# Appendix I-Experimental instructions for: Linking Social and Personal Preferences: Theory and Experiment* 

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Section 1 repeats the general introduction that were read to participants (but also available on paper). Section 2 includes the treatment specific texts the participants could reference for each treatment. Attached at the end (as Figure 4 and Figure 5) is a general questionnaire that participants answered.

## 1 General introduction

LEADER READS ON SIGNAL.
Welcome. My name is ... and I will lead this session. Since the results from this experiment will be used in a research project, we ask you to follow the rules of conduct that you have on your desk:

[^0]- Please do not communicate with other participants during the experiment.
- If you have questions, raise your hand and we will assist you.
- Visiting websites during the experiment is not allowed.
- Using your mobile phone is not allowed during the experiment.
- If you fail to comply with these rules, you might be asked to leave the experiment without compensation.

I am now going to read the instructions for this experiment. These instructions are also available to you on your desk. This is an experiment in decision-making. Your payoffs will depend partly on your decisions, the decisions of other participants, and partly on chance. Funding for this experiment has been provided by public and private research foundations. Please pay careful attention to the instructions as a considerable amount of money is (potentially) at stake.

Your participation in the experiment and any information about your payoffs will be kept strictly confidential. Each participant is assigned a participant ID number. This number will be used to record all data. Neither the experimenters nor the other participants will be able to link you to any of your decisions. Neither your name nor any other identifying information about you will be used in any final reports of the study.

The entire experiment should be complete within one and a half to two hours. Your earnings in the experiment will be 100 NOK as a participation fee (simply for showing up on time) plus whatever you earn in the experiment. You will be paid privately according to your participant ID number at the end of the experiment. Details of how you will make decisions and receive payments will be provided below.

During the experiment we will speak in terms of experimental tokens instead of NOK. Your earnings will be calculated in terms of tokens and then translated at the end of the experiment into NOK at the following rate:

## 1 Token $=1.20$ NOK

If you have any questions, please raise your hand and a research assistant will approach your desk.

Once the experiment begins, we ask everyone to remain silent. In order to keep your decisions private, please do not reveal your choices to any other participant. Also, make sure to not close the program window at any time during the experiment.

### 1.1 The computer program

The experiment has four parts. ${ }^{1}$
In each part of the experiment, you will participate in 50 independent decision problems that share a common form. This section describes in detail the process that will be repeated in all decision problems and the computer program that you will use to make your decisions. An example of the computer dialog window is shown in Attachment 1.2

## LEADER WAITS TILL EVERYONE HAS FOUND ATTACHMENT 1.

In each decision problem, you will be asked to allocate tokens between two accounts, labeled $x$ and $y$. The $x$ account corresponds to the $x$-axis (the horizontal axis) and the $y$ account corresponds to the $y$-axis (the vertical axis) on a two-dimensional graph. Each choice will involve choosing a point on a line representing possible token allocations. The instructions for each part will describe in detail how the payoff for each part of the experiment will be determined.

Each decision problem will start by having the computer select such a line randomly from the set of lines that intersect with at least one of the axes at 50 or more tokens but with no intercept exceeding 100 tokens. Examples of lines that you might face are shown in Attachment $2 \sqrt[3]{3}$ In each part of the experiment, the lines selected for you in different decision problems are independent of each other and of the lines selected for any of the other participants in their decision problems, and will not depend on your choices in any of the earlier decision problems.

In each choice, you may choose any $x$ and $y$ pair that is on the line. For example, as illustrated in Attachment 3, choice A represents a decision to allocate $q$ tokens to the $x$ account and $r$ tokens to the $y$ account. Similarly, choice B represents a decision to allocate $w$ tokens to the $x$ account and $z$ tokens to the $y$ account..$^{4}$

To choose an allocation, use the mouse to move the pointer on the computer screen to the allocation that you desire. The computer will only allow you to choose $x$ and $y$ combinations that are on the line. When you are ready to make your decision, left-click to enter your chosen allocation. After that, confirm your decision by clicking on the Submit button. To move on to the next round, click the OK button. Once you have clicked the OK button, your decision cannot be revised.

[^1]Next, you will be asked to make a decision in another independent decision. This process will be repeated until all 50 decision problems in each part of the experiment are completed. At that point, you may have to wait for other participants to finish. Each part of the experiment will end after all participants have made all their decisions. At the end of each part of the experiment, you will receive further instructions. At the end the experiment, the computer will randomly select one of the 50 decision rounds from each of the four parts of the experiment to carry out for payoffs. The round selected from each part depends solely upon chance.

### 1.2 Round 1

You will now be given the instructions for part 1. Please raise your hand if you have any questions. ${ }^{5}$

SA3 and 4 hands out Round 1 instructions. Everyone gets the SAME SHEET.

> WHEN THE PARTICIPANTS HAVE FINISHED READING THE ROUND 1 INSTRUCTIONS, AND WHEN NOBODY HAS MORE QUESTIONS, LEADER STARTS ROUND 1.

## When all of the participants are finished with Round 1, the LEADER CONTINUES READING

You have now finished Part 1 of the experiment. We will now collect the instructions for Part 1.

SA3 and 4 COLLECTS THE PAPERS FOR Round 1. LEADER waits to Read until SA3 and 4 has Finished collecting the Round 1 INSTRUCTIONS

### 1.3 Part 2

You will now be given the instructions for part 2. Please raise your hand if you have any questions.

SA3 And 4 hands out Round 2 instructions. Different for EVERY DESK. GIVE CORRECT SHEET TO CORRECT DESK.

[^2]When the participants have finished reading the Round 2 inSTRUCTIONS, AND WHEN NOBODY HAS MORE QUESTIONS, LEADER STARTS Round 2.

When all of the participants are finished with Round 2, the LEADER CONTINUES READING

You have now finished Part 2 of the experiment. We will now collect the instructions for Part 2.

SA3 And 4 COLLECTS THE PAPERS FOR ROUND 2. LEADER WAITS to read until SA3 and 4 has finished collecting the Round 2 INSTRUCTIONS

### 1.4 Part 3

You will now be given the instructions for part 3. Please raise your hand if you have any questions.

SA3 and 4 hands out Round 3 instructions. Different for EVERY DESK. GIVE CORRECT SHEET TO CORRECT DESK.

When the participants have finished reading the Round 3 InSTRUCTIONS, AND WHEN NOBODY HAS MORE QUESTIONS, LEADER STARTS Round 3.

## When all of the participants are finished with Round 3, the LEADER CONTINUES READING

You have now finished Part 3 of the experiment. We will now collect the instructions for Part 3.

SA3 and 4 collects the papers for Round 3. Leader waits to read until SA3 and 4 has Finished collecting the Round 3 INSTRUCTIONS

### 1.5 Part 4

You will now be given the instructions for part 4. Please raise your hand if you have any questions.

SA3 and 4 hands out Round 4 instructions. Different for EVERY DESK. GIVE CORRECT SHEET TO CORRECT DESK.

When the participants have finished reading the Round 4 INSTRUCTIONS, AND WHEN NOBODY HAS MORE QUESTIONS, LEADER STARTS Round 4.

When all of the participants are finished with Round 4, THE LEADER CONTINUES READING

You have now finished Part 4 of the experiment. We will now collect the instructions for Part 4.

SA3 and 4 COLLECTS THE PAPERS FOR ROUND 4. LEADER WAITS to read until SA3 and 4 has finished collecting the Round 4 INSTRUCTIONS

## 2 Instruction sheets handed out to participants

Treatment-specific instructions follow. In the headings, the domain name is included in small caps for reference, these were not shown to participants.

### 2.1 Instructions for part $M$ (Social Risk)

For each allocation that you make to the $x$ account and the $y$ account in this part of the experiment, the computer will randomly (entirely dependent upon chance) select one of the accounts, $x$ or $y$. It is equally likely that account $x$ or account $y$ will be chosen. You will receive the number of tokens you allocated to the account that was chosen. Another person, who will be chosen at random from the group of participants in the experiment, will receive the number of tokens you allocated to the other account.

You will also receive the tokens allocated to a randomly chosen account by a third person, where the third person is chosen at random from the group of participants in the experiment. The computer will make sure that the participant to whom you allocate tokens does not allocate tokens to you as a third person (and vice versa). Neither you nor any other participants will observe who allocated tokens to whom or which account was chosen in any decision round, that is, the choices of all participants are anonymous in the experiment.

Your earnings for this part of the experiment will be determined as follows. At the end of the experiment, the computer will randomly select one of the 50 decision rounds to carry out for payoffs. The round selected depends solely upon chance. You will then be paid the tokens you allocated to the account that was chosen for you in this round. In addition, you will also be paid the tokens that the randomly chosen third person allocated to the account that was not chosen for her or him in this round. You will therefore be paid two groups of tokens: one based on your own decision to allocate tokens and one based on the decision of another random participant to allocate tokens.

For example, suppose that in the round the computer randomly selects to carry out for payoffs, you chose allocation A, as illustrated in Attachment 3. Additionally, suppose that the computer chose the $y$ account for you in your decision problem. In that case, you will be paid $r$ tokens from your own $y$ account and the recipient will be paid $q$ tokens from the $x$ account. The payment to you from the choice paid by the third person in the selected round is determined in the same way. At the end of the experiment, the tokens paid to you from the selected round will be converted into money. Recall that each token will be worth 1.20 NOK. At the end of this part of the experiment, you will receive further instructions.

### 2.2 Instructions for part $D$ (Social)

For each allocation of tokens to the $x$ account and the $y$ account that you make in this part of the experiment, you will receive the number of tokens in your $y$ account. Another person, who will be chosen at random (entirely dependent upon chance) from the group of participants in the experiment, will receive the number of tokens in your $x$ account.

You will also receive the tokens allocated to the $x$ account by a third person, where the third person is chosen at random from the group of participants in the experiment. The computer will make sure that the participant to whom you allocate tokens does not allocate tokens to you as a third person (and vice versa). Neither you nor any other participant will observe who allocated tokens to whom in any decision round, that is, the choices of all participants are anonymous in the experiment.

Your earnings for this part of the experiment will be determined as follows. At the end of the experiment, the computer will randomly select one of the 50 decision rounds to carry out for payoffs. The round selected depends solely upon chance. You will then be paid the tokens you allocated to the $y$ account in this round. In addition, you will also be paid the tokens that the randomly chosen third person allocated to her or his $x$ account in this round. You will therefore be paid two groups of tokens: one based on your own decision to allocate tokens and one based on the decision of another random participant to allocate tokens.

For example, suppose that in the round the computer chose to carry out for payoffs, you chose allocation A, as illustrated in Attachment 3. In that case you would be paid $r$ tokens from your own $y$ account and the recipient will be paid $q$ tokens from the $x$ account. The payment to you from the choice paid by the third person in the selected round is determined in the same way. At the end of the experiment, the tokens paid to you from the selected round will be converted into money. Recall that each token will be worth 1.20 NOK. At the end of this part of the experiment, you will receive further instructions.

### 2.3 Instructions for part $R$ (PERSONAL RISK)

For each allocation that you make in this part of the experiment in the $x$ account and the $y$ account, the computer will randomly (entirely dependent upon chance) select one of the accounts, $x$ or $y$. It is equally likely that account x or account y will be chosen. You will only receive the number of tokens you allocated to the account that was chosen. The tokens you allocated to the other account will be lost (not allocated to anyone).

Your earnings for this part of the experiment will be determined as follows. At the end of the experiment, the computer will randomly select one of the 50 decision rounds to carry out for payoffs. The round selected depends solely upon chance. You will only be paid the number of tokens you allocated to the account that was chosen in this round. These are
the only tokens you will be paid from this part of the experiment. Recall that it is equally likely that account x or account y will be chosen.

For example, suppose that in the round the computer chose to carry out for payoffs, you chose allocation A, as illustrated in Attachment 3, and that the computer chose account $x$ for you in that round. In that case you would be paid $q$ tokens in total. Similarly, if the computer chose the account $y$ for you in that round then you would be paid $r$ tokens in total. At the end of the experiment, the tokens will be converted into money. Recall that each token will be worth 1.20 NOK. At the end of this part of the experiment, you will receive further instructions.

### 2.4 Instructions for part $O$ (OBSERVER)

For each allocation that you make in this part of the experiment to the $x$ account and the $y$ account, two other participants chosen at random (entirely dependent upon chance) from the group of participants in the experiment will receive tokens. One participant will receive the tokens you allocated to the $x$ account; another participant will receive the tokens you allocated to the $y$ account.

You will receive the tokens a third person allocated to the $x$ account and a fourth person allocated to the $y$ account. These persons will also be chosen at random from the group of participants in the experiment. The computer will make sure that the participant to whom you allocate tokens does not allocate tokens to you as a third or fourth person (and vice versa). Neither you nor any other participants will observe who allocated tokens to whom, that is, the choices of all participants are anonymous in the experiment.

In this part of the experiment, your earnings are not determined by your own choices, but by the choices made by the randomly chosen third and fourth person. Your choices, however, will determine the earnings of two other randomly chosen participants. At the end of the experiment, the computer will randomly select one of the 50 decision rounds to carry out for payoffs. You will then be paid the tokens that the randomly chosen third person allocated to the $x$ account and the randomly chosen fourth person allocated to the y accounts in this round. In the same way, two other randomly chosen participants will be paid what you allocated to the $x$ account and $y$ account in this round, respectively.

For example, suppose that in the round the computer chose to carry out for payoffs, you chose allocation A, as illustrated in Attachment 3. In that case, two other participants will be paid $r$ tokens and $q$ tokens, respectively. The payment to you from the choices made by the third person and the fourth person in the selected round is determined in the same way. At the end of the experiment, the tokens will be converted into money. Recall that each token will be worth 1.20 NOK. At the end of this part of the experiment, you will receive further instructions.

Attachment 1


Figure 1: Attachment 1, referenced in the instructions


Figure 2: Attachment 2, referenced in the instructions

## Attachment 3



Figure 3: Attachment 3, referenced in the instructions

## Small survey

1. What is your age in years? $\qquad$
2. What is your gender? ( $\mathrm{M} / \mathrm{F}$ )
3. What is your best estimate of your total expenditures the previous calendar year (2012)?
4. What is the total (gross) income of your parents? Please make your best guess and tick off the corresponding circle.

O 0 to less than 250000 NOK
O 250000 to less than 500000 NOK
O 500000 to less than 750000 NOK
O 750000 to less than 1000000 NOK
O 1000000 to less than 1250000 NOK
O 1250000 to less than 1500000 NOK
O 1500000 NOK or more

Please indicate how much you agree or disagree with the following statements by circling the corresponding number.
5. A society should aim at equalizing incomes.

| Disagree <br> completely | Disagree | Neither agree nor <br> disagree | Agree | Agree completely |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

6. In the present situation in Norway, we should do more to equalize incomes.

| Disagree <br> completely | Disagree | Neither agree nor <br> disagree | Agree | Agree completely |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

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Figure 4: First page of questionnaire at the end of experiment
7. Imagine two people, one earning twice as much as the other:

The person earning twice as much should pay more than double of the other in tax.

| Disagree <br> completely | Disagree | Neither agree nor <br> disagree | Agree | Agree completely |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

8. The government should spend more of the tax revenues on social services and benefits targeting the poor than the rich.

| Disagree <br> completely | Disagree | Neither agree nor <br> disagree | Agree | Agree completely |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

9. What total amount of tax per year, if any at all, should in your opinion be paid by a person earning NOK 200,000 a year? By taxes, we mean all personal income taxes. Indicate your answers in NOK.
$\square$
And what total amount of tax should be paid by a person earning NOK 400,000?
$\square$
And what total amount of tax should be paid by a person earning NOK 800,000?


And what total amount of tax should be paid by a person earning NOK 1,600,000?
$\square$
10. Below is a seven-point scale on which the political views that people might hold are arranged from very left-wing to very right-wing. Where would you place yourself on this scale?

| Very <br> left-wing | Left-wing | Slightly <br> left-wing | Moderate | Slightly <br> right-wing | Right-wing | Very <br> right-wing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O | 0 | 0 | 0 | 0 | 0 | 0 |

Figure 5: Second page of questionnaire at the end of experiment


[^0]:    *We are grateful to Daniel Silverman, Robert Powell, Benjamin Polak, Daniel Markovits, Edi Karni, Douglas Gale, Raymond Fisman and Chris Chambers for helpful discussions and encouragement and for suggestions from a number of seminar audiences. Financial support was provided by the National Science Foundation, the Research Council of Norway, and the Peder Sather Center for Advanced Study. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of any funding agency. The experiments reported in this paper were conducted by the Choice Lab at the Centre for Experimental Research on Fairness, Inequality and Rationality (FAIR) at NHH Norwegian School of Economics. Funding for the experiments was provided by the Research Council of Norway through its Centres of Excellence Scheme, FAIR project No 262675 and Research Grant 236995.
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[^1]:    ${ }^{1}$ The paper "Linking Social and Personal Preferences: Theory and Experiment" only uses data from three of these four parts.
    ${ }^{2}$ Attachment 1 is enclosed as Figure 1
    ${ }^{3}$ Attachment 2 is enclosed as Figure $\frac{1}{2}$
    ${ }^{4}$ Attachment 3 is enclosed as Figure $\overline{3}$.

[^2]:    ${ }^{5}$ The instructions that were handed out are presented in Section 2.

