.

Part 1: IQ test

After the general instructions, participants start the IQ test. They first see the following instructions where “Raven’s SPM no. 31” is replaced with the Raven’s Standard Progressive Matrix 31 in the actual screen. After clicking “Next,” they will see a set of 9 IQ test questions: the Raven’s Standard Progressive Matrices 11, 24, 28, 36, 43, 48, 49, 53, and 55. They have 9 minutes to complete these 9 questions and they see a countdown on the top of the screen.

FIGURE 4: IQ TEST INSTRUCTIONS PAGE

Part 1: Instructions

In part 1, you will work on an IQ test, which is frequently used to measure intelligence. The IQ test you will work on is the Raven’s Standardized Progressive Matrices Test.

You will solve the IQ test as follows: for each question, you will see an image in which a piece is missing. Below the image there will be several options. Choose the correct option among them to complete the image. There will be only one correct option.

An example is provided below. In the image, there are 9 large white squares each containing a small black square. In the first column, the small black square is located on the left; in the second column, in the middle; in the third column, on the right. In the first row, it is located on the top; in the second row, in the middle; in the third row, in the bottom. Thus, in the third column of the third row, the small black square must be located in the right bottom, thus the correct option is 5.

Raven’s SPM no. 31

There are 9 questions in total and you have 9 minutes. Once the time is over, you will automatically be directed to the next page. You will earn 0,5€ for each correct answer. There is no penalty for wrong answers. You can use paper and pencil on your desk.

Next

After they finish the IQ test, participants see the following screen in which they are asked to guess the number of IQ test questions they have solved correctly.

FIGURE 5: GUESSING PAGE

Guess the number of questions you solved

The IQ test is over.

We have randomly formed a group of 6 participants including you in this room and constructed a ranking among the 6 group members based on their IQ test performance.

A group member with rank 1 performed the best in the IQ test, followed by a group member with rank 2, 3, 4, 5, and 6. In case of a tie between group members, the computer randomly decided who receives the higher rank.

How many questions do you think you have solved correctly? If your guess is correct, you will additionally earn 0,5€.

Next

Then participants receive their IQ ranking within a group of 6 participants. The group was formed based on their oTree participant ID which was pre-assigned to each desk. They are asked to answer how many people in their group performed better and worse than them in order to proceed.

FIGURE 6: COMPREHENSION QUESTIONS PAGE

Feedback

Among your 6 group members including you, you received **Rank 4**.

Among your 6 group members, how many people performed better than you in the IQ test?

Among your 6 group members, how many people performed worse than you in the IQ test?

Next

Part 2: Dictator game

Then half of the participants in a given group become dictators and see the following instructions pages. Dictator is called “active participant” and told that their decision will not be known to anyone except us.

FIGURE 7: DICTATOR INSTRUCTIONS PAGE 1 (DICTATORS ONLY)

Part 2: Instructions

In this part, half of you will be active participants who will work on the task described in the next page, and the remaining half will be passive participants who will NOT work on the task described in the next page.

Next

FIGURE 8: DICTATOR INSTRUCTIONS PAGE 2 (DICTATORS ONLY)

Part 2: Instructions

You are assigned to a role of **active participant**.

Part 2 consist of 3 rounds. In each round, you will first receive an endowment (money). After that, you will be paired with a passive participant in your group.

Your task in this part is to allocate the endowment to yourself and the paired passive participant. The passive participants, other active participants, or anyone else other than us will never know who allocated how much.

At the end of the study, the computer will randomly select 1 out of 3 rounds and the amount you allocated to you in that round will be your earnings in this part.

The computer will also randomly select 1 out of 3 rounds for the paired passive participants and the amount you allocated to him or her in that round will be his or her earnings in this part.

Next

After the instructions, dictators see the following set of screens 3 times, each time with a different recipient, in which they move the cursor of the slider to determine the allocation:

FIGURE 9: DICTATOR GAME PAGE 1 (DICTATORS ONLY)

Round 1 of 3

Time left to complete this page: **0:02**

Please wait.

FIGURE 10: DICTATOR GAME PAGE 2 (DICTATORS ONLY)

Round 1 of 3



Giovanna

Rank 5

You have received **7€** for this round.

You have been paired with **Giovanna**.

Please allocate the endowment between yourself and Giovanna. When you click the line below, a cursor appears. You can move the cursor by dragging it. Please move the cursor to your preferred position to determine the allocation.

You Giovanna

Next

The cursor is initially hidden to avoid anchoring until the dictators click the slider bar:

FIGURE 11: DICTATOR GAME PAGE 2 AFTER CLICKING THE SLIDER BAR (DICTATORS ONLY)

Please allocate the endowment between yourself and Giovanna. When you click the line below, a cursor appears. You can move the cursor by dragging it. Please move the cursor to your preferred position to determine the allocation.

You Giovanna

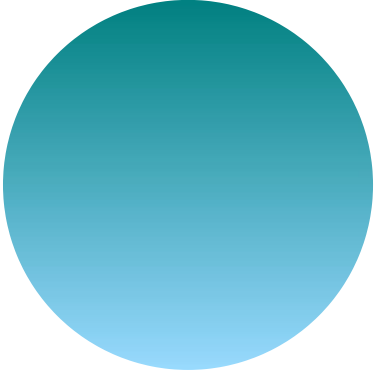
Next

After playing dictator game 3 times, dictators are asked to answer how well they know each of the paired recipients. The choices are: (i) “I didn’t know him/her at all,” “I saw him/her before,” “I knew him/her but not very well,” and “I knew him/her very well.”

FIGURE 12: DICTATORS' PROXIMITY CHECK PAGE (DICTATORS ONLY)

Round 3 of 3

Below we display the participants whom you were paired with. How well did you know him/her before participating in this study?

		
Giovanna	Caterina	Paolo
<input type="text" value="I saw him/her before"/>	<input type="text" value="I didn't know him/her at all"/>	<input type="text" value="I didn't know him/her at all"/>
<input type="button" value="Next"/>		

Recipients, on the other hand, are not told that dictators are playing dictator game. Instead, they are asked to make guesses on the number of IQ test questions the other 2 recipients have solved correctly:

FIGURE 13: RECIPIENT INSTRUCTIONS PAGE (RECIPIENTS ONLY)

Part 2: Instructions

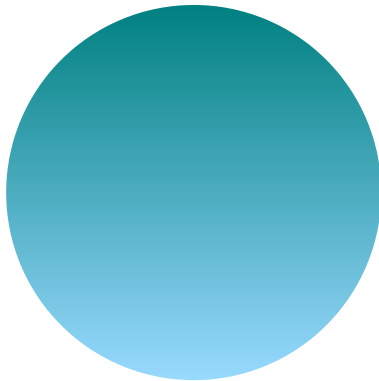
In part 2 consists of 2 rounds. In each round, you will be paired with another participant in your group.

Your task in this part is to guess how many questions the paired participant has solved correctly in the IQ test. For each correct guess, you will earn 0,5€.

After the instructions, recipients see the following screen 2 times, each time with different recipient, in which they enter their guess.

FIGURE 14: GUESSING PAGE (RECIPIENTS ONLY)

Round 1 of 2



Paolo

Rank 1

You have been paired with **Paolo**.

How many questions do you think Paolo has solved correctly?

Next

After they finish 2 guesses, recipients are also asked how well they know each of the paired recipients, just like dictators are asked.

FIGURE 15: RECIPIENTS' PROXIMITY CHECK PAGE (RECIPIENTS ONLY)

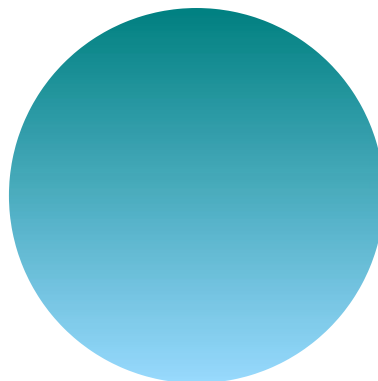
Round 2 of 2

Below we display the participants whom you were paired with. How well did you know him/her before participating in this study?



Caterina

I didn't know him/her at all ▾



Paolo

I knew him/her but not very well ▾

Next

Post-experiment: Questionnaire

After the 3 rounds of the dictator game and the 2 rounds of the guessing are over, participants are told their earnings from the IQ test, dictator game, and the guesses. Before receiving their earnings, participants answer a short questionnaire.

Since dictators and recipients do different activities during the dictator game, they receive slightly different information. The following screen is for dictators:

FIGURE 16: DICTATORS' RESULTS AND EARNINGS INFORMATION PAGE (DICTATORS ONLY)

Results

The study is over. The results are provided below.

- In part 1, you solved **0** questions and earned **0,0€**. You have additionally earned **0,5€** because your guess about the number of questions solved was correct.
- In part 2, computer selected **round 2** in which you allocated **5,0€** to yourself.

So, your total earnings are **8,0€** including 2,5€ of participation fee.

Thank you for participating in this study! We will prepare your payment soon. Meanwhile, please answer a short questionnaire by clicking "Next." Your answer will be kept anonymous and will not affect your payment.

Next

The following screen is for recipients:

FIGURE 17: RECIPIENTS' RESULTS AND EARNINGS INFORMATION PAGE (RECIPIENTS ONLY)

Results

The study is over. The results are provided below.

- In part 1, you solved **0** questions and earned **0,0€**. You have additionally earned **0,5€** because your guess about the number of questions solved was correct.
- In part 2, you made **2** guesses correct. So you earned **1,0€**.
- You additionally earned a top-up of **0,0€**.

So, your total earnings are **4,0€** including 2,5€ of participation fee.

Thank you for participating in this study! We will prepare your payment soon. Meanwhile, please answer a short questionnaire by clicking "Next." Your answer will be kept anonymous and will not affect your payment.

Next

After the results and earnings information page, participants answer a 3-page questionnaire. The questionnaire slightly differs for dictators and recipients. The following set of screens is for dictators:

FIGURE 18: DICTATORS' QUESTIONNAIRE PAGE 1 (DICTATORS ONLY)

Questionnaire 1 of 3

Your study program:

Economics and Management

Please also type your full study program name in Italian:

Laurea Magistrate in Economia e Politica Economica

If you are enrolled in a specialized or professional program, please choose the closest study program. If you are enrolled in a post-bachelor vocational program, please choose the study program of your bachelor's degree. If you are an exchange student, please choose the study field closest to the one in your home university.

Your degree program:

Master/Post-bachelor

Your year in the degree program:

2nd year

Your age:

24

Your gender:

Female

Are you from Emilia-Romagna region?

Yes

Next

FIGURE 19: DICTATORS' QUESTIONNAIRE PAGE 2 (DICTATORS ONLY)

Questionnaire 2 of 3

Below we display the participants whom you were paired with. How well did you know him/her before participating in this study?



Paolo



Giovanna



Caterina

Next

FIGURE 20: DICTATORS' QUESTIONNAIRE PAGE 3

Questionnaire 3 of 3

What do you think this study was about?

Was there anything unclear or confusing about this study?

Do you have any other comments? (optional):

Next

In page 2, they are again asked how well they know each of the paired recipients but this time in a different order to make sure they did not answer randomly.

The following set of screens is for recipients:

FIGURE 21: RECIPIENTS' QUESTIONNAIRE PAGE 1 (RECIPIENTS ONLY)

Questionnaire 1 of 3

Your study program:

Economics and Management

Please also type your full study program name in Italian:

Laurea Magistrale in Economia e Commercio

If you are enrolled in a specialized or professional program, please choose the closest study program. If you are enrolled in a post-bachelor vocational program, please choose the study program of your bachelor's degree. If you are an exchange student, please choose the study field closest to the one in your home university.

Your degree program:

Master/Post-bachelor

Your year in the degree program:

1st year

Your age:

23

Your gender:

Male

Are you from Emilia-Romagna region?

No

In another study, we'd like to use your photo. We will show your photo to some people in the University of Bologna only in this room, but no other people except us will see your photo. Your photo will be deleted immediately after we finish another study. For your cooperation, we will pay you gratuity of 1,5€. May we use your photo in another study?


Yes, I allow the researcher to use my photo in another study

Next


FIGURE 22: RECIPIENTS' QUESTIONNAIRE PAGE 2 (RECIPIENTS ONLY)

Questionnaire 2 of 3

Below we display the participants whom you were paired with. How well did you know him/her before participating in this study?



Paolo



Caterina

Next

FIGURE 23: DICTATORS' QUESTIONNAIRE PAGE 3

Questionnaire 3 of 3

What do you think this study was about?

Was there anything unclear or confusing about this study?

Do you have any other comments? (optional):

Next

The differences are that (i) in page 1, recipients are additionally asked if they would allow us to use their photo in another experiment and (ii) in page 2, they only see 2 participants they are paired with, in a different order as dictators' screen. Page 3 is the same as dictators.

References

Isaksson, Siri. 2018. *It Takes Two: Gender Differences in Group Work*. Working Paper.