Appendix B:

Study Material and Instructions

The following document shows the instructions to the participants. The instructions here are provided in English but will be provided in German. Text in italics is the instruction to the participant.

**Purpose of the research study:** The purpose of this study is to gather information about the relationship between hypothetical decisions regarding others and personality.

**What you will do in the study:** In this study, you will be asked to complete a short survey. During the survey, you will be asked to make hypothetical decisions and fill out a personality questionnaire. Please do not skip any questions.

**Time required:** The study will require about 30 minutes of your time.

**Risks:** There are no anticipated risks in this study.

**Benefits:** There are no direct benefits to you for participating in this research study. The study may help us understand factors that affect the use of preprints in the scholarly community.

**Confidentiality:** The information that you provide us with in this study will be handled confidentially. Your data will be anonymous, which means that your name will not be collected or linked to the data. Your data will be recorded, stored, and shared anonymously using an individually assigned identification number. We ask that you not discuss your study session with others in order to preserve your privacy.

**Voluntary participation:** Your participation in the study is completely voluntary.

**Right to withdraw from the study:** You have the right to withdraw from the study at any time without penalty. However, if you finish the study before the end of the study, you will receive no payment.
How to withdraw from the study: You can end your participation in the study at any time by closing the window.

Payment: You receive 10 € for participation.

Do you want to participate? Click continue

Measurement of social demographics

How old are you?

What gender do you have? Male vs. female vs. divers?

What is your monthly disposable income?

What is your highest educational degree? PhD vs. Masters vs. Bachelor vs. Apprenticeship vs. Highschool, non

Social value orientation

The instructions are the standard instructions used for the social value orientation slider measure (Murphy, Ackerman, & Handgraaf, 2011):

“In this task, imagine that you have been randomly paired with another person, whom we will refer to as the other. This other person is someone you do not know and will remain mutually anonymous. All of your choices would be completely confidential. You will be making a series of decisions about allocating resources between you and this other person. For each of the following questions, please indicate the distribution you prefer most by selecting the button below the payoff allocations. You can only make one selection for each question. Your decisions will yield money for both yourself and the other person.

In the example below, a person has chosen to distribute the payoff so that he/she receives 50 dollars, while the anonymous other person receives 40 dollars.”

“There are no right or wrong answers, this is all about personal preferences. After you have made your decision, select the resulting distribution of money by clicking on button below your choice. As you can see, your choices will influence both the amount of money you receive as well as the amount of money the other receives.”
Items 1-6 of the standard SVO slider will be presented (Items are depicted after the instructions).

**Honesty-humility**

HEXACO60 German version: provided by [http://hexaco.org/hexaco-inventory](http://hexaco.org/hexaco-inventory)

**Moral identity centrality**

MIQ standard version, translated into German.
Real effort task

In the following task, the Slider task, you will have to adjust different sliders to a specified value. Here is an example:

Please adjust the following slider to the middle position which has the value 50.

Sliders are adjusted by clicking on them and then moving your mouse cursor to the specified position and clicking on it.

Please try it out on the following slider and adjust it to 20.

After correctly adjusting it: Thank you.

In the task you will be asked to adjust sliders as the one in the example. You will have to adjust 10 sliders presented on the screen within a period of 30 seconds. The screen will reload and present new sliders after that period. Please adjust all sliders in the 30s period. You will be alerted to sliders that have not been adjusted after 25s.

Comprehension test

You have unlimited time to adjust the sliders on one page. Yes / No

If Yes: Wrong. You will only see each page for 30s and you have to adjust all sliders in that time.

If you do not adjust all sliders, nothing happens. Yes / No

If Yes: Wrong. If you do not adjust all sliders you receive a warning 25s after the page reloaded. The page will automatically reload after 30s and if sliders were not adjusted, time is not counted.
Opportunity cost of time

Exact wording from the instructions in Ellingsen & Johannesson (2009):

In this part of the experiment we are interested in your (and the other participants) valuation of the cost of working on the slider task for 15 minutes. We will offer you a specific compensation to stay after the end of the experiment for 15 minutes and work on this task.

On the enclosed form marked “Time cost” you will fill out the smallest compensation you accept to stay after the end of the experiment for 15 minutes. The forms are then collected.

Thereafter we will draw the price that we are willing to pay for you to stay after the end of the experiment for 15 minutes. The price is drawn randomly from a box that contain notes with prices from 0 € and upwards in 1€ increments: i.e. 1€, 2€ 3€, etc. upwards to the highest possible price. The highest possible price is equal to what we think is the highest possible reasonable valuation of the cost of giving up 15 minutes. In the random draw of the price one is drawn from a uniform distribution.

If the randomly drawn price (X €) is higher than or equal to the time cost you stated on the form we will pay you the drawn price (€) and you will be able to participate in the working task. If the randomly drawn price (X €) is lower than the time cost you stated on the form, you can leave directly and the experiment ends.

Note that it is in your own best interest to state your time cost as accurately as possible, i.e. to be honest. This is because you cannot affect how much you get paid for staying for 15 minutes as this price is randomly drawn. The only thing you can affect is if you will stay for 15 minutes or not at different prices.

Comprehension test

Will you for sure receive your requested wage and work? Yes / No

If NO: You will not receive your requested wage for sure and work, but only if it is below or equal to the random number drawn.

Your payoff in the task depends on the wage you requested? Yes / No

If NO: The payoff is only determined by your requested pay.

How long will you have to work for the requested pay? ___minutes

If not 15 minutes: You will have to work for 15 minutes.

MEASURE of opportunity cost

What is the smallest compensation you accept to stay after the end of the experiment for 20 minutes? ..................€

Before the slider task starts we like to ask two questions.
Decisions about time and money

Instruction before the decisions about the roles of decider and receiver:

In this next part of the study there are two roles of participants: decider and receiver. The participants in the role of the decider make decisions that influence the receiver. The receiver is passive and cannot influence the decisions. Receivers and deciders are matched, but they will remain anonymous.

New screen:

You are a decider.

New screen:

We now ask you two questions about your working time and earnings in the slider task. After your decision it will be randomly determined which of the two decisions will be carried out. For this reason, treat each decision as if it would be the only decision you are making.

Money treatment

This task will take 15 minutes and you will receive [WAGE] € for its completion. When you finish the task, you will be able share your earnings with a receiver. This means the receiver will receive whatever you share as a payoff.

Please state now how much of your earnings you want to give to a receiver. The decision you make now will be binding and carried out after the task is completed. Please indicate your preferred distribution below by clicking in the circle under the respective allocation.

<table>
<thead>
<tr>
<th>For me</th>
<th>5,00€</th>
<th>4,50€</th>
<th>4,00€</th>
<th>3,50€</th>
<th>3,00€</th>
<th>2,50€</th>
<th>2,00€</th>
<th>1,50€</th>
<th>1,00€</th>
<th>0,50€</th>
<th>0,00€</th>
</tr>
</thead>
<tbody>
<tr>
<td>For other</td>
<td>0,00€</td>
<td>0,50€</td>
<td>1,00€</td>
<td>1,50€</td>
<td>2,00€</td>
<td>2,50€</td>
<td>3,00€</td>
<td>3,50€</td>
<td>4,00€</td>
<td>4,50€</td>
<td>5,00€</td>
</tr>
</tbody>
</table>

Please write down the distribution you just choose: I keep _______€ and I give _______€.

Time condition

The slider task will take at the most 15 minutes. The task will not be to your benefit, but you will work for a receiver. You decide how long you want to work and you see before you make your decision will benefit a receiver. This means whatever time you are willing to work the receiver will have to work less.
Please state now how long you are willing to work using the slider below. The decision you make now will be binding and the task will last as long as you decide now. If you decide not to work at all, then the study will end after your decision. The working time is portrayed as minutes:seconds (for example 34:30 means 34 minutes and 30 seconds) Please indicate your preferred working time by clicking in the circle under the respective number of minutes.

<table>
<thead>
<tr>
<th>Work for (mm:ss)</th>
<th>0:00</th>
<th>01:30</th>
<th>03:00</th>
<th>04:30</th>
<th>06:00</th>
<th>07:30</th>
<th>09:00</th>
<th>10:30</th>
<th>12:00</th>
<th>13:30</th>
<th>15:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>The other works</td>
<td>15:00</td>
<td>13:30</td>
<td>12:00</td>
<td>10:30</td>
<td>9:00</td>
<td>7:30</td>
<td>6:00</td>
<td>4:30</td>
<td>3:00</td>
<td>1:30</td>
<td>0:00</td>
</tr>
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<td></td>
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</tr>
</tbody>
</table>

Please write down the working time you just chose: I will work ___ minutes and ____ seconds.

Slider task

The random number drawn from the distributions of numbers was X €. Your requested pay was smaller; you will receive your requested pay in the task. [Your requested pay was higher than this number, you cannot participate in the task, thank you for participating in the study].

In the slider task you will see multiple pages with 10 sliders like the ones you saw in the instruction. Above each slider a number will indicate to what value the slider should be adjusted. You have 30 seconds to adjust all sliders on one page. If you did not adjust all sliders, then the 30s work time will not be deducted from your whole work time. After the 30 second period a new page with 10 sliders will appear.

You can start the task by clicking “OK”.

Determining which decision is played out

Showing an electronic coin toss and determine which decision is played out: Decision about time or decision about money.

Time treatment:

Your decision about how long you want to work has been selected. You will now work [X] minutes.

Money treatment:

Your decision about how to split your earned payoffs has been selected. You will now work for 15 minutes and earn [X] Euros.
Measuring affect

After having worked for 1 minute and 30 seconds affect will be measured using the PANAS (Watson, Clark, & Tellegen, 1988):

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent [INSERT APPROPRIATE TIME INSTRUCTIONS HERE]. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>very slightly or not at all</td>
<td>a little</td>
<td>moderately</td>
<td>quite a bit</td>
<td>extremely</td>
</tr>
</tbody>
</table>

_____ interested
_____ distressed
_____ excited
_____ upset
_____ strong
_____ guilty
_____ scared
_____ hostile
_____ enthusiastic
_____ proud

_____ irritable
_____ alert
_____ ashamed
_____ inspired
_____ nervous
_____ determined
_____ attentive
_____ jittery
_____ active
_____ afraid

Role switch

The timing to receive the information about the role switch will depend on which decision was played out.

Time treatment:

After the task is completed the participant is told:

*You are now a receiver. Another participant decided to give you [X] Euro.*

Money treatment:

Working on the task is set to 15 minutes. However, the actual working time is determined by 15 minutes minus the time given by a decider. When the working time is fulfilled, a message on the screen appears.

*You are now a receiver. Another participant decided work [mm:ss] for you. For this reason you now completed the task.*
Payoff information

After the task depending on the treatment condition played out, participants see one of the two types of final payoff information:

Time treatment

Thank you for finishing this task. You worked for [DECIDED WORKING TIME] and therefore a participant in the other group [DECIDED WORKING TIME] less. You received a payoff of [X€] from another anonymous participant.

Money treatment

Thank you for finishing this task. You earned [wage-gift] and gave [gift] to another participant in the other group. You received [mm:ss] working time from another anonymous participant.

End of Study

Before you can close the browser we ask you to briefly tell us how much you agree with the following statements (1 disagree – 7 totally agree):

1. Money is a replenishable resource.
2. Time is a replenishable resource.
3. Time can be exchanged with other people.
4. Money can be exchanged with other people.
5. Time can be saved.
6. Money can be saved.
7. Time is special.
8. Money is special.

Thank you for participating in this study. You now can close your browser window