

Who deserves redistribution?

Pre-Analysis Plan

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1. Introduction

This document outlines our pre-analysis plan for an online experiment that collects real redistributive choices. This pre-analysis plan presents the data sources, the structure of the experiment, and the empirical strategy. We will collect data from two sources: Workers enrolled through Amazon Mechanical Turk and Spectators through a survey company. At the time of writing this plan, we designed the survey questionnaires and the treatments. We intend to submit this Pre-Analysis Plan to the AEA RCT Registry.

1.1. The context

There is strong evidence that financial self-interest alone does not explain redistributive attitudes (Fong, 2001). For example, the large increase in economic inequality in the last decades has not been followed by a comparable increase in support for redistribution, contrary to the predictions from standard theories of redistributive preferences (Ashok et al. 2015; Kuziemko et al. 2015). This result seems to hold also in this moment of health and economic emergency. Indeed, a few recent papers on the effects of the coronavirus (Cappelen et al. 2020; Daniele et al. 2020; Brañas-Garza et al. 2020) have shown a dramatic fall in generosity among citizens eventually due to a drop in trust towards the institutions. Such an attitude is particularly worrying in a historical moment when the popular support for redistribution is essential to fight the widening of inequalities caused by the pandemic.

Building on the literature on how people form preferences for redistribution (Alesina et al. 2018; Fong et al. 2006), which ultimately tries to identify possible drivers of redistribution, we conduct a social preference experiment and collect information on real redistributive choices. In particular, we aim to study whether (and how) people's willingness to redistribute is affected by the desire to reward recipients' previous virtuous behavior, namely the sacrifice of own interest for the community's sake. Some previous works (Almås, Cappelen, and Tungodden 2020; Durante, Putterman, and Weele 2014) have shown that people wish to help those who "deserve" aid, namely those who are poor although they are working hard but fail for reasons beyond their control. We want to move a step ahead by exploring the role of recipients' cooperative levels in making them "deserving" redistribution. An additional objective of the analysis is to study the correlation between own cooperative behavior and redistribution levels. We aim to assess if high cooperative individuals display higher or lower redistribution. Whether moral deeds prompt behavioral consistency or provide moral credits that can lead to compensatory actions is an open question.

2. Research strategy and design

The present project uses the approach for collecting experimental data on a nationally representative population that has been introduced by Cappelen et al. (2013) and then further exploited by Almås, Cappelen, and Tungodden 2020. In order to provide an incentivized measure for redistributive policies, we ask respondents to make real redistributive choices affecting other subjects' payoffs. To rule out self-interest motivations, subjects will make redistributive choices that do not affect their own payoff: we call them "Spectators". These redistributive choices will have real consequences on other subjects' payoffs: we call these subjects "Workers". Our experimental protocol thus combines the infrastructure of an online "labor market" to recruit Workers and that of the international survey company to recruit Spectators.

First, we recruit Workers using Amazon Mechanical Turk. In Phase 1, Workers take part into a binary Public Goods Game. They receive an endowment of 1 EUR and could choose between two options: O1: Keep the 1 EUR for themselves; O2: Keep 0.5 EUR for themselves and contribute 0.5 EUR to a joint project. The joint project works this way: we collect the contributions of all the workers enrolled in this study, multiply it for a factor equal to 2 and divide the whole amount collected equally among all the workers, no matter if they contributed to the joint project or not. This game allows us to identify cooperative workers, who sacrifice their own interest for the community's sake, from free-rider workers, who show selfish behavior.

In Phase 2, Workers conduct a real-effort work task made of four assignments (a scrambling task, two math tasks, and a code recognition task). We measure their performance in all the four tasks.

Once we collect this information about Workers, we randomly match Workers in pairs (A - B) and set the pay-offs. Within the A-B pair, the more productive Worker in performing the assignment earns 6 EUR, while the less productive earns 0 EUR. For each assignment, we then match one Spectator with a unique pair of Workers. The Spectator has to decide whether and how to redistribute the Workers' payoffs.

2.1. Conditions

The Spectators are asked to choose the amount of the redistribution between Worker A and Worker B in different conditions, where we vary the information provided, regarding the Workers' productivity and cooperative behavior. The first condition only informs the Spectator that the pay-offs the two Workers have earned were determined by merit in the "real-effort work task" described above. We label this as the Control condition. The other conditions inform about the relative productivity, but also about the relative behavior of A and B in the Public Good Game in Phase 1.

We follow a procedure that can be classified as a "strategy method" (Mitzkewitz and Nagel 1993), whereby the Spectators make decisions on all possible conditions, but we implement only one of the five, the one that corresponds to the behaviors of the two workers randomly associated to the Spectator. The Spectators will be informed that one of the five situations corresponds exactly to what happens in their matched pair (but they do not know which one). In all conditions, the initial distribution of earnings is the same: one worker had earned all the money, and the other worker had earned nothing (6 EUR, 0 EUR).

In detail, the five conditions are the following: Control-c0) A was more productive than B; c1) A was more productive than B. Both A and B contributed to the Public Good; c2) A was more productive than B. Only B contributed to the Public Good; c3) A was more productive than B. Only A contributed to the Public Good; c4) A was more productive than B. Neither A or B contributed to the Public Good. After presenting

the five conditions, the Spectator chooses whether and how to redistribute between A and B. The Spectators could redistribute any integer amount (including zero) between A and B.

We present the control condition, where no information is given about A's and B's behavior in the Public Goods Game, first, given that it only presents a limited information set. The other four conditions, that add information on the cooperative trait of workers, are then presented in a random order. To check any anchoring effect to the responses in the control condition, a sub-set of Spectators do not receive the control condition.

Almås, Cappelen, and Tungodden (2020) find that people are willing to accept some degree of inequality if it reflects differences in merit. Our paper wants to test whether subjects want to reward cooperative behavior by increasing redistribution. If this hypothesis is confirmed by the data, our result implies a lower acceptance of inequality due to merit if recipients show a cooperative behavior.

2.2. Background questions

On top of the redistribution choices, the survey collects information on the Spectator's descriptive and normative beliefs regarding the cooperation choice, and about their gender, age, family status, education level, employment and work conditions, sector of work, political orientation, and general attitude towards the welfare state. We also ask the Spectators to participate in a Public Goods Game, with the same multiplying factor equal to 2, where we ask a donation ranging from 0 to 1 EUR. This incentivized question allows us to measure Spectators' cooperative behavior and test any correlation of own cooperative behavior and redistribution levels.

3. Empirical strategy

We estimate the following equation:

$$D_i^c = \alpha + \beta_1 C_{i,1} + \beta_2 C_{i,2} + \beta_3 C_{i,3} + \beta_4 C_{i,4} + \boldsymbol{\varphi} X_i + \varepsilon_i \quad (1)$$

Where D_i^c is the share that Spectator i redistributes to the lower earner B in condition c . C are dummy variables, that take the value of 1 if condition is equal to c , and 0 otherwise, with $c=1, 2, 3, 4$, as described above. The excluded category is the control condition ($c0$). X_i is a set of individual characteristics of the Spectator, including her level of cooperation in the Public Good Game. We cluster standard errors at the level of individual Spectator.

3.1. Testable hypotheses

H1: Spectators reward cooperation, i.e. show higher redistribution levels towards cooperative Workers.

Redistribution in condition 2) is higher than redistribution in control condition: $\beta_2 > 0$

H2: Spectators punish selfish behavior, i.e. show lower redistribution levels towards free-rider Workers.

Redistribution in condition 3) is lower than redistribution in control condition: $\beta_3 < 0$

H3: Spectators reward more when they value cooperation.

Redistribution is higher, the greater the contribution of Spectator to the Public Goods Game.

3.2 Heterogeneity

Using the background data collected in the survey, we will also study heterogeneity in distributive behavior. We will focus on political orientation, education, and normative beliefs.

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Invitation and Instructions on Amazon Mechanical Turk

Q1 Please enter your MTurk worker ID:

End of Block: Consent

Start of Block: Part 1 – Common project phase

Q2 The first part of the study is a project, common to all the participants of this research study. In addition to the fixed participation fee of 1 USD mentioned above, all participants, including you, receive an extra 1.2 USD and can decide between the following two options:

1. Contribute 0.6 USD to a common project and keep 0.6 USD for yourself. The common project works as follows: the contributions of all the participants who decided to contribute will be summed up, multiplied by a number (called “multiplier”) equal to 2 and then equally split among all the participants of the study, no matter if they contributed or not to the common project.
 2. Do not contribute 0.6 USD to the common project and keep the whole 1.2 USD for yourself. Consider the case of ten participants in the study. Six of them contribute to the common project, whereas four do not contribute. The sum of all contributions is 0.6 USD X 6 contributors = 3.6 USD. These 3.6 USD will be multiplied by 2, increasing the value of the common project to 7.2 USD. The 7.2 USD will be split equally among all the 10 participants: each participant, including you, will earn 0.72 USD.
-

Q3 Please specify whether the following sentence is true or false.

The total contributions to the common project are split among people who contributed to the common project only.

- True (1)
- False (2)
-

Page Break

Display This Question:

If Please specify whether the following sentence is true or false. The total contributions to the co... = True

Q4

Your answer is wrong, please read again the instructions below.

In addition to the fixed participation fee of 1 USD mentioned above, all participants, including you, receive an extra 1.2 USD and can decide between the following two options:

1. Contribute 0.6 USD to a common project and keep 0.6 USD for yourself. The common project works as follows: the contributions of all the participants who decided to contribute will be summed up, multiplied by a number (called “multiplier”) equal to 2 and then equally split among all the participants of the study, no matter if they contributed or not to the common project.
 2. Do not contribute 0.6 USD to the common project and keep the whole 1.2 USD for yourself.
-

Page Break

Q5 Please specify whether the following sentence is true or false.

If the research study involves 20 participants, and all of them contribute to the common project, then the money that each subject receives back is computed as follow: $0.6 \text{ USD} \times 20 = 12 \text{ USD}$, then 12 USD is multiplied by 2 = 24 USD, so each participant receives 1.2 USD (24 USD/20 participants).

True (4)

False (5)

Page Break

Display This Question:

If Please specify whether the following sentence is true or false. If the research study involves 20... = False

Q6

Your answer is wrong, please read again the instructions below.

In addition to the fixed participation fee of 1 USD mentioned above, all participants, including you, receive an extra 1.2 USD and can decide between the following two options:

1. Contribute 0.6 USD to a common project and keep 0.6 USD for yourself. The common project works as follows: the contributions of all the participants who decided to contribute will be summed up, multiplied by a number (called “multiplier”) equal to 2 and then equally split among all the participants of the study, no matter if they contributed or not to the common project.
2. Do not contribute 0.6 USD to the common project and keep the whole 1.2 USD for yourself.

Page Break

Q7 Like all the participants in this study, you receive 1.2 USD (in addition to the fixed participation fee of 1 USD).

The payments from the first part of the study are as follows. You will receive the fixed participation fee of 1 USD at the end of this survey. The earnings from the common project will be paid separately from your fixed participation fee and they will be made within 2 weeks. These earnings comprise 0.6 USD - if you decided to contribute to the project, or 1.2 USD - if you decided to not contribute to the project, plus the returns to the common project equally split among participants.

Please, indicate which of the two options you select:

I want to contribute 0.6 USD to the common project (12)

I do not want to contribute 0.6 USD to the common project (13)

End of Block: Part 1 – Common project phase

Start of Block: Part 2 –Production phase

Q8 The second part of the study is a production phase. You will work on FOUR different assignments. Your performance in the assignments may influence how much you earn in this study. Go on the next page to receive instructions for the first assignment.

End of Block: Part 2 –Production phase

Start of Block: First Assignment: Instruction

Q9 In the first assignment, you will work on a sentence unscrambling task for 2 minutes. At the end of the task, you will receive 1 point for each correct unscrambling, and you will be subtracted 1 point for each failing unscrambling. Your performance in the first assignment depends on both the sum of points you receive and the time you took to complete the task.

Description of the assignment: You will see five English words. Your task is to form a sentence or an expression by using only four of these five words.

For example, if the words given to you are “cat, hungry, is, the, blue”, then you can construct the sentence: “the cat is hungry.”

Please write the sentence that you form into the blank space. The assignment will last for 2 minutes. After 2 minutes, you will proceed to the next assignment.

When you have read and understood the instruction, go to the next page.

End of Block: First Assignment: Instruction

Start of Block: First Assignment

Q10 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q11 was cat the dog barking

Q12 beautiful is are very you

Q13 forward the mind step please

Q14 in is doctor red the

Q15 eating on Lisa fruit likes

Q16 one talking loud so stop

Q17 black those is sheep that

Q18 red do I mind not

Q19 sorry is grass the wet

Q20 fridge the sun rising is

Q21 sky away not go do

Q22 on the table broken is

Q23 flower girl eating is the

Q24 rose red about the is

Q25 pillow you about is this

Q26 this am nice I quite

Q27 the my hungry is lion

Q28 many friends have I are

Q29 lesson has is the starting

Page Break

End of Block: First Assignment

Start of Block: Introduction to second assignment

Q30 You have now completed the first out of four assignments. On the next page you will receive instructions for the second assignment.

End of Block: Introduction to second assignment

Start of Block: Second assignment: instruction

Q31 In the second assignment, you will work on a math operations task for 2 minutes. At the end of the task, you will receive 1 point for each correct math operation, and you will be subtracted 1 point for each wrong math operation. Your performance in the second assignment depends on both the sum of points you receive and the time you took to complete the task.

Description of the assignment:

You will see three numbers and three math operators. Your task is to fill in the missing number.

For example, if the numbers and math operators you receive are the following: $4 + \dots - 3 = 10$ the missing number is 9.

Please write the missing number into the blank space using your keyboard.
The assignment will last for 2 minutes. After 2 minutes you will proceed to the next assignment.
When you have read and understood the instruction, go to the next page.

End of Block: Second assignment: instruction

Start of Block: Second Assignment

Q32 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Q33 $4 : \dots + 5 = 7$

Q34 $35 : \dots - 10 = -3$

Q35 $12 * \dots - 16 = 20$

Q36 $65 - \dots - 25 = 25$

Q37 $\dots * 5 - 34 = -14$

Q38 $9 + 89 - \dots = 18$

Q39 $6 * \dots - 34 = 14$

$$\text{Q40 } 7 - 21 + \dots = 0$$

$$\text{Q41 } 63 : \dots - 20 = 1$$

$$\text{Q42 } 18 * \dots - 6 = 30$$

$$\text{Q43 } 1 + \dots - 2 = 24$$

$$\text{Q44 } 64 : \dots - 25 = 1$$

$$\text{Q45 } 13 + \dots - 9 = 7$$

$$\text{Q46 } 80 : \dots - 15 = 5$$

$$\text{Q47 } 66 : \dots + 6 = 12$$

$$\text{Q48 } 45 - \dots - 14 = 29$$

$$\text{Q49 } 10 * \dots - 89 = 11$$

Q50 ... * 6 - 19 = -1

End of Block: Second Assignment

Start of Block: Introduction to third assignment

Q52 You have now completed the second out of four assignments. On the next page you will receive instructions for the third assignment.

End of Block: Introduction to third assignment

Start of Block: Third assignment: Instruction

Q53 Third assignment. In the third assignment, you will work on a recognition and math-operation task for 2 minutes.

Description of the assignment:

You will see 3-digit codes displayed in a matrix. Your task is to find and check off the code(s) that satisfy a specific property, that will be given ahead of each matrix. The correct answer may occur multiple times in the same matrix. You will receive 1 point for each correct marking. You will be subtracted 1 point if you check off the wrong code. You will not lose any point for failing to check off the occurrence of the correct codes. Your performance in the third assignment depends on both the sum of points you receive and the time you took to complete the task. The assignment will last for 2 minutes. After 2 minutes you will proceed to the last part of the study.

Below we present a simplified example to make sure you understand the assignment. When you have read and understood the assignment, go to the next page.

This is an example. You need to find the code(s) that satisfy this property: the sum of the numbers is equal to 6.

<input type="checkbox"/> 345	<input type="checkbox"/> 125	<input type="checkbox"/> 324	<input type="checkbox"/> 322	<input type="checkbox"/> 122	<input checked="" type="checkbox"/> 321
<input type="checkbox"/> 142	<input type="checkbox"/> 167	<input checked="" type="checkbox"/> 123	<input type="checkbox"/> 172	<input type="checkbox"/> 564	<input type="checkbox"/> 581

End of Block: Third assignment: Instruction

Start of Block: Third Assignment

Q54 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q55 Find the code that satisfies this property: the sum of the numbers is equal to 12.

- 089 (1)
- 125 (2)
- 432 (3)
- 321 (4)
- 653 (5)
- 322 (6)
- 009 (7)
- 894 (8)
- 122 (9)
- 453 (10)
- 123 (11)
- 678 (12)

Q56 Find the code that satisfies this property: the sum of the numbers is equal to 15.

- 089 (1)
 - 654 (25)
 - 456 (26)
 - 264 (27)
 - 123 (28)
 - 564 (29)
 - 234 (30)
 - 125 (19)
 - 322 (21)
 - 612 (22)
 - 684 (23)
 - 789 (24)
-

Q57 Find the code that satisfies this property: the sum of the numbers is equal to 12.

- 632 (1)
 - 256 (2)
 - 764 (3)
 - 237 (4)
 - 734 (5)
 - 632 (6)
 - 667 (7)
 - 435 (8)
 - 890 (9)
 - 688 (10)
 - 153 (11)
 - 783 (12)
-

Q58 Find the code that satisfies this property: the sum of the numbers is equal to 17.

- 632 (1)
- 578 (2)
- 764 (3)
- 237 (4)
- 678 (5)
- 782 (6)
- 123 (7)
- 422 (8)
- 890 (9)
- 482 (10)
- 566 (11)
- 567 (12)

Q59 Find the code that satisfies this property: the sum of the numbers is equal to 8.

- 632 (1)
 - 434 (2)
 - 765 (3)
 - 238 (4)
 - 235 (5)
 - 711 (6)
 - 123 (7)
 - 422 (8)
 - 866 (9)
 - 125 (10)
 - 558 (11)
 - 932 (12)
-

Q60 Find the code that satisfies this property: the sum of the numbers is equal to 5.

- 655 (1)
- 411 (2)
- 734 (3)
- 212 (4)
- 267 (5)
- 934 (6)
- 166 (7)
- 423 (8)
- 812 (9)
- 134 (10)
- 166 (11)
- 930 (12)

Q61 Find the code that satisfies this property: the sum of the numbers is equal to 7.

- 089 (1)
 - 654 (2)
 - 122 (3)
 - 264 (4)
 - 123 (5)
 - 564 (6)
 - 125 (7)
 - 322 (8)
 - 612 (9)
 - 684 (10)
 - 561 (11)
 - 453 (12)
-

Q62 Find the code that satisfies this property: the sum of the numbers is equal to 15.

- 098 (1)
 - 654 (2)
 - 456 (3)
 - 264 (4)
 - 123 (5)
 - 564 (6)
 - 125 (7)
 - 322 (8)
 - 612 (9)
 - 684 (10)
 - 789 (11)
 - 234 (12)
-

Q63 Find the code that satisfies this property: the sum of the numbers is equal to 12.

- 632 (1)
- 256 (2)
- 764 (3)
- 237 (4)
- 277 (5)
- 632 (6)
- 667 (7)
- 435 (8)
- 890 (9)
- 688 (10)
- 277 (11)
- 783 (12)

Q64 Find the code that satisfies this property: the sum of the numbers is equal to 11.

- 632 (1)
 - 578 (2)
 - 764 (3)
 - 237 (4)
 - 678 (5)
 - 782 (6)
 - 123 (7)
 - 422 (8)
 - 890 (9)
 - 482 (10)
 - 511 (11)
 - 567 (12)
-

Q65 Find the code that satisfies this property: the sum of the numbers is equal to 8.

- 482 (1)
 - 804 (2)
 - 764 (3)
 - 237 (4)
 - 235 (5)
 - 711 (6)
 - 123 (7)
 - 422 (8)
 - 866 (9)
 - 125 (10)
 - 558 (11)
 - 932 (25)
-

Q66 Find the code that satisfies this property: the sum of the numbers is equal to 16.

- 655 (1)
- 411 (2)
- 734 (3)
- 212 (4)
- 790 (5)
- 934 (6)
- 166 (7)
- 423 (8)
- 812 (9)
- 134 (10)
- 166 (11)
- 930 (12)

Q67 Find the code that satisfies this property: the sum of the numbers is equal to 11.

- 089 (1)
- 145 (2)
- 434 (3)
- 341 (4)
- 653 (5)
- 344 (6)
- 209 (7)
- 894 (8)
- 144 (9)
- 453 (10)
- 143 (11)
- 678 (12)

Q68 Find the codes that satisfies this property: the sum of the numbers is equal to 6.

- 634 (1)
 - 089 (2)
 - 436 (3)
 - 264 (4)
 - 123 (5)
 - 364 (6)
 - 234 (7)
 - 321 (8)
 - 322 (9)
 - 612 (10)
 - 684 (11)
 - 789 (12)
-

Q69 Find the codes that satisfies this property: the sum of the numbers is equal to 17.

- 132 (1)
 - 251 (4)
 - 714 (5)
 - 237 (6)
 - 734 (7)
 - 132 (8)
 - 117 (9)
 - 435 (10)
 - 890 (11)
 - 188 (12)
 - 153 (13)
 - 783 (14)
-

Q70 Find the codes that satisfies this property: the sum of the numbers is equal to 8.

- 632 (1)
 - 538 (4)
 - 364 (5)
 - 233 (6)
 - 638 (7)
 - 382 (8)
 - 123 (9)
 - 422 (10)
 - 890 (11)
 - 482 (12)
 - 566 (13)
 - 563 (14)
-

Q71 Find the codes that satisfies this property: the sum of the numbers is equal to 20.

- 637 (1)
 - 434 (4)
 - 765 (5)
 - 738 (6)
 - 735 (7)
 - 711 (8)
 - 173 (9)
 - 477 (10)
 - 866 (11)
 - 175 (12)
 - 558 (13)
 - 937 (14)
-

Q72 Find the codes that satisfies this property: the sum of the numbers is equal to 16.

- 555 (1)
 - 411 (4)
 - 734 (5)
 - 212 (6)
 - 257 (7)
 - 934 (8)
 - 155 (9)
 - 423 (10)
 - 812 (11)
 - 134 (12)
 - 155 (13)
 - 930 (14)
-

Q73 Find the codes that satisfies this property: the sum of the numbers is equal to 8.

- 089 (1)
 - 654 (5)
 - 111 (6)
 - 164 (7)
 - 113 (8)
 - 564 (9)
 - 115 (10)
 - 311 (11)
 - 611 (12)
 - 684 (13)
 - 561 (14)
 - 453 (15)
-

Q74 Find the codes that satisfies this property: the sum of the numbers is equal to 14.

- 098 (1)
 - 653 (4)
 - 356 (5)
 - 263 (6)
 - 123 (7)
 - 563 (8)
 - 125 (9)
 - 322 (10)
 - 612 (11)
 - 683 (12)
 - 789 (13)
 - 233 (14)
-

Q75 Find the codes that satisfies this property: the sum of the numbers is equal to 17.

- 635 (1)
 - 556 (4)
 - 764 (5)
 - 537 (6)
 - 577 (7)
 - 635 (8)
 - 667 (9)
 - 435 (10)
 - 190 (11)
 - 611 (12)
 - 577 (13)
 - 713 (14)
-

Q76 Find the codes that satisfies this property: the sum of the numbers is equal to 10.

- 635 (1)
 - 571 (4)
 - 764 (5)
 - 537 (6)
 - 671 (7)
 - 715 (8)
 - 153 (9)
 - 455 (10)
 - 190 (11)
 - 415 (12)
 - 511 (13)
 - 567 (14)
-

Q77 Find the codes that satisfies this property: the sum of the numbers is equal to 11.

- 415 (1)
 - 104 (4)
 - 764 (5)
 - 537 (6)
 - 227 (7)
 - 711 (8)
 - 153 (9)
 - 455 (10)
 - 166 (11)
 - 155 (12)
 - 551 (13)
 - 935 (14)
-

Q78 Find the codes that satisfies this property: the sum of the numbers is equal to 12.

- 255 (1)
- 411 (4)
- 734 (5)
- 515 (6)
- 790 (7)
- 934 (8)
- 166 (9)
- 453 (10)
- 115 (11)
- 134 (12)
- 606 (13)
- 930 (14)

End of Block: Third Assignment

Start of Block: Introduction to fourth assignment

Q79 You have now completed the third out of four assignments. On the next page you will receive instructions for the fourth assignment.

End of Block: Introduction to fourth assignment

Start of Block: Fourth assignment: Instructions

Q80 In the fourth assignment, you will work on a recognition task for 2 minutes.

Description of the assignment:

On top of the page you will see a 3-letter code. Your task is to find and check off the specific code from a matrix of 3-letter codes displayed in random order. The assignment code will occur multiple times in the same matrix. You will receive 1 point for each correct marking. You will be subtracted 1 point if you check off the wrong code. You will not lose any point for failing to check off all the occurrences of the correct code. Your performance in the fourth assignment depends on both the sum of points you receive and the time you took to complete the task. The assignment will last for 2 minutes. After 2 minutes you will proceed to the last part of the study. Below we present a simplified example to make sure you understand the assignment. When you have read and understood the assignment, go to the next page.

This is an example

The code you must check off is WSI

<input type="checkbox"/> EFG	<input checked="" type="checkbox"/> WSI	<input type="checkbox"/> OIU	<input type="checkbox"/> UJK	<input type="checkbox"/> EER	<input type="checkbox"/> VGT
<input type="checkbox"/> SCF	<input type="checkbox"/> QQE	<input type="checkbox"/> WDF	<input type="checkbox"/> YHJ	<input type="checkbox"/> IOL	<input checked="" type="checkbox"/> WSI

End of Block: Fourth assignment: Instructions

Start of Block: Fourth Assignment

Q81 Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

Q82 The code you must check off is PDD

- EFT (1)
- PGS (25)
- GEY (26)
- PDO (27)
- EGS (28)
- GST (29)
- DTF (30)
- YTT (19)
- SVA (20)
- YST (17)
- PDD (18)
- PEG (21)
- GSA (22)
- GAP (13)
- PDD (14)
- VAY (2)
- POD (3)
- PEG (4)
- YST (11)
- SAY (12)
- YST (5)
- STD (6)
- YST (7)
- STF (8)

Q83 The code you must check off is RCZ

- AFF (1)
- VJJ (2)

- RLV (3)
- EJH (4)
- RCZ (5)
- CLV (6)
- JAA (7)
- VEL (8)
- NJE (9)
- JLV (10)
- JAA (11)
- VLZ (12)
- RCZ (13)
- RCL (14)
- RCZ (15)
- REJ (16)
- ARC (17)
- JHA (18)
- VJF (19)
- PCZ (20)
- VFG (21)
- NLJ (22)
- TRS (23)
- RCZ (24)

Q84 The code you must check off is TFP

- EFT (1)
- TFO (2)
- GEO (3)
- TFS (4)
- TFP (5)

- GDD (6)
- DTF (7)
- YTT (8)
- SEE (9)
- DTP (10)
- PPS (11)
- VFT (12)
- GSS (13)
- GAP (14)
- OPD (15)
- YFT (16)
- EVV (17)
- PFT (18)
- YFP (19)
- SFP (20)
- YEG (21)
- STD (22)
- YST (23)
- TFP (24)

Q85 The code you must check off is GVA

- EPP (1)
- YDD (2)
- GFY (3)
- TDR (4)
- GVA (5)
- VGA (6)
- DEE (7)
- YFT (8)

- SDT (9)
- DFY (10)
- DEE (11)
- VFA (12)
- GVA (13)
- GUA (14)
- GVA (15)
- GTD (16)
- EGV (17)
- PDE (18)
- YPD (19)
- PEG (20)
- YPE (21)
- SFD (22)
- GVA (23)
- GUA (24)

Q86 The code you must check off is VLV

- ALE (1)
- VLV (2)
- RAF (3)
- ELN (4)
- ELF (5)
- RJJ (6)
- JEL (7)
- VEE (8)
- NAA (9)
- JEF (10)
- FFN (11)

- CLE (12)
- RNB (13)
- RZF (14)
- FJJ (15)
- VLV (16)
- ACC (17)
- FLE (18)
- VLU (19)
- NLF (20)
- VAR (21)
- NEJ (22)
- VNE (23)
- NJE (24)

Q87 The code you must check off is JAA

- AFF (1)
- VJJ (2)
- RLV (3)
- EJE (4)
- IAA (5)
- CLV (6)
- JAA (7)
- VEL (8)
- NJE (9)
- JLV (10)
- JAA (11)
- CLZ (12)
- RCZ (13)
- RCL (14)

- FLL (15)
- REJ (16)
- ARC (17)
- FJA (18)
- VJA (19)
- FAR (20)
- VFA (21)
- JEE (22)
- JAA (23)
- NEL (24)

Q88 The code you must check off is VNE

- ALE (1)
- FRN (2)
- RAV (3)
- UNE (4)
- RNE (5)
- ARN (6)
- JEL (7)
- VEE (8)
- NCZ (9)
- VNE (10)
- FAA (11)
- FAR (12)
- RNZ (13)
- RZF (14)
- FJJ (15)
- CZV (16)
- ARL (17)

VME (18)

NZV (19)

VNE (20)

NEJ (21)

VNE (22)

NEL (23)

VNE (24)

Q89 The code you must check off is FAJ

ZNC (1)

FAI (2)

AFN (3)

EAV (4)

FAV (5)

JEE (6)

FEJ (7)

LEE (8)

AJE (9)

ANV (10)

FAJ (11)

VFL (12)

VLE (13)

ZZC (14)

JEK (15)

CZV (16)

ARL (17)

ARN (18)

EAJ (19)

NCV (20)

ARN (21)

NNR (22)

VFL (23)

FAJ (24)

Q90 The code you must check off is ERR

ALE (1)

EFA (2)

RAV (3)

ELR (4)

ERR (5)

ALE (6)

EPP (7)

AAR (8)

NCZ (9)

ANN (10)

ERR (11)

RNL (12)

ARR (13)

RNC (14)

MRN (15)

RNA (16)

JEE (17)

ARL (18)

VVV (19)

NCV (20)

EEE (21)

NEJ (22)

ERR (23)

NLE (24)

Q91 The code you must check off is CZV

ZVC (1)

AFV (2)

CZU (3)

JEL (4)

FAV (5)

EAV (6)

JEF (7)

LEE (8)

AJE (9)

ANV (10)

RNA (11)

CZV (12)

VLE (13)

TRA (14)

VFD (15)

CZV (16)

ARL (17)

OZV (18)

JRH (19)

NCV (20)

ELV (21)

NEJ (22)

JVL (23)

JLV (24)

Q92 The code you must check off is ELF

ALE (1)

- VLV (2)
- RAF (3)
- ELN (4)
- ELF (5)
- RJJ (6)
- VEE (7)
- FLE (8)
- NAA (9)
- JEF (10)
- FFN (11)
- CLE (12)
- RNN (13)
- RZF (14)
- GFF (15)
- VLV (16)
- ELF (17)
- AAA (18)
- VLF (19)
- NLF (20)
- EIF (21)
- NEJ (22)
- VNE (23)
- NJE (24)

Q93 The code you must check off is FJJ

- ALE (1)
- FRN (2)
- RAV (3)
- ELR (4)

- ARN (5)
- FJI (6)
- JEK (7)
- VEE (8)
- NCZ (9)
- VNE (10)
- FJJ (11)
- FAR (12)
- RNZ (13)
- RZF (14)
- GJJ (15)
- FJJ (16)
- ARL (17)
- FAR (18)
- VNE (19)
- FIJ (20)
- NEJ (21)
- VNE (22)
- AAS (23)
- NEL (24)

End of Block: Fourth Assignment

Start of Block: Final Instruction

Q94 You have now completed the fourth out of four assignments. On the next page you will receive instructions for the determination of payments

Page Break

Q95 You have now completed all the assignments and we measured your performance in each of them. We now explain how we calculate your earnings from the production phase. A two-stage process will determine your final payment.

First stage

In the first stage, for each assignment, you will be randomly and anonymously matched to another participant who has completed the same assignment. The participant with the best performance in the pair earns 7.3 USD, and the other participant earns 0 USD. If you both have the same performance, you will be matched with another participant.

Second stage

In the second stage, for each assignment, a randomly selected third person will be given the opportunity to redistribute the earnings assigned in the first stage between you and the other participant. This person will not know your identities, but will be informed about the nature of the assignments and your earnings from these assignments. For example, in each assignment, either you or the other participant earns 7.3 USD and the other participant earns 0 USD. If the third person chooses to redistribute earnings, the USD added to the participant with low earnings, will be subtracted from the participant with high earnings. Among the four assignments, only one will be selected at random and actually paid. The payment will be made within 2 weeks and it will be paid separately from your fixed participation fee of 1 USD and from your returns from the common project.

Page Break

Q96 If you have any comments or suggestion related to this study please write them down in the space below. Your feedback is very important to improve our research.

End of Block: Final Instruction

Start of Block: Random ID

Q97

This is your random ID: `{e://Field/Random%20ID}`

Copy this value to paste into MTurk.

When you have copied this ID, please click the next button to submit your survey.

End of Block: Random ID