

ONLINE APPENDIX

"Which Reference Groups Matter and How? A Relative Income Information Experiment with Administrative Data"

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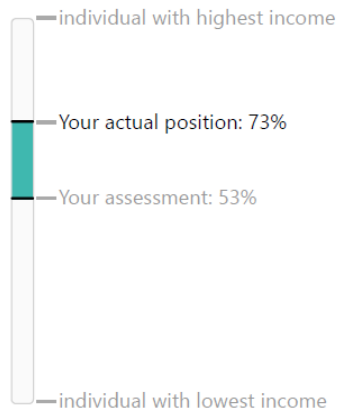
Topi Miettinen

DESCRIPTION OF SURVEY

Figure A1. . Example of the treatment of information in treatment EDUCATION

In this section we would like to give you information about the relationship between your income and the incomes of **those who had the same level of education** in 2018.

By income, we refer to the total after tax annual income, which contains income from labor and capital, as well as all transfers and subsidies like unemployment benefits and pensions (i.e., disposable income).



According to your assessment, 53% of people who had the same level of education had lower income than you in 2018.

Actually, based on register data, 73% of people who had the same level of education had lower income than you in 2018.

The guess above may not be the one that determines your bonus payment. One of the five guesses will be randomly selected to determine whether you get a bonus of 5 euro in addition to the 15 euro compensation.

Please choose the correct statement according to the information you see above. (This question is just to verify that you have understood the information in the figure.)

- The actual proportion of people with lower income than I is **larger** than I thought.
- The actual proportion of people with lower income than I is **smaller** than I thought.
- The actual proportion of people with lower income than I is the **same** as I thought.

Notes: The participants in treatment EDUCATION see their disposable income rank among people who have the same educational level. They also see their assessment of the rank and need to answer the interpretation question correctly before they proceed. The other treatments provide the information in the same way except the specified reference group differs based on the treatment.

Figure A2. . Survey feedback page

THIS PAGE IS ONLY FOR INCENTIVE.

Thank you for taking part in this study! You have now completed the survey.

The randomly drawn cause is VÄLGÖRENHET. The indicated amount 0 euro will be spent on VÄLGÖRENHET.

Your guess about the % of people among those who lived in the same municipality had lower income than you in 2018 was randomly selected. The actual % is 85. Your guess was 68.

You would receive an additional 5 euros if your guess hit the correct 5%-point interval among 0-5%, 6-10%, 11-15%, ..., 91-95%, 96-100%.

Your assessment does not hit the correct 5%-point interval and thus you will not receive 5 euros in addition.

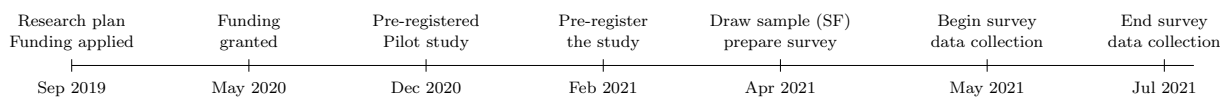
In total, you will be sent 15 euros as a gift card for R-kioski by a text message to your mobile phone.

After this page you will get a link that directs you to a separate website at Statistics Finland, in which you may enter a mobile phone number. The experts at Statistics Finland will extract the information regarding your payment from the anonymous survey data sent to Statistics Finland. They then connect your payment data with the mobile phone number and send you the gift cards by text-message, and lottery tickets by mail.

To finalize the survey and receive your payment, click on this [link](#) and follow the instructions on the Statistics Finland website.

Notes: The participants receive feedback on the incentivized belief elicitation at the end of survey.

Figure A3. . Timeline of the study



Description of online survey

The original survey was conducted in both Finnish and Swedish. The English translation of the survey screens can be found at the [link](#). The survey consists of five sections, which are further divided into 17 blocks.

1) Log-in and background questions

- Block 1: Participants log in and respond to questions concerning their birth year, gender, who they live with, highest education in 2018, occupation in 2018, and municipality of residence in 2018. [If the participants log in with their username after the first time, they would access the survey webpage where they stopped if they have accidentally left the survey or the final webpage if they have finished.]

2) Incentivized income rank belief elicitation

- Block 2: Participants report their beliefs about the percentage of Finns who had lower disposable income than them in 2018 in each of the five reference groups (same municipality, same age, same education, same occupation, all Finland). Reference groups are displayed in random order.

3) Income rank information provision treatment

- Block 3 Choice of information: [Displayed only to participants in treatment CHOICE.] Participants choose one of the five reference groups for which they want to learn their income rank. After making a choice, participants give reasons for the choice by ticking suitable alternatives in a multiple choice question and answering in an open text field as they wish.
- Block 4 Information treatment: [Not displayed to participants in treatment CONTROL.] Participants receive information about their disposable income relative to others in the reference group corresponding to their treatment assignment. Participants in treatment CHOICE see their income rank in the reference group corresponding to their choice in Block 3.

4) Outcome questions

- Block 5 Life satisfaction and future plans: Participants answer questions concerning 1) fairness of their income and feelings about their income, 2) life satisfaction, and 3) intentions to invest, gamble and search for a new job. Then, they also report their current employment status and whether they are members of an employment union or association.
- Block 6 Job satisfaction: [This block is displayed only to participants who report being currently employed or furloughed based on their answer in block 5.] Participants answer questions concerning job satisfaction, wage satisfaction, and meaningfulness of their job.
- Block 7 Trust in institutions: Participants report their trust in government, employee unions, and politicians.
- Block 8 Attitudes toward immigration and trade policies: Participants answer questions concerning attitudes toward immigration and foreign imports.
- Block 9 Attitudes toward welfare policy: Participants answer questions concerning attitudes toward job-search-dependent unemployment benefits and the basic income scheme.

- Block 10 Income redistribution: Participants answer questions concerning ideal minimum monthly disposable income, tax rate for the highest earning 1% of Finns, inheritance tax rates, whether there should be more or less income redistribution and whether it is acceptable to take advantage of the tax code to minimize one's tax burden.
- Block 11 Preferred income distribution: Participants indicate their preferred income distributions.
- Block 12 Just world beliefs: Participants answer questions concerning beliefs about the role of luck and effort, fairness of chances in getting a job and achieving the education one aspires to.
- Block 13 Self-assessment: Participants answer questions concerning their social preferences (such as trust, positive and negative reciprocity, competitiveness).
- Block 14 Willingness to act: Participants answer questions concerning patience, altruism and risk taking.
- Block 15 Political orientation: Participants answer questions concerning their political orientation on spectrum right/left and liberal/conservative and which party they would vote for if there was an election today.
- Block 16 Incentivized tasks (Real stakes questions): Participants decide how much (0-15 Euro) of their payoff of 15 Euro they want to donate to charity, donate as a voluntary tax, and spend on lotto tickets. One of the three decisions is randomly chosen and implemented.

5) Summary

- Block 17 Summary: Participants receive reminder of the income rank information provided in Block 4, whether they hit the correct interval in the incentivized beliefs question in Block 3, and their final payment including which of the incentivized decisions/real stakes questions made in Block 15 was randomly chosen and implemented.

Blocks 1 to 4 and Blocks 13 to 17 are in the specified order. In the Outcome questions section, Blocks 5 and 6 are bound together such that Block 5 always precedes Block 6. Blocks 7 to 11 are bound together and shown in random order with a restriction that Blocks 10 and 11 are always next to each other. The order of the three bundles, 5&6, 7 to 11, and 12, is randomized. Within each of the blocks in the Outcome questions section, the order of questions is randomized, except in Block 6 in which the question concerning wage satisfaction precedes that of general job satisfaction. The objective is to obtain the respondents assessment of job satisfaction *net* of wage satisfaction. In particular, in Block 5, the three parts, (1) to (3), are in a random order and the three questions within part (3) are also in a random order. In Block 12, the order of the questions about fair opportunities in education and job are randomized and the order of the bundle and the question about fairness in outcome is randomized. The full survey and questions can be found in the survey screens at the <https://doi.org/10.17605/OSF.IO/PSBD4>.

Table A1—. Description of variables

Variable	Description
(A) Outcome variables	
Fairness of own income	Q: How would you evaluate the fairness of the level of your disposable income? A: Unfairly low - Fair - Unfairly high. (slider, values 0-100, recoded as unfair - fair: $\text{abs}([\text{answer}] - 50)$)
Satisfaction with disposable income	Q: How do you feel about your disposable income? A: Disappointed - Neither disappointed nor pleased - Pleased (slider, values 0-100)
Life satisfaction	Q: All things considered, how satisfied are you with your life as a whole nowadays? A: Extremely unsatisfied - Extremely satisfied (slider, values 0-100)
Job satisfaction	Q: How satisfied are you with your job in general? A: Not at all satisfied - Very satisfied (slider, values 0-100)
Wage satisfaction	Q: How satisfied are you with how much you earn on your current job? A: Not at all satisfied - Very satisfied (slider, values 0-100)
Job meaningfulness	Q: Does your work feel meaningful to you? A: Not at all meaningful - Very meaningful (slider, values 0-100)
Job search intentions	Q: How likely is it that you will search for a new job in the next six months? A: Very unlikely - Somewhat unlikely - Somewhat likely - Very likely (radio buttons)
(B) Treatment variables	
Treatment	Treatment indicator: CONTROL, AGE, MUNICIPALITY, EDUCATION, OCCUPATION, NATIONAL. Treatment assignment conducted by SF before start of data collection.
Misperception	Defined as Perceived rank - Actual rank (percentile / 100). Perceived rank from survey Block 3 (see Appendix B), Actual rank from SF register data.
(C) Covariates	
<i>ii) main specification</i>	
Actual rank	Actual rank in a given reference distribution. Source: SF data.
<i>ii) Secondary specification</i>	
Female	Indicator variable, 1 if Female. Source SF register data.
High education	Indicator variable, 1 if highest level of education is Master or higher. Source SF register data.
Spouse	Indicator variable, 1 if reports living with a spouse. Source: survey data.
Child(ren)	Indicator variable, 1 if reports living with a child /children. Source: survey data.
Metropolitan area	Indicator variable, 1 if municipality of residence is Helsinki, Espoo, Vantaa, Kauniainen. Source: SF register data.

Notes: This table presents the variables used in the main analyses of this paper. The outcome variables with slider answer modes use continuous rating scales (Visual analogue scale, VAS) with labeled end points (and midpoints in Fairness of own income, Satisfaction with disposable income). The continuous scales are coded 0-100. All the analyses in this paper use standardized outcome measures.

SURVEY DATA AND SAMPLE

Table B1—. Survey sample and unit non-response

	(1) Invited	(2) Not responded	(3) Responded	(4) Difference
Female	0.48	0.47	0.49	p=0.002
Age	40.96	40.97	40.96	p<0.000
Finnish	0.95	0.95	0.95	p>0.050
Disposable income (log)	10.38	10.36	10.43	p<0.000
Basic education	0.06	0.07	0.03	p<0.000
Upper secondary education	0.54	0.68	0.43	p<0.000
Bachelor level education	0.26	0.23	0.31	p<0.000
Master level education (or higher)	0.15	0.10	0.24	p<0.000
Metropolitan area	0.20	0.19	0.22	p<0.000
Observations	20,000	13,358	6,642	

Notes: Demographic characteristics of the sample of invited individuals (column 1), invited individuals who did not respond to the survey (column 2) and individuals who responded (column 3). Column 4 reports the significance of the difference between those who responded and those who did not. All variables are indicators except for age and disposable income (log). Finnish refers to Finnish as mother tongue; basic, upper secondary, bachelor and master or higher to the highest earned educational degree; Metropolitan area to place of residence in the Helsinki Metropolitan area (Helsinki, Espoo, Vantaa and Kauniainen). Data and results reported in this table are provided by Statistics Finland and concern 2021.

Table B2—. Target population and survey respondent characteristics

	(1) Started survey	(2) Finished survey	(3) Target population
Female	0.49	0.49	0.49
Age	40.96	40.93	41.06
Spouse	0.76	0.76	0.74
Child(ren)	0.68	0.68	0.69
Finnish	0.95	0.95	0.95
Self-employed	0.06	0.06	0.10
Disposable income (log)	10.43	10.43	10.41
Basic education	0.03	0.03	0.05
Upper secondary education	0.43	0.43	0.45
Bachelor level education	0.31	0.31	0.26
Master level education (or higher)	0.24	0.24	0.23
Metropolitan area	0.24	0.24	0.22
Observations	6,642	6,121	542,605

Notes: Demographic characteristics of those who started survey (column 1), those who finished completing the survey (column 2) and the target population (columns 3) in 2021. Target population is the population of Finns corresponding to sampling frame criteria. All variables are indicators except for age and disposable income (log). Finnish refers to Finnish as mother tongue; basic, upper secondary, bachelor and master or higher to the highest earned educational degree; Metropolitan area to place of residence in the Helsinki Metropolitan area (Helsinki, Espoo, Vantaa and Kauniainen).

Table B3—. Number and rate of responses and completions by treatment

	CONTROL	EDUCATION	OCCUPATION	MUNICIPALITY	AGE	NATIONAL	CHOICE	Total
Invited	2407	2400	2394	2403	2404	2401	5591	20000
Responded	821	801	796	814	800	770	1840	6642
Finished	766	745	729	726	742	723	1690	6121
Response rate (%)	34	33	33	34	33	32	33	33
Completion rate (%)	93	93	92	89	93	94	92	92

Notes: This table presents the number and rate of responses and completions by treatment.

Table B4—. Attrition analysis

	(1) Quit survey	(2) Quit survey after treatment
Ref.: Treatment CONTROL		
Treatment EDUCATION	0.050 (0.197)	-0.055 (0.322)
Treatment OCCUPATION	0.227 (0.190)	0.132 (0.304)
Treatment MUNICIPALITY	0.537 (0.180)	0.494 (0.285)
Treatment AGE	0.081 (0.196)	0.201 (0.301)
Treatment NATIONAL	-0.095 (0.206)	-0.206 (0.336)
Treatment CHOICE	0.211 (0.164)	0.134 (0.261)
Female	0.397 (0.097)	0.778 (0.163)
Self-employed	0.409 (0.176)	0.173 (0.307)
Metropolitan area	0.182 (0.106)	0.269 (0.168)
Disposable income (log)	-0.088 (0.121)	-0.120 (0.197)
Ref.: Basic education		
Upper secondary	-0.217 (0.266)	-0.419 (0.406)
Bachelor education	-0.194 (0.271)	-0.366 (0.413)
Master or higher education	-0.398 (0.284)	-0.859 (0.444)
Constant	-1.774 (1.277)	-2.470 (2.069)
Observations	6642	6642

Notes: Logit regression using data on all respondents who started completing the survey (full survey sample). Dependent variable is 1 if respondent quit the survey before completion (column 1), and quit the survey before completion after treatment (column 2), and 0 otherwise.

Table B5—. Balance of randomization

	CONTROL	EDUCATION	OCCUPATION	MUNICIPALITY	AGE	NATIONAL	CHOICE
Disposable income (log)	10.356 (0.012)	-0.002 (0.018)	-0.027 (0.018)	-0.021 (0.019)	-0.017 (0.018)	-0.018 (0.019)	-0.025 (0.015)
Misperception (National)	-22.280 (0.649)	0.713 (0.928)	-0.034 (0.901)	1.232 (0.930)	1.196 (0.916)	1.230 (0.979)	-0.606 (0.782)
Female	0.497 (0.017)	-0.030 (0.025)	0.031 (0.025)	-0.022 (0.025)	-0.008 (0.025)	-0.006 (0.025)	0.003 (0.021)
Age	38.129 (0.111)	-0.390 (0.156)	-0.054 (0.158)	-0.019 (0.157)	-0.125 (0.159)	-0.263 (0.159)	-0.253 (0.133)
Spouse	0.741 (0.015)	0.025 (0.021)	-0.008 (0.022)	0.028 (0.021)	0.032 (0.021)	-0.018 (0.022)	0.013 (0.018)
Child(ren)	0.698 (0.016)	-0.010 (0.023)	-0.025 (0.023)	-0.027 (0.023)	-0.012 (0.023)	-0.039 (0.023)	-0.018 (0.019)
Finnish	0.954 (0.007)	-0.005 (0.011)	-0.004 (0.011)	0.000 (0.010)	0.004 (0.010)	0.015 (0.010)	-0.014 (0.009)
Basic education	0.033 (0.006)	-0.008 (0.008)	-0.009 (0.008)	0.003 (0.009)	-0.002 (0.008)	-0.002 (0.009)	-0.006 (0.007)
Upper secondary education	0.443 (0.017)	-0.018 (0.025)	0.028 (0.025)	-0.011 (0.025)	0.005 (0.025)	-0.017 (0.025)	-0.007 (0.021)
Bachelor education	0.315 (0.016)	0.002 (0.023)	-0.010 (0.023)	-0.017 (0.021)	-0.007 (0.023)	0.000 (0.023)	0.016 (0.020)
Master or higher education	0.211 (0.014)	0.024 (0.021)	-0.009 (0.020)	0.025 (0.021)	0.003 (0.020)	0.019 (0.021)	-0.003 (0.017)
Self-employed	0.054 (0.008)	0.016 (0.012)	0.008 (0.012)	-0.004 (0.012)	0.006 (0.012)	-0.000 (0.011)	-0.003 (0.009)
Employee	0.946 (0.008)	-0.016 (0.012)	-0.008 (0.012)	0.004 (0.012)	-0.006 (0.012)	0.000 (0.011)	0.003 (0.009)
Urban municipality	0.788 0.014	0.007 0.020	-0.010 0.021	-0.017 0.021	-0.021 0.021	-0.010 0.021	-0.032 0.017
Semiurban municipality	0.129 (0.012)	0.004 (0.017)	0.015 (0.017)	0.011 (0.017)	0.008 (0.017)	0.006 (0.017)	0.017 (0.014)
Rural municipality	0.083 (0.010)	-0.012 (0.013)	-0.001 (0.014)	0.006 (0.014)	0.013 (0.014)	0.004 (0.014)	0.016 (0.012)
Metropolitan	0.246 (0.015)	0.020 (0.022)	0.013 (0.022)	-0.004 (0.021)	0.018 (0.022)	0.001 (0.022)	-0.012 (0.018)

Notes: Rows show a regression of a predetermined variable on treatment dummies. CONTROL corresponds to the constant and columns 2-7 show the difference of the treatment group to the control group. Robust standard errors are in parentheses. Dependent variables are indicators except for disposable income (log), misperception (National) and age. Misperception (National) is prior belief - actual rank in the national income distribution. Finnish refers to Finnish as primary language; basic, upper secondary, bachelor and master or higher to the highest earned educational degree; urban, semi-urban and rural area to type of municipality of residence; Metropolitan area to area consisting of Helsinki, Espoo, Vantaa and Kauniainen.

ADDITIONAL RESULTS

Descriptive results: Misperceptions about income rank

Table C1—. Summary of misperceptions and absolute misperceptions in reference groups

	mean	sd	median	min	max
Misperceptions					
National	-21.9	18.3	-21	-97	89
Education	-20.1	22.6	-19	-99	86
Occupation	-13.4	26.3	-13	-97	79
Municipality	-21.8	19.1	-21	-98	91
Age	-13.1	19.6	-12	-94	94
Absolute misperceptions					
National	23.9	15.6	22	0	97
Education	24.5	17.8	21	0	99
Occupation	23.3	18.2	19	0	97
Municipality	24.0	16.1	22	0	98
Age	18.4	14.7	15	0	94

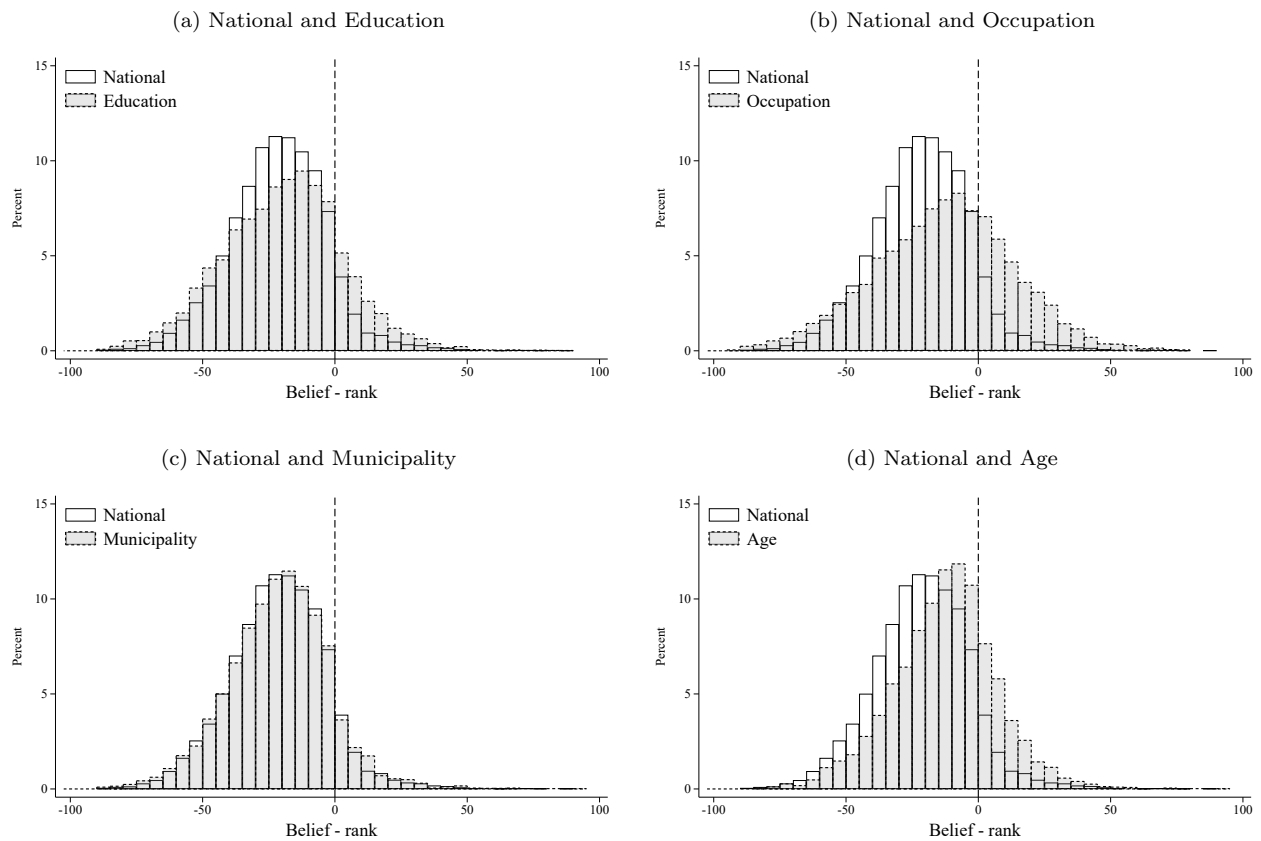
Notes: Summary statistics of misperceptions and absolute misperceptions about rank in the income distribution in reference groups. Misperception is defined as prior belief - actual rank and expressed in percentiles. The table uses data from the full survey sample.

Table C2—. Determinants of misperceptions

	Misperception about rank in reference distribution				
	Age	Municipality	Education	Occupation	National
Female	0.028*** (0.004)	0.043*** (0.004)	0.029*** (0.005)	0.040*** (0.005)	0.038*** (0.004)
Spouse	-0.021*** (0.005)	-0.028*** (0.005)	-0.042*** (0.006)	-0.039*** (0.006)	-0.030*** (0.005)
Child(ren)	0.024*** (0.005)	0.024*** (0.005)	0.036*** (0.005)	0.040*** (0.005)	0.027*** (0.005)
High education	-0.031*** (0.005)	-0.052*** (0.005)	-0.117*** (0.005)	-0.054*** (0.006)	-0.056*** (0.005)
Metropolitan area	0.013** (0.004)	-0.045*** (0.004)	-0.004 (0.005)	0.005 (0.005)	-0.016*** (0.005)
Disposable income (log)	0.046*** (0.008)	0.007 (0.007)	0.040*** (0.007)	0.054*** (0.008)	0.013 (0.007)
Constant	-0.303*** (0.080)	0.179* (0.075)	-0.151* (0.073)	-0.328*** (0.081)	0.103 (0.076)
Mean (abs.) misperception	0.184	0.240	0.245	0.233	0.239
Standard deviation	(0.147)	(0.161)	(0.178)	(0.182)	(0.156)
R^2	0.030	0.059	0.083	0.040	0.044
Observations	6337	6337	6337	6337	6337

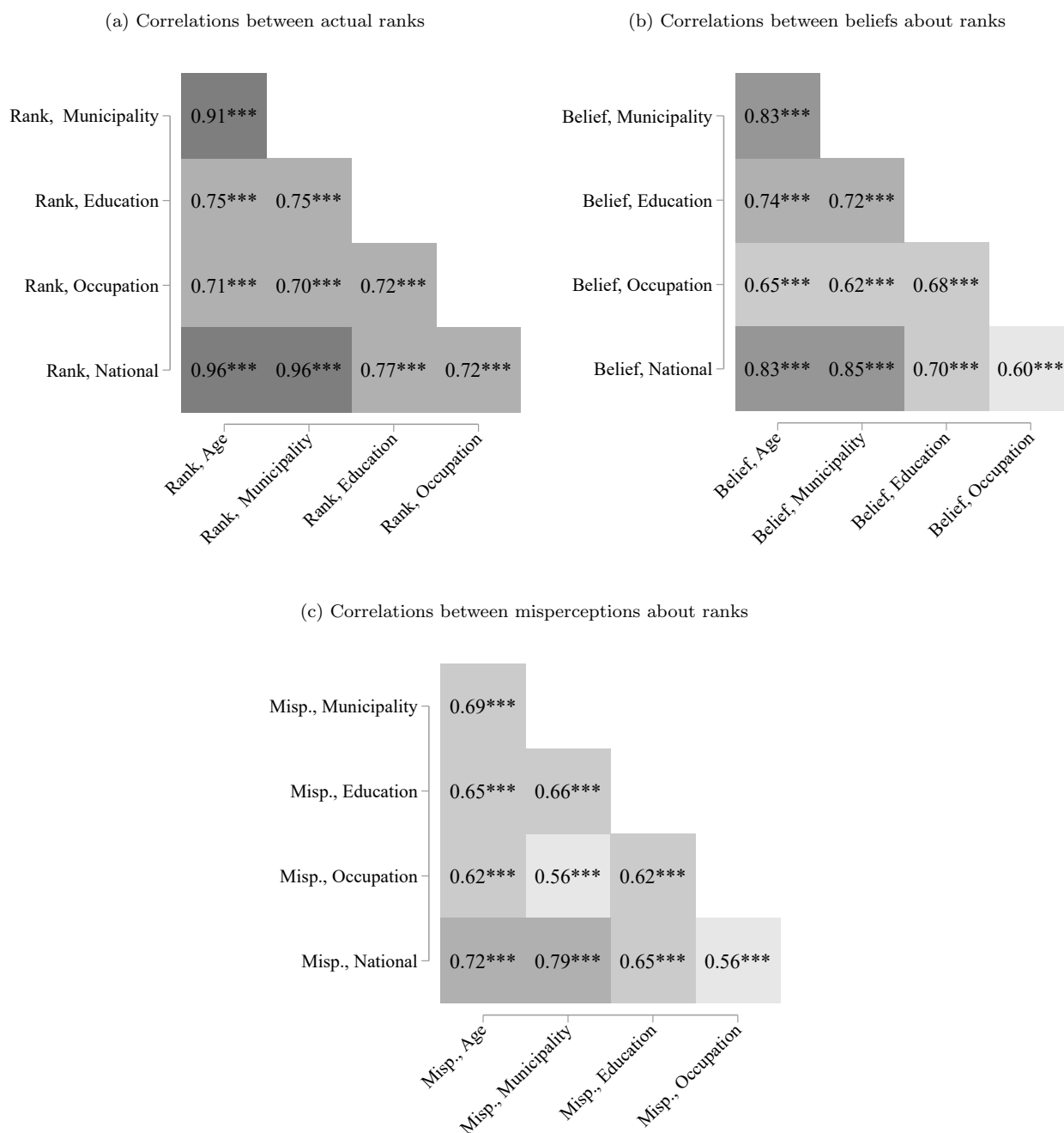
OLS regressions with robust standard errors in parentheses. Dependent variable is absolute misperception, defined as absolute value of (belief - actual rank) divided by 100 in each reference group. All independent variables are binary indicator variables except for Disposable income (log). Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area use SF's administrative data (2018). The regressions use the full survey sample.

Figure C1. . Comparison of misperceptions



Notes: Comparison of misperceptions about disposable income rank between reference groups a) Education, b) Occupation, c) Municipality and d) Age, and reference group National. Misperceptions are defined as the difference between perceived and actual rank. Negative values correspond to underestimation and positive values to overestimation. Actual rank in a given reference group is based on register data provided by Statistics Finland. The figures use data from the full survey sample.

Figure C2. . Correlations between actual ranks and perceptions about ranks in reference groups



Notes: The figures display Pearson correlations between survey respondents' actual ranks (panel a), beliefs about their ranks (panel b) and misperceptions (belief-actual rank) about ranks of the main analysis sample. Actual ranks are based on register data provided by Statistics Finland. Beliefs about ranks are based on participants' answers to the incentivized belief elicitation questions. The figures use data from the main analysis sample. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Results: Causal effects

Table C3—. Effect of income rank information on subjective well-being with pooled treatments

	(1)	(2)	(3)	(4)	(5)	(6)
	Income satisfaction	Fairness	Wage satisfaction	Life satisfaction	Job satisfaction	Job meaningfulness
Treated	-0.058 (0.052)	0.040 (0.053)	0.014 (0.057)	-0.040 (0.054)	0.004 (0.060)	-0.015 (0.059)
Misperception	1.772*** (0.207)	1.043*** (0.212)	1.538*** (0.231)	1.089*** (0.203)	0.448 (0.239)	0.207 (0.224)
Misperception × Treated	-0.905*** (0.217)	-0.650** (0.220)	-0.430 (0.241)	-0.485* (0.212)	-0.031 (0.247)	-0.051 (0.233)
Rank	1.782*** (0.067)	0.834*** (0.072)	1.846*** (0.073)	0.926*** (0.073)	0.509*** (0.079)	0.283*** (0.080)
Constant	-0.864*** (0.062)	-0.365*** (0.066)	-0.965*** (0.069)	-0.418*** (0.067)	-0.261*** (0.072)	-0.153* (0.071)
Observations	4456	4456	4132	4456	4132	4132

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the main outcomes with pooled treatment arms. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treated takes the value 1 if the respondent belongs to one of the five exogenous information treatments, and zero otherwise. Misperception is belief minus actual rank in the reference distribution corresponding the treatment in AGE, MUNICIPALITY, EDUCATION, OCCUPATION, NATIONAL, and the average of misperception across all five reference groups for the individuals in the CONTROL arm. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment for individuals in exogenous information treatments, and the average rank for individuals in the CONTROL arm.

Table C4—. Effect of income rank information provision on income related subjective well-being measures (first component of PCA)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	1.957*** (0.298)	2.164*** (0.312)	2.771*** (0.256)	2.072*** (0.262)	1.993*** (0.320)
Treatment	0.150 (0.086)	0.063 (0.109)	-0.156 (0.099)	-0.084 (0.082)	0.279* (0.121)
Misperception × Treatment	-0.932* (0.385)	-0.889* (0.404)	-1.706*** (0.353)	-0.795* (0.322)	0.133 (0.458)
Rank	2.930*** (0.162)	3.447*** (0.217)	2.545*** (0.177)	2.381*** (0.189)	3.429*** (0.228)
Constant	-1.715*** (0.116)	-2.260*** (0.188)	-1.268*** (0.128)	-1.222*** (0.113)	-2.304*** (0.195)
Observations	1413	1398	1400	1400	1393

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the first component of principal component analysis on the correlation between income related subjective well-being measures (income satisfaction, fairness of own income and wage satisfaction). Treatment is an indicator for being in the respective treatment group. Misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C5—. Effect of income rank information provision on non-income related subjective well-being measures (first component of PCA)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.817** (0.299)	0.506 (0.321)	1.025*** (0.262)	0.289 (0.258)	0.588 (0.310)
Treatment	0.002 (0.091)	0.134 (0.122)	-0.048 (0.102)	-0.048 (0.089)	0.061 (0.122)
Misperception × Treatment	0.019 (0.417)	0.270 (0.435)	-0.372 (0.344)	-0.306 (0.304)	0.054 (0.431)
Rank	0.944*** (0.178)	0.879*** (0.229)	0.434* (0.184)	0.501** (0.193)	1.023*** (0.232)
Constant	-0.516*** (0.119)	-0.585** (0.184)	-0.110 (0.124)	-0.282* (0.112)	-0.681*** (0.184)
Observations	1413	1398	1400	1400	1393

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the first component of principal component analysis on the correlation between non-income related subjective well-being measures (life satisfaction, job satisfaction, job meaningfulness). Treatment is an indicator for being in the respective treatment group. Misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C6—. Effect of income rank information provision on income related subjective well-being by position of the questions in survey

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Satisfaction with own disposable income					
Block 1 st	-0.494 [-1.407,0.419]	-0.551 [-1.562,0.459]	-1.058** [-1.784,-0.332]	-0.886** [-1.495,-0.278]	0.525 [-0.466,1.516]
Block 2 nd	-1.214* [-2.155,-0.273]	-0.946* [-1.842,-0.051]	-1.234** [-2.091,-0.378]	-0.514 [-1.289,0.261]	-0.231 [-1.245,0.782]
Block 3 rd	-0.820* [-1.594,-0.047]	-0.691 [-1.535,0.153]	-0.695 [-1.481,0.091]	-0.535 [-1.210,0.141]	-0.398 [-1.304,0.507]
Fairness of own disposable income					
Block 1 st	-0.490 [-1.337,0.357]	-0.907 [-1.876,0.062]	-1.184** [-1.903,-0.465]	-0.600 [-1.201,0.002]	0.087 [-0.900,1.074]
Block 2 nd	-0.508 [-1.458,0.443]	-1.520** [-2.542,-0.498]	-1.117** [-1.950,-0.285]	-0.232 [-0.947,0.483]	-0.524 [-1.535,0.488]
Block 3 rd	-0.030 [-0.841,0.781]	-0.072 [-0.938,0.794]	-0.116 [-0.923,0.690]	-0.026 [-0.685,0.634]	-0.238 [-1.162,0.687]
Wage satisfaction					
Block 1 st	0.436 [-0.508,1.380]	-0.009 [-1.057,1.039]	-1.473*** [-2.318,-0.629]	-0.385 [-1.059,0.290]	0.886 [-0.156,1.928]
Block 2 nd	-0.831 [-1.748,0.085]	-0.404 [-1.378,0.571]	-1.126* [-1.995,-0.257]	-0.182 [-1.010,0.646]	0.015 [-0.930,0.959]
Block 3 rd	-0.461 [-1.373,0.451]	0.127 [-0.738,0.993]	-0.029 [-0.823,0.764]	-0.304 [-1.085,0.477]	0.249 [-0.781,1.278]

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. This table reports the coefficient estimates and 95% confidence intervals of coefficient Misperception \times Treatment from Equation 1 with rank corresponding to treatment as a control variable. The estimations are conducted separately for subsamples of respondents for whom the block containing questions related to subjective well-being was displayed first, second or third following the belief elicitation and information provision treatment (see B in Appendix).

Table C7—. Effect of income rank information provision on non-income related subjective well-being by position of the questions in survey

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Life satisfaction					
Block 1 st	-0.131 [-1.017,0.754]	-0.126 [-1.188,0.935]	-1.140** [-1.879,-0.401]	-0.344 [-1.002,0.314]	-0.488 [-1.433,0.458]
Block 2 nd	-0.380 [-1.293,0.532]	-0.617 [-1.509,0.276]	-0.370 [-1.179,0.440]	-0.568 [-1.219,0.084]	0.088 [-0.760,0.937]
Block 3 rd	-0.631 [-1.530,0.267]	0.157 [-0.739,1.053]	0.395 [-0.371,1.162]	-0.529 [-1.213,0.155]	0.036 [-0.891,0.963]
Job satisfaction					
Block 1 st	0.503 [-0.471,1.477]	-0.370 [-1.472,0.731]	-0.707 [-1.530,0.117]	-0.069 [-0.736,0.598]	-0.094 [-1.075,0.886]
Block 2 nd	-0.057 [-1.108,0.994]	0.296 [-0.819,1.412]	-0.220 [-1.195,0.755]	-0.003 [-0.881,0.875]	-0.211 [-1.267,0.846]
Block 3 rd	0.187 [-0.768,1.142]	1.177* [0.282,2.073]	0.180 [-0.638,0.998]	0.325 [-0.377,1.027]	0.365 [-0.720,1.450]
Meaningfulness of own job					
Block 1 st	0.306 [-0.658,1.271]	-0.097 [-1.181,0.986]	-0.181 [-0.994,0.632]	-0.059 [-0.731,0.613]	0.433 [-0.525,1.390]
Block 2 nd	0.072 [-0.940,1.083]	-0.070 [-1.193,1.052]	-0.077 [-0.982,0.827]	-0.280 [-1.058,0.498]	-0.158 [-1.224,0.908]
Block 3 rd	0.062 [-0.889,1.012]	0.514 [-0.432,1.459]	-0.059 [-0.796,0.679]	-0.091 [-0.844,0.661]	-0.243 [-1.314,0.828]

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. This table reports the coefficient estimates and 95% confidence intervals of coefficient Misperception \times Treatment from Equation 1 with rank corresponding to treatment as a control variable. The estimations are conducted separately for subsamples of respondents for whom the block containing questions related to subjective well-being was displayed first, second or third following the belief elicitation and information provision treatment (see B in Appendix).

Table C8—. Average treatment effects

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Income related measures					
Income satisfaction	0.104* (0.049)	0.140** (0.050)	0.088 (0.049)	-0.017 (0.051)	0.147** (0.052)
Fairness	0.192*** (0.047)	0.209*** (0.049)	0.130** (0.049)	0.081 (0.049)	0.142** (0.050)
Wage satisfaction	0.116* (0.052)	0.069 (0.053)	0.129* (0.052)	-0.027 (0.054)	0.124* (0.054)
Non-income related measures					
Life satisfaction	0.048 (0.050)	0.038 (0.050)	0.046 (0.051)	0.020 (0.051)	0.061 (0.050)
Job satisfaction	-0.038 (0.053)	0.042 (0.053)	0.024 (0.053)	-0.007 (0.053)	0.017 (0.054)
Job meaningfulness	-0.014 (0.053)	0.038 (0.054)	-0.023 (0.052)	-0.034 (0.054)	-0.003 (0.054)

OLS regressions with robust standard errors in parentheses estimating Average Treatment Effects (ATE) of income rank information provision on income and non-income related dimensions of subjective well-being.

Table C9—. OLS results for the effect of income rank information on preference for income redistribution

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Treatment	0.041 (0.059)	0.110 (0.087)	0.034 (0.068)	0.025 (0.058)	0.063 (0.083)
Misperception	-0.743*** (0.216)	-0.772*** (0.223)	-0.682*** (0.184)	-0.548** (0.176)	-0.949*** (0.208)
Misperception \times Treatment	0.101 (0.266)	0.369 (0.302)	0.236 (0.228)	0.170 (0.207)	0.133 (0.300)
Rank	-1.164*** (0.122)	-1.064*** (0.158)	-0.922*** (0.127)	-0.936*** (0.137)	-1.130*** (0.151)
Constant	0.619*** (0.079)	0.622*** (0.124)	0.468*** (0.080)	0.455*** (0.076)	0.638*** (0.119)
Observations	1518	1504	1519	1503	1497

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the income satisfaction in the reference group. The dependent variable is stated preferences for redistribution. The question is "In your opinion, should there be more or less redistribution of income in Finland than there currently is?" and the answer is provided with a slider whose end labels are "A lot less redistribution" / "A lot more redistribution" and there is no default. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank.

Table C10—. Linear spline results for the effect of income rank information on satisfaction with own disposable income (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	1.262*** (0.198)	1.589*** (0.202)	1.772*** (0.171)	1.365*** (0.163)	1.424*** (0.206)
Treatment	0.048 (0.064)	-0.057 (0.077)	-0.070 (0.074)	-0.065 (0.068)	0.058 (0.082)
Misperception \times Treatment	-0.725* (0.294)	-0.902** (0.284)	-0.825** (0.261)	-0.605* (0.264)	-0.382 (0.302)
Misperception ⁺ \times Treatment	-0.451 (0.649)	1.365* (0.636)	-0.715 (0.730)	-0.177 (0.498)	2.130** (0.800)
Rank	1.885*** (0.107)	2.254*** (0.135)	1.679*** (0.115)	1.568*** (0.120)	2.310*** (0.149)
Constant	-0.995*** (0.072)	-1.328*** (0.112)	-0.744*** (0.078)	-0.700*** (0.069)	-1.416*** (0.122)
Observations	1521	1501	1519	1505	1498

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on satisfaction with own disposable income. The dependent variable measured with a slider (0: Not at all satisfied, 100: Very satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C11—. Linear spline results for the effect of income rank information on perceived fairness of own income (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.739*** (0.204)	0.861*** (0.210)	1.168*** (0.178)	0.943*** (0.163)	0.733*** (0.213)
Treatment	0.139* (0.065)	0.037 (0.081)	0.031 (0.074)	0.053 (0.067)	0.070 (0.084)
Misperception \times Treatment	-0.438 (0.295)	-0.818** (0.288)	-0.573* (0.249)	-0.299 (0.256)	-0.337 (0.314)
Misperception ⁺ \times Treatment	0.510 (0.586)	0.058 (1.269)	-0.921 (0.767)	-0.050 (0.450)	0.744 (0.642)
Rank	1.056*** (0.115)	1.251*** (0.157)	0.973*** (0.124)	0.847*** (0.124)	1.053*** (0.157)
Constant	-0.553*** (0.080)	-0.742*** (0.127)	-0.402*** (0.085)	-0.350*** (0.074)	-0.627*** (0.128)
Observations	1521	1501	1519	1505	1498

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on perceived fairness of one's disposable income. The dependent variable is perceived fairness, measured with a slider (0: Unfairly low, 50: Fair, 100: Unfairly high) and recoded as $50 - \text{abs}(\text{slider value} - 50)$. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C12—. Linear spline results for the effect of income rank information on wage satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	1.213*** (0.203)	1.239*** (0.210)	1.586*** (0.181)	1.165*** (0.189)	1.159*** (0.221)
Treatment	0.054 (0.069)	0.085 (0.083)	-0.056 (0.080)	-0.050 (0.073)	0.173* (0.086)
Misperception \times Treatment	-0.502 (0.305)	0.007 (0.300)	-0.830** (0.269)	-0.310 (0.273)	0.194 (0.323)
Misperception ⁺ \times Treatment	0.917 (0.746)	-0.755 (0.765)	-0.026 (0.805)	0.067 (0.519)	1.319* (0.667)
Rank	1.899*** (0.119)	2.197*** (0.150)	1.566*** (0.128)	1.555*** (0.126)	2.428*** (0.158)
Constant	-1.028*** (0.081)	-1.382*** (0.126)	-0.718*** (0.093)	-0.733*** (0.076)	-1.588*** (0.133)
Observations	1413	1398	1400	1400	1393

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on job satisfaction. The dependent variable is how satisfied one is with her current wage, measured with a slider (0: Not at all satisfied, 100: Very satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C13—. Linear spline results for the effect of income rank information on life satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.850*** (0.202)	0.867*** (0.202)	1.097*** (0.182)	0.660*** (0.167)	0.838*** (0.203)
Treatment	-0.027 (0.069)	-0.031 (0.081)	-0.022 (0.077)	0.003 (0.070)	-0.005 (0.085)
Misperception \times Treatment	-0.556 (0.295)	-0.286 (0.288)	-0.322 (0.262)	-0.356 (0.230)	-0.275 (0.304)
Misperception ⁺ \times Treatment	0.682 (0.738)	1.195 (1.117)	-0.167 (0.665)	-0.379 (0.497)	1.287* (0.638)
Rank	0.979*** (0.120)	1.012*** (0.155)	0.808*** (0.131)	0.695*** (0.127)	1.226*** (0.159)
Constant	-0.491*** (0.083)	-0.562*** (0.123)	-0.308*** (0.089)	-0.303*** (0.077)	-0.733*** (0.128)
Observations	1521	1501	1519	1505	1498

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on life satisfaction. The dependent variable is how satisfied one is with her life, measured with a slider (0: Extremely unsatisfied, 100: Extremely satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C14—. Linear spline results for the effect of income rank information on job satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.492* (0.215)	0.130 (0.229)	0.555** (0.197)	0.186 (0.191)	0.205 (0.229)
Treatment	-0.093 (0.077)	0.120 (0.090)	-0.017 (0.085)	-0.006 (0.075)	0.029 (0.094)
Misperception \times Treatment	-0.185 (0.353)	0.354 (0.317)	-0.209 (0.290)	0.022 (0.257)	0.036 (0.341)
Misperception ⁺ \times Treatment	1.557* (0.727)	0.130 (0.970)	-0.316 (0.844)	0.107 (0.546)	0.091 (0.779)
Rank	0.497*** (0.131)	0.503** (0.167)	0.298* (0.132)	0.308* (0.133)	0.511** (0.172)
Constant	-0.245** (0.085)	-0.351** (0.134)	-0.083 (0.088)	-0.151* (0.076)	-0.343* (0.135)
Observations	1413	1398	1400	1400	1393

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on job satisfaction. The dependent variable is how satisfied one is with her current job is, measured with a slider (0: Not at all satisfied, 100: Very satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C15—. Linear spline results for the effect of income rank information on job meaningfulness (Exogenous information)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.197 (0.205)	0.137 (0.222)	0.311 (0.188)	-0.182 (0.177)	0.150 (0.221)
Treatment	-0.011 (0.075)	0.065 (0.090)	-0.071 (0.083)	-0.118 (0.078)	-0.019 (0.094)
Misperception × Treatment	0.051 (0.340)	0.121 (0.319)	-0.186 (0.270)	-0.386 (0.257)	-0.056 (0.334)
Misperception ⁺ × Treatment	0.329 (0.776)	0.073 (0.987)	0.394 (0.712)	0.796 (0.580)	0.645 (0.850)
Rank	0.330** (0.127)	0.284 (0.166)	-0.083 (0.136)	0.002 (0.138)	0.343* (0.173)
Constant	-0.181* (0.083)	-0.184 (0.130)	0.121 (0.089)	-0.027 (0.079)	-0.228 (0.133)
Observations	1413	1398	1400	1400	1393

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on job meaningfulness. The dependent variable is how meaningful one feels her current job is, measured with a slider (0: Not at all meaningful, 100: Very meaningful). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero). Treatment is an indicator for being in the respective treatment group, misperception is belief minus actual rank, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Causal effects on real stakes survey questions, earned income and employment contracts

Table C16— Effect of income rank information on contributing money as a voluntary tax

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Extensive margin					
Treatment	-0.009 (0.130)	-0.013 (0.169)	-0.262 (0.144)	-0.034 (0.121)	-0.317 (0.168)
Misperception	0.023 (0.419)	0.092 (0.423)	0.559 (0.373)	0.095 (0.341)	0.541 (0.446)
Treatment × Misperception	-0.063 (0.571)	-0.190 (0.592)	-0.945* (0.477)	-0.023 (0.414)	-0.460 (0.593)
Rank	0.085 (0.253)	0.298 (0.305)	-0.008 (0.265)	0.179 (0.261)	0.465 (0.323)
Constant	-0.629*** (0.164)	-0.782** (0.242)	-0.463** (0.176)	-0.668*** (0.151)	-0.811** (0.254)
Intensive margin					
Treatment	0.117 (0.448)	-0.322 (0.576)	0.533 (0.499)	0.488 (0.426)	-0.218 (0.565)
Misperception	3.449* (1.463)	2.982* (1.413)	3.787** (1.276)	1.563 (1.202)	4.542** (1.502)
Treatment × Misperception	-1.688 (1.959)	-1.688 (1.906)	-1.446 (1.562)	0.943 (1.370)	-1.821 (1.919)
Rank	2.506** (0.862)	2.040* (1.020)	1.650 (0.967)	1.472 (0.984)	3.847*** (0.959)
Constant	6.672*** (0.528)	6.901*** (0.760)	7.402*** (0.597)	7.137*** (0.543)	5.845*** (0.712)
Observations	1508	1492	1511	1495	1490

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Logit and OLS regressions with standard errors in parentheses estimating the effects of income rank information provision on giving money (0, 5, 10, 15 EUR) as a voluntary tax using a two-part model. The top panel reports estimates from a logit regression, where the outcome is a dummy for whether the participant donated a positive amount (i.e. the extensive margin of giving). The bottom panel reports estimates from an OLS regression, where the outcome is the euro amount of donations, conditional on giving a positive amount (i.e. the intensive margin of giving). The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C17—. Effect of income rank information on buying Lotto lottery tickets

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Extensive margin					
Treatment	-0.132 (0.125)	-0.110 (0.160)	-0.218 (0.138)	-0.179 (0.116)	-0.135 (0.158)
Misperception	-0.273 (0.405)	-0.899* (0.404)	-0.623 (0.357)	-0.307 (0.327)	-0.842* (0.416)
Treatment × Misperception	-0.104 (0.550)	0.130 (0.562)	-0.052 (0.459)	-0.418 (0.401)	0.080 (0.554)
Rank	-0.525* (0.244)	-0.867** (0.293)	-0.571* (0.256)	-0.085 (0.254)	-0.522 (0.297)
Constant	0.366* (0.157)	0.528* (0.228)	0.329 (0.170)	0.085 (0.146)	0.286 (0.233)
Intensive margin					
Treatment	0.104 (0.384)	-0.063 (0.492)	0.245 (0.431)	0.063 (0.365)	0.610 (0.511)
Misperception	0.674 (1.186)	2.214 (1.149)	1.232 (1.101)	1.701 (0.976)	1.550 (1.208)
Treatment × Misperception	-0.365 (1.717)	-0.754 (1.600)	0.361 (1.348)	-0.374 (1.192)	1.858 (1.705)
Rank	2.368** (0.791)	3.501*** (0.871)	2.604** (0.814)	2.543** (0.801)	3.494*** (0.945)
Constant	7.214*** (0.470)	6.470*** (0.647)	7.093*** (0.511)	7.346*** (0.438)	6.320*** (0.677)
Observations	1508	1492	1511	1495	1490

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Logit and OLS regressions with standard errors in parentheses estimating the effects of income rank information spending money (0, 5, 10, 15 EUR) on Lotto lottery tickets using a two-part model. The top panel reports estimates from a logit regression, where the outcome is a dummy for whether the participant donated a positive amount (i.e. the extensive margin of giving). The bottom panel reports estimates from an OLS regression, where the outcome is the euro amount of spending, conditional on spending a positive amount (i.e. the intensive margin of giving). The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment.

Table C18—. Effect of income rank information on earned income (log) in 2021

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.065 (0.225)	0.045 (0.235)	0.313 (0.197)	-0.064 (0.183)	0.226 (0.272)
Treatment	0.085 (0.072)	0.097 (0.100)	-0.028 (0.084)	0.078 (0.063)	-0.073 (0.106)
Misperception × Treatment	0.267 (0.348)	0.362 (0.368)	0.139 (0.277)	0.526* (0.231)	-0.277 (0.383)
Rank	1.467*** (0.132)	2.024*** (0.197)	1.547*** (0.153)	0.797*** (0.132)	2.309*** (0.204)
Constant	-0.895*** (0.100)	-1.499*** (0.173)	-0.956*** (0.116)	-0.459*** (0.083)	-1.681*** (0.177)
Observations	1508	1492	1511	1493	1489

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on earned income in 2021. The dependent variable is earned income consisting of cash salary items, compensation for employment-related costs and in-kind benefits. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment. Data include all individuals who completed the survey.

Table C19—. Effect of income rank information on earned income (log) in 2022

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.082 (0.243)	0.225 (0.246)	0.298 (0.218)	-0.024 (0.199)	0.225 (0.267)
Treatment	0.106 (0.067)	-0.011 (0.104)	-0.033 (0.086)	0.023 (0.067)	-0.046 (0.102)
Misperception × Treatment	0.367 (0.330)	0.221 (0.393)	0.137 (0.283)	0.246 (0.236)	-0.110 (0.375)
Rank	1.332*** (0.130)	2.052*** (0.212)	1.441*** (0.155)	0.793*** (0.138)	2.036*** (0.190)
Constant	-0.810*** (0.097)	-1.481*** (0.181)	-0.889*** (0.118)	-0.451*** (0.086)	-1.476*** (0.169)
Observations	1507	1490	1511	1493	1487

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on earned income in 2022. The dependent variable is earned income consisting of cash salary items, compensation for employment-related costs and in-kind benefits. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank (divided by 100) in the reference group corresponding to treatment. Data include all individuals who completed the survey.

Table C20—. Effect of income rank information on earned income (log) in 2022

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	-0.741** (0.252)	-0.404 (0.283)	-0.524* (0.227)	-0.558** (0.189)	-0.414 (0.302)
Treatment	0.085 (0.071)	-0.021 (0.115)	-0.023 (0.090)	0.015 (0.068)	-0.100 (0.112)
Misperception × Treatment	0.347 (0.340)	0.249 (0.421)	0.166 (0.294)	0.276 (0.238)	-0.232 (0.411)
Constant	-0.097 (0.055)	-0.089 (0.079)	-0.106 (0.067)	-0.075 (0.051)	-0.091 (0.081)
Observations	1507	1490	1511	1493	1487

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on earned income in 2022. The dependent variable is earned income consisting of cash salary items, compensation for employment-related costs and in-kind benefits. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Data include all individuals who completed the survey.

Table C21—. Marginal effect of income rank information provision on starting a new employment relationship between October-December 2021.

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	-0.001 (0.034)	0.036 (0.036)	-0.052 (0.035)	0.014 (0.030)	-0.001 (0.029)
Treatment	0.007 (0.010)	-0.014 (0.014)	0.033* (0.013)	0.004 (0.010)	0.004 (0.011)
Misperception × Treatment	0.016 (0.044)	-0.070 (0.048)	0.107* (0.043)	-0.036 (0.033)	0.043 (0.043)
Rank	0.006 (0.019)	0.055 (0.030)	-0.027 (0.022)	-0.002 (0.022)	0.011 (0.022)
Observations	1421	1406	1404	1412	1389

Logit regression estimating the effect of income rank information provision on the likelihood of starting a new employment relationship between October and December 2021. The dependent variable is a dummy indicating whether the first day of employment for the employment relationship ongoing during the last week of the year is between first day of October and last day of December 2021. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Rank is the respondent's actual rank divided by 100 in the reference group corresponding to treatment. Data include all individuals who completed the survey.

CAUSAL EFFECTS USING DEMOGRAPHIC CHARACTERISTICS AS CONTROL VARIABLES

Table D1—. OLS results for the effect of income rank information on satisfaction with own disposable income

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.051 (0.189)	0.675*** (0.200)	0.583*** (0.164)	0.223 (0.138)	0.495* (0.202)
Treatment	-0.003 (0.057)	-0.041 (0.075)	-0.108 (0.064)	-0.083 (0.054)	0.120 (0.080)
Treatment × Misperception	-0.768** (0.258)	-0.735** (0.268)	-0.871*** (0.227)	-0.594** (0.199)	-0.074 (0.284)
Female	-0.217*** (0.048)	-0.156** (0.049)	-0.212*** (0.049)	-0.226*** (0.050)	-0.210*** (0.051)
High education	0.420*** (0.057)	0.363*** (0.056)	0.309*** (0.060)	0.374*** (0.062)	0.385*** (0.061)
Spouse	0.201** (0.064)	0.234*** (0.063)	0.206** (0.065)	0.162* (0.067)	0.197** (0.066)
Child(ren)	-0.079 (0.059)	-0.018 (0.059)	0.057 (0.059)	0.008 (0.063)	-0.008 (0.063)
Metropolitan area	0.275*** (0.055)	0.268*** (0.056)	0.302*** (0.057)	0.283*** (0.060)	0.236*** (0.060)
Constant	-0.141* (0.070)	-0.082 (0.079)	-0.113 (0.074)	-0.137 (0.070)	-0.071 (0.083)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the income satisfaction in the reference group. The dependent variable is how pleased/disappointed one feels with her disposable income, measured with a slider (0: Disappointed, 50: Neither disappointed nor pleased, 100: Pleased). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables used in the analysis are treatment, misperception about the income rank in the reference group corresponding to the treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D2—. OLS results for the effect of income rank information on fairness of own disposable income

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.036 (0.193)	0.333 (0.204)	0.443** (0.169)	0.285* (0.133)	0.266 (0.207)
Treatment	0.152** (0.056)	0.012 (0.078)	-0.030 (0.064)	0.053 (0.052)	0.083 (0.076)
Treatment × Misperception	-0.269 (0.254)	-0.816** (0.277)	-0.694** (0.226)	-0.283 (0.190)	-0.259 (0.278)
Female	-0.193*** (0.048)	-0.206*** (0.049)	-0.280*** (0.049)	-0.310*** (0.049)	-0.231*** (0.052)
High education	0.288*** (0.051)	0.244*** (0.054)	0.220*** (0.057)	0.214*** (0.057)	0.237*** (0.056)
Spouse	0.151* (0.061)	0.215*** (0.065)	0.196** (0.064)	0.173** (0.065)	0.165* (0.064)
Child(ren)	-0.073 (0.055)	-0.004 (0.059)	-0.019 (0.057)	0.007 (0.059)	0.007 (0.059)
Metropolitan area	0.112* (0.052)	0.070 (0.055)	0.198*** (0.052)	0.123* (0.054)	0.085 (0.055)
Constant	-0.051 (0.071)	-0.054 (0.081)	-0.002 (0.075)	-0.020 (0.071)	-0.028 (0.083)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information on the perceived fairness of one's income relative to others in the reference group. The dependent variable is perceived fairness, measured with a slider (0: Unfairly low, 50: Fair, 100: Unfairly high) and recoded as $50 - \text{abs}(\text{slider value} - 50)$ to reflect range from Unfair to Fair. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables used in the analysis are treatment, misperception about the income rank in the reference group corresponding to the treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D3—. OLS results for the effect of income rank information on wage satisfaction

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.025 (0.200)	0.455* (0.219)	0.482* (0.188)	0.029 (0.166)	0.305 (0.224)
Treatment	0.082 (0.064)	0.026 (0.086)	-0.037 (0.075)	-0.043 (0.060)	0.185* (0.084)
Treatment × Misperception	-0.216 (0.277)	-0.101 (0.302)	-0.712** (0.255)	-0.207 (0.223)	0.329 (0.305)
Female	-0.189*** (0.053)	-0.132* (0.053)	-0.131* (0.054)	-0.143** (0.055)	-0.132* (0.055)
High education	0.398*** (0.063)	0.341*** (0.064)	0.328*** (0.065)	0.371*** (0.068)	0.406*** (0.064)
Spouse	0.133* (0.067)	0.122 (0.067)	0.139* (0.068)	0.201** (0.069)	0.096 (0.067)
Child(ren)	-0.021 (0.063)	-0.005 (0.063)	0.058 (0.063)	-0.010 (0.065)	0.014 (0.064)
Metropolitan area	0.167** (0.060)	0.183** (0.062)	0.200*** (0.060)	0.179** (0.065)	0.133* (0.061)
Constant	-0.122 (0.070)	-0.043 (0.085)	-0.103 (0.083)	-0.199** (0.073)	-0.074 (0.086)
Observations	1413	1398	1400	1400	1393

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the wage satisfaction in the reference group. The dependent variable is how satisfied one feels with how much she earns in the current job, measured with a slider (0: Not at all satisfied, 100: Very satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables used in the analysis are treatment, misperception about the income rank in the reference group corresponding to the treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers. The average treatment effect, ATE, is computed by multiplying the mean of misperceptions with the coefficient of Treatment×Misperception plus the coefficient of Treatment. The mean values are calculated from the misperceptions that are absolutely larger than 10 percentage points.

Table D4—. OLS results for the effect of income rank information on life satisfaction

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.216 (0.183)	0.443* (0.189)	0.421* (0.166)	0.154 (0.140)	0.364 (0.194)
Treatment	-0.001 (0.060)	0.001 (0.074)	-0.024 (0.065)	-0.028 (0.055)	0.047 (0.075)
Treatment × Misperception	-0.286 (0.260)	-0.115 (0.264)	-0.259 (0.225)	-0.400* (0.189)	-0.107 (0.265)
Female	0.017 (0.049)	0.085 (0.050)	0.017 (0.050)	0.158** (0.050)	0.070 (0.050)
High education	0.224*** (0.056)	0.232*** (0.054)	0.212*** (0.058)	0.215*** (0.054)	0.212*** (0.054)
Spouse	0.472*** (0.070)	0.400*** (0.069)	0.501*** (0.071)	0.417*** (0.068)	0.446*** (0.067)
Child(ren)	0.110 (0.061)	0.114 (0.060)	0.174** (0.061)	0.135* (0.061)	0.145* (0.060)
Metropolitan area	0.174** (0.055)	0.171** (0.056)	0.154** (0.055)	0.163** (0.056)	0.073 (0.056)
Constant	-0.505*** (0.079)	-0.419*** (0.086)	-0.508*** (0.084)	-0.555*** (0.077)	-0.457*** (0.089)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the life satisfaction in the reference group. The dependent variable is life satisfaction (0: Extremely unsatisfied, 100: Extremely satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables used in the analysis are treatment, misperception about the income rank in the reference group corresponding to the treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D5—. OLS results for the effect of income rank information on job satisfaction

	(1)	(2)	(3)	(4)	(5)
	Age	Municipality	Education	Occupation	National
Misperception	0.228 (0.199)	-0.026 (0.224)	0.297 (0.187)	-0.031 (0.162)	0.029 (0.222)
Treatment	-0.015 (0.063)	0.121 (0.085)	-0.035 (0.074)	0.004 (0.061)	0.023 (0.084)
Treatment × Misperception	0.208 (0.290)	0.372 (0.300)	-0.246 (0.258)	0.079 (0.216)	0.009 (0.303)
Female	0.098 (0.054)	0.123* (0.054)	0.024 (0.055)	0.078 (0.055)	0.054 (0.055)
High education	0.114 (0.066)	0.205** (0.064)	0.123 (0.067)	0.170** (0.065)	0.183** (0.065)
Spouse	0.072 (0.072)	0.063 (0.070)	0.116 (0.073)	0.141* (0.069)	0.163* (0.072)
Child(ren)	0.115 (0.068)	0.110 (0.065)	0.142* (0.068)	0.089 (0.066)	0.098 (0.069)
Metropolitan area	0.123 (0.064)	0.038 (0.065)	0.117 (0.063)	0.047 (0.063)	-0.017 (0.064)
Constant	-0.204** (0.077)	-0.243** (0.090)	-0.192* (0.086)	-0.258*** (0.077)	-0.247** (0.087)

Observations 1413 1398 1400 1400 1393
 OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the job satisfaction in the reference group. The dependent variable is job satisfaction (0: Extremely unsatisfied, 100: Extremely satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables used in the analysis are treatment, misperception about the income rank in the reference group corresponding to the treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D6—. OLS results for the effect of income rank information on job meaningfulness

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.082 (0.182)	0.109 (0.206)	0.261 (0.170)	-0.135 (0.143)	0.114 (0.209)
Treatment	0.008 (0.062)	0.071 (0.084)	-0.051 (0.072)	-0.053 (0.061)	0.010 (0.084)
Treatment × Misperception	0.172 (0.278)	0.136 (0.294)	-0.123 (0.239)	-0.131 (0.203)	0.042 (0.297)
Female	0.354*** (0.052)	0.335*** (0.054)	0.263*** (0.053)	0.354*** (0.055)	0.322*** (0.054)
High education	0.146* (0.065)	0.234*** (0.063)	0.130 (0.068)	0.204** (0.066)	0.170** (0.066)
Spouse	0.081 (0.069)	0.073 (0.071)	0.163* (0.072)	0.140* (0.069)	0.139* (0.069)
Child(ren)	0.214** (0.065)	0.171** (0.065)	0.167* (0.067)	0.167* (0.068)	0.129 (0.067)
Metropolitan area	0.088 (0.063)	0.025 (0.065)	0.080 (0.064)	-0.020 (0.065)	-0.064 (0.066)
Constant	-0.420*** (0.075)	-0.365*** (0.088)	-0.356*** (0.083)	-0.447*** (0.075)	-0.343*** (0.084)
Observations	1413	1398	1400	1400	1393

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the job meaningfulness in the reference group. The dependent variable is how meaningful one feels with her current job, measured with a slider (0: Not at all meaningful, 100: Very meaningful). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D7—. Linear spline results for the effect of income rank information on satisfaction with disposable income (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.051 (0.189)	0.678*** (0.201)	0.587*** (0.165)	0.223 (0.138)	0.495* (0.202)
Treatment	0.076 (0.066)	-0.013 (0.080)	-0.037 (0.075)	-0.068 (0.070)	0.109 (0.086)
Treatment × Misperception	-0.424 (0.301)	-0.639* (0.289)	-0.639* (0.262)	-0.545* (0.264)	-0.116 (0.306)
Treatment × Misperception ⁺	-1.502* (0.606)	-0.809 (0.741)	-1.035 (0.653)	-0.168 (0.493)	0.201 (0.859)
Female	-0.214*** (0.048)	-0.152** (0.049)	-0.203*** (0.049)	-0.226*** (0.050)	-0.211*** (0.052)
High education	0.416*** (0.057)	0.357*** (0.056)	0.303*** (0.060)	0.374*** (0.062)	0.386*** (0.061)
Spouse	0.203** (0.064)	0.234*** (0.063)	0.202** (0.065)	0.162* (0.067)	0.198** (0.066)
Child(ren)	-0.078 (0.059)	-0.018 (0.059)	0.055 (0.060)	0.009 (0.063)	-0.008 (0.063)
Metropolitan area	0.279*** (0.055)	0.266*** (0.056)	0.302*** (0.057)	0.284*** (0.060)	0.236*** (0.060)
Constant	-0.144* (0.069)	-0.082 (0.079)	-0.111 (0.074)	-0.137 (0.070)	-0.071 (0.084)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the income satisfaction in the reference group. The dependent variable is how pleased/disappointed one feels with her disposable income, measured with a slider (0: Disappointed, 50: Neither disappointed nor pleased, 100: Pleased). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D8—. Linear spline results for the effect of income rank information on fairness of own income (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.036 (0.193)	0.337 (0.205)	0.446** (0.169)	0.285* (0.133)	0.266 (0.207)
Treatment	0.154* (0.066)	0.046 (0.081)	0.033 (0.073)	0.051 (0.067)	0.080 (0.084)
Treatment × Misperception	-0.262 (0.299)	-0.700* (0.286)	-0.488* (0.248)	-0.291 (0.253)	-0.270 (0.310)
Treatment × Misperception ⁺	-0.031 (0.558)	-0.973 (1.423)	-0.916 (0.695)	0.025 (0.456)	0.053 (0.600)
Female	-0.193*** (0.048)	-0.200*** (0.049)	-0.273*** (0.049)	-0.310*** (0.049)	-0.232*** (0.052)
High education	0.288*** (0.051)	0.238*** (0.054)	0.215*** (0.057)	0.214*** (0.057)	0.237*** (0.056)
Spouse	0.151* (0.061)	0.215*** (0.065)	0.192** (0.065)	0.173** (0.065)	0.165* (0.064)
Child(ren)	-0.073 (0.055)	-0.004 (0.059)	-0.020 (0.057)	0.007 (0.059)	0.007 (0.059)
Metropolitan area	0.112* (0.052)	0.068 (0.055)	0.198*** (0.052)	0.123* (0.054)	0.085 (0.055)
Constant	-0.052 (0.071)	-0.054 (0.081)	-0.000 (0.075)	-0.020 (0.071)	-0.029 (0.083)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information on the perceived fairness of one's income relative to others in the reference group. The dependent variable is perceived fairness, measured with a slider (0: Unfairly low, 50: Fair, 100: Unfairly high) and recoded as $50 - \text{abs}(\text{slider value} - 50)$ to reflect range from Unfair to Fair. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D9—. Linear spline results for the effect of income rank information on wage satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.025 (0.200)	0.471* (0.219)	0.484* (0.188)	0.029 (0.166)	0.309 (0.224)
Treatment	0.093 (0.074)	0.141 (0.088)	-0.011 (0.084)	-0.043 (0.075)	0.239** (0.092)
Treatment × Misperception	-0.169 (0.315)	0.288 (0.313)	-0.629* (0.279)	-0.206 (0.276)	0.525 (0.335)
Treatment × Misperception ⁺	-0.207 (0.721)	-3.234*** (0.867)	-0.435 (0.891)	-0.001 (0.515)	-0.977 (0.765)
Female	-0.188*** (0.053)	-0.112* (0.053)	-0.128* (0.054)	-0.143** (0.055)	-0.126* (0.055)
High education	0.397*** (0.063)	0.318*** (0.064)	0.325*** (0.065)	0.371*** (0.068)	0.399*** (0.064)
Spouse	0.134* (0.067)	0.121 (0.067)	0.139* (0.068)	0.201** (0.069)	0.093 (0.067)
Child(ren)	-0.020 (0.063)	-0.004 (0.063)	0.057 (0.063)	-0.010 (0.065)	0.015 (0.064)
Metropolitan area	0.167** (0.060)	0.176** (0.061)	0.199*** (0.060)	0.179** (0.065)	0.133* (0.061)
Constant	-0.123 (0.070)	-0.042 (0.085)	-0.103 (0.083)	-0.199** (0.073)	-0.072 (0.086)
Observations	1413	1398	1400	1400	1393

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the wage satisfaction in the reference group. The dependent variable is how satisfied one feels with how much she earns in the current job, measured with a slider (0: Not at all satisfied, 100: Very satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D10—. Linear spline results for the effect of income rank information on life satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.216 (0.183)	0.442* (0.189)	0.422* (0.166)	0.154 (0.140)	0.363 (0.194)
Treatment	0.001 (0.068)	-0.003 (0.079)	-0.010 (0.076)	0.006 (0.068)	0.032 (0.084)
Treatment × Misperception	-0.281 (0.292)	-0.129 (0.279)	-0.216 (0.257)	-0.284 (0.225)	-0.160 (0.302)
Treatment × Misperception ⁺	-0.024 (0.716)	0.115 (1.021)	-0.193 (0.707)	-0.390 (0.475)	0.257 (0.578)
Female	0.017 (0.049)	0.085 (0.050)	0.019 (0.050)	0.159** (0.050)	0.068 (0.050)
High education	0.224*** (0.056)	0.233*** (0.055)	0.211*** (0.058)	0.213*** (0.054)	0.214*** (0.055)
Spouse	0.472*** (0.070)	0.400*** (0.069)	0.500*** (0.071)	0.417*** (0.068)	0.447*** (0.067)
Child(ren)	0.110 (0.061)	0.114 (0.060)	0.174** (0.061)	0.135* (0.061)	0.144* (0.060)
Metropolitan area	0.174** (0.055)	0.171** (0.057)	0.154** (0.055)	0.165** (0.056)	0.073 (0.056)
Constant	-0.505*** (0.079)	-0.419*** (0.086)	-0.507*** (0.084)	-0.555*** (0.077)	-0.458*** (0.089)
Observations	1521	1501	1519	1505	1498

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the wage satisfaction in the reference group. The dependent variable is life satisfaction (0: Extremely unsatisfied, 100: Extremely satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D11—. Linear spline results for the effect of income rank information on job satisfaction (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.227 (0.199)	-0.024 (0.224)	0.298 (0.187)	-0.031 (0.162)	0.030 (0.222)
Treatment	-0.075 (0.077)	0.139 (0.088)	-0.015 (0.085)	-0.004 (0.075)	0.042 (0.093)
Treatment × Misperception	-0.054 (0.354)	0.434 (0.311)	-0.181 (0.291)	0.051 (0.256)	0.075 (0.340)
Treatment × Misperception ⁺	1.137 (0.724)	-0.521 (0.969)	-0.343 (0.923)	0.098 (0.545)	-0.327 (0.752)
Female	0.095 (0.054)	0.127* (0.054)	0.026 (0.055)	0.077 (0.055)	0.056 (0.055)
High education	0.117 (0.066)	0.201** (0.064)	0.121 (0.067)	0.170** (0.065)	0.180** (0.065)
Spouse	0.071 (0.072)	0.063 (0.070)	0.115 (0.073)	0.141* (0.069)	0.162* (0.072)
Child(ren)	0.113 (0.068)	0.110 (0.065)	0.141* (0.068)	0.089 (0.066)	0.098 (0.069)
Metropolitan area	0.120 (0.064)	0.037 (0.065)	0.117 (0.063)	0.047 (0.064)	-0.017 (0.064)
Constant	-0.201** (0.077)	-0.243** (0.090)	-0.191* (0.086)	-0.258*** (0.077)	-0.246** (0.087)
Observations	1413	1398	1400	1400	1393

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the wage satisfaction in the reference group. The dependent variable is job satisfaction (0: Extremely unsatisfied, 100: Extremely satisfied). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D12—. Linear spline results for the effect of income rank information on job meaningfulness (symmetry of effect)

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	0.083 (0.182)	0.112 (0.206)	0.260 (0.170)	-0.136 (0.143)	0.113 (0.209)
Treatment	0.014 (0.073)	0.091 (0.088)	-0.070 (0.082)	-0.122 (0.077)	0.000 (0.093)
Treatment × Misperception	0.196 (0.333)	0.207 (0.308)	-0.183 (0.267)	-0.365 (0.249)	0.005 (0.326)
Treatment × Misperception ⁺	-0.107 (0.764)	-0.588 (0.973)	0.315 (0.778)	0.790 (0.570)	0.180 (0.815)
Female	0.354*** (0.052)	0.339*** (0.054)	0.260*** (0.053)	0.352*** (0.055)	0.321*** (0.055)
High education	0.146* (0.065)	0.230*** (0.063)	0.131 (0.068)	0.208** (0.066)	0.172** (0.066)
Spouse	0.081 (0.069)	0.073 (0.071)	0.163* (0.072)	0.141* (0.069)	0.140* (0.069)
Child(ren)	0.214** (0.065)	0.172** (0.065)	0.167* (0.067)	0.166* (0.068)	0.129 (0.067)
Metropolitan area	0.088 (0.063)	0.024 (0.065)	0.080 (0.064)	-0.026 (0.065)	-0.064 (0.066)
Constant	-0.420*** (0.075)	-0.365*** (0.088)	-0.356*** (0.083)	-0.446*** (0.075)	-0.343*** (0.084)
Observations	1413	1398	1400	1400	1393

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on the wage satisfaction in the reference group. The dependent variable is how meaningful one feels with her current job, measured with a slider (0: Not at all meaningful, 100: Very meaningful). The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. The control variables include treatment, misperception about the income rank in the reference group corresponding to the treatment, a piecewise function of misperception (Misperception⁺ equals the value if the misperception is positive, otherwise zero), and demographic characteristics. The treatment is an indicator for being in the respective treatment group. The misperception is belief minus actual position, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual position. Demographic characteristics are defined as binary variables. Spouse is an indicator for living with spouse, Child(ren) for living with a child or children, High education for having a master's degree or higher level of education, Metropolitan area for living in the capital region of Finland (Helsinki, Espoo, Vantaa or Kauniainen). Female, High education, and Metropolitan area are taken from SF's registers.

Table D13—. Effect of income rank information on earned income (log) in 2021

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	-0.842*** (0.236)	-0.726** (0.271)	-0.799*** (0.211)	-0.670*** (0.176)	-0.659* (0.304)
Treatment	0.081 (0.076)	0.076 (0.109)	-0.020 (0.087)	0.083 (0.063)	-0.129 (0.117)
Misperception × Treatment	0.336 (0.363)	0.374 (0.389)	0.254 (0.286)	0.546* (0.230)	-0.414 (0.419)
Female	-0.306*** (0.051)	-0.315*** (0.055)	-0.349*** (0.055)	-0.314*** (0.051)	-0.344*** (0.055)
High education	0.256*** (0.054)	0.277*** (0.058)	0.380*** (0.060)	0.264*** (0.057)	0.308*** (0.057)
Spouse	-0.077 (0.068)	-0.059 (0.075)	0.145 (0.078)	0.063 (0.068)	0.051 (0.070)
Child(ren)	0.223** (0.074)	0.194* (0.076)	0.156* (0.071)	0.083 (0.064)	0.152* (0.070)
Metropolitan area	0.012 (0.060)	0.108 (0.062)	0.135* (0.059)	0.078 (0.059)	0.163** (0.059)
Constant	-0.120 (0.071)	-0.186 (0.098)	-0.327*** (0.096)	-0.120 (0.075)	-0.229* (0.103)
Observations	1508	1492	1511	1493	1489

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on earned income in 2022. The dependent variable is earned income consisting of cash salary items, compensation for employment-related costs and in-kind benefits. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Data include all individuals who completed the survey.

Table D14—. Effect of income rank information on earned income (log) in 2022

	(1) Age	(2) Municipality	(3) Education	(4) Occupation	(5) National
Misperception	-0.740** (0.248)	-0.555* (0.280)	-0.717** (0.228)	-0.606** (0.188)	-0.560 (0.300)
Treatment	0.105 (0.070)	-0.033 (0.114)	-0.026 (0.088)	0.028 (0.067)	-0.094 (0.110)
Misperception × Treatment	0.455 (0.338)	0.230 (0.416)	0.236 (0.290)	0.262 (0.235)	-0.245 (0.405)
Female	-0.309*** (0.049)	-0.331*** (0.061)	-0.353*** (0.056)	-0.295*** (0.053)	-0.389*** (0.054)
High education	0.252*** (0.052)	0.279*** (0.060)	0.347*** (0.060)	0.233*** (0.058)	0.280*** (0.056)
Spouse	-0.021 (0.069)	-0.079 (0.073)	0.115 (0.073)	0.027 (0.066)	0.063 (0.070)
Child(ren)	0.269*** (0.072)	0.247** (0.079)	0.239*** (0.070)	0.159* (0.069)	0.227** (0.071)
Metropolitan area	0.020 (0.059)	0.117 (0.064)	0.118 (0.061)	0.121* (0.059)	0.132* (0.061)
Constant	-0.180* (0.075)	-0.166 (0.099)	-0.334*** (0.098)	-0.150* (0.075)	-0.235* (0.101)
Observations	1507	1490	1511	1493	1487

OLS regressions with robust standard errors in parentheses estimating the effects of income rank information provision on earned income in 2021. The dependent variable is earned income consisting of cash salary items, compensation for employment-related costs and in-kind benefits. The dependent variable is standardized by subtracting the control group mean from each observation and then dividing by the control group standard deviation. Treatment is an indicator for being in the respective treatment group. The misperception is belief minus rank in the reference group corresponding to treatment, and the difference in percentage points is divided by 100, so a misperception of 0.01 means that the believed rank is 1 percentage point higher than the actual rank. Data include all individuals who completed the survey.

ROBUSTNESS / SPECIFICATION CURVE ANALYSIS

Table E1. Main and alternative specifications		
Decision	Main specification	Alternative specifications
A) Which observations to include (Exclusion criteria 1 to 4: $3 \times 2 \times 2 \times 2$ variations)	Include all observations	Drop observation if: 1) misperception > 95% or misperception > 90%; 2) incomplete answers; 3) mismatch between register data and self-reported data in relevant treatment: education if in EDUCATION or occupation if in OCCUPATION or municipality of residence if in MUNICIPALITY or birth year if in AGE; 4) survey completion time among the longest 5%
B) Operationalizing misperceptions (Five definitions: 5 variations)	Belief - actual rank as percentile, rescaled as between -1 and 1	1) Belief - actual rank as decile, rescaled; 2) Belief - actual rank as quintile, rescaled; 3) Equals -1/0/1 when misperception in percentile falls in $[-1, 0.1)/[-0.1, 0.1]/(0.1, 1]$; 4) Dummy for positive/non-positive misperception
C) Choice of covariates (Treatment-dummy, Rank in the corresponding reference group, other main control covariates, labor market variables, and survey variables: $2 \times 2 \times 2 \times 2 \times 2$ variations)	Treatment-dummy and actual rank in the corresponding reference group	1) Other control covariates: Female, Spouse, Child(ren), Metropolitan area, High education; 2) Labor market variables: occupation at two-digit level, union membership, current employment status; 3) Survey related variables: order of survey question blocks, pages, and questions, total survey completion time

This table summarizes the main and alternative reasonable specifications used to in the specification curve analysis. The first column lists the three data analytical decisions. The middle column shows the main specification as defined in the pre-analysis plan (except the control covariates that are not pre-registered) and used in the analyses in Section II. The third column lists reasonable alternative analytical choices. For the definitions of misperception, when defined as percentile, the misperception ranges between -1 and 1 with the step of 0.01. When defined as decile (quintile), the range is also between -1 and 1 but the step is 0.1 (0.2). The specification curve analysis is conducted for each of the outcomes: Fairness of own disposable income, Satisfaction with disposable income, Wage satisfaction, Life satisfaction, Job satisfaction and Job meaningfulness. OLS regression is used. We apply heteroskedasticity-consistent standard error (hc3) in the OLS regressions.

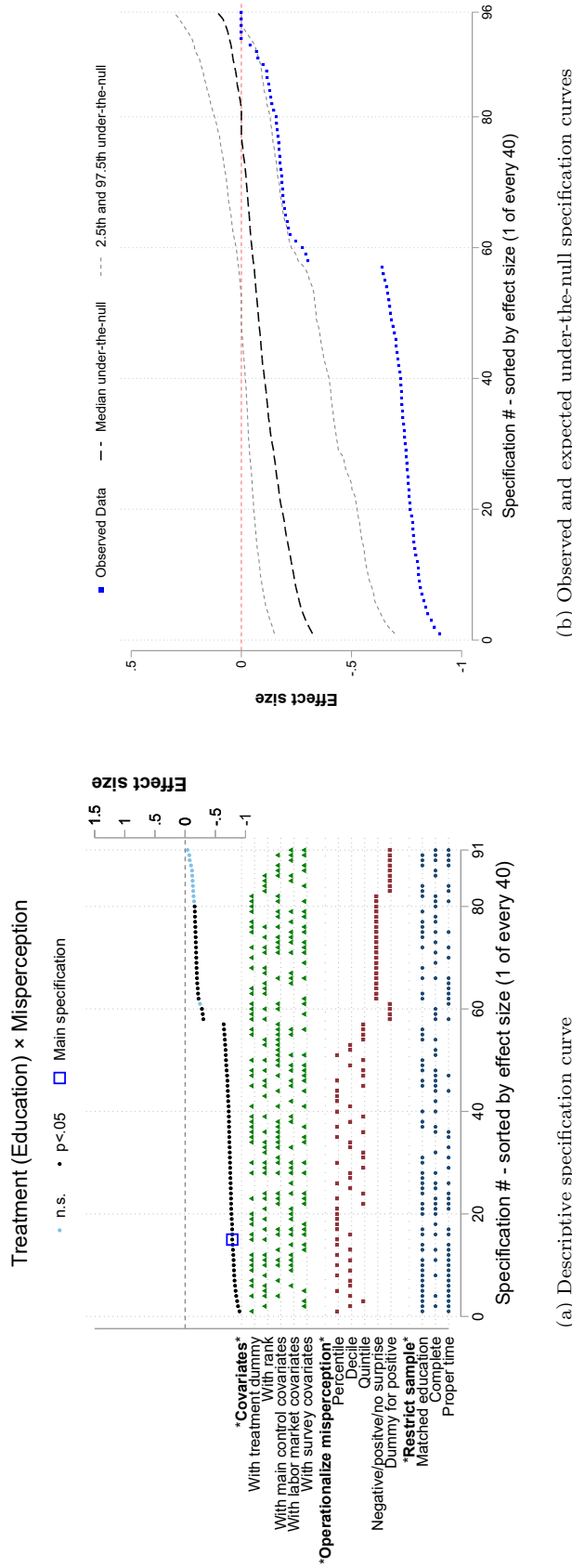


Figure E1. . Descriptive and under-the-null specification curve for Fairness of own income: Treatment (Education) × Misperception

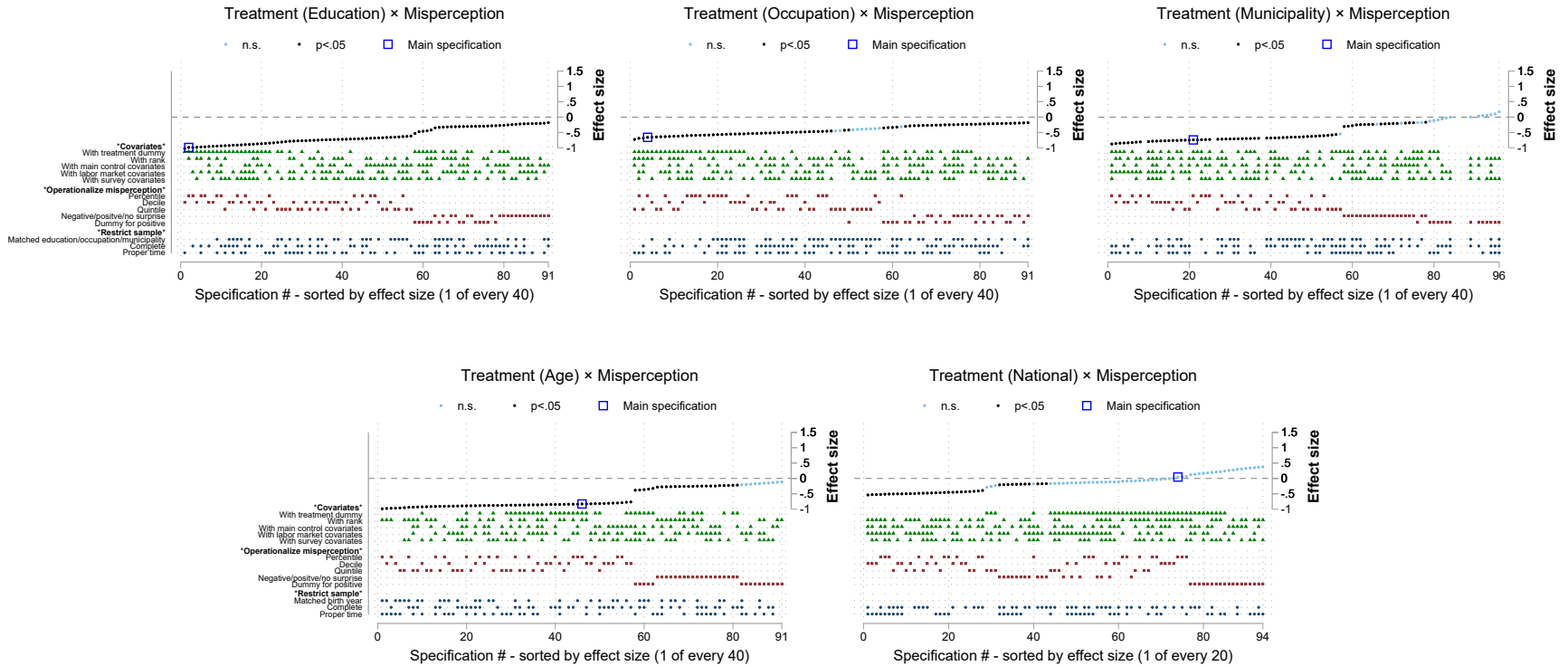
Notes: Panel (a) is the descriptive specification curve for Fairness of own income in treatment EDUCATION. In the figure at top, each dot depicts the estimate of the coefficient of Treatment×Misperception. The dots vertically aligned below in the bottom figure indicate the model specification behind those estimates. A total of 3648 specifications were estimated; to facilitate visual inspection, all the estimates are sorted and one out of every 40 estimates is plotted. NS, not significant ($P >= 0.05$). For comparison, the effect size of the main specification of Table 2 is plotted. All estimations use robust standard errors. Panel (b) plots the observed and expected under-the-null specification curves for Fairness of own income in treatment EDUCATION. The expected curves are based on 500 shuffled samples where the randomly assigned variable, treatment dummy, is shuffled. All specifications are estimated in each shuffled sample (3648 specifications). The curves plot the estimate of the coefficient of Treatment×Misperception. The resulting estimates for each shuffled sample are ranked from smallest to largest. The dashed lines depict the 2.5th, 50th and 97.5th percentiles for each of these ranked estimates.

Table E2—. Joint tests for inferential specification curves

Outcome	Treatment	Test statistic	Observed result	<i>P</i> value
Income satisfaction	Education	Share of significant results	3648 of 3648 specifications	$P < 0.002$
		Median effect size	Rank info. decreases the slope of misperception by 0.697 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 215.08$	$P < 0.002$
	Occupation	Share of significant results	3306 of 3666 specifications	$P < 0.002$
		Median effect size	Rank info. decreases the slope of misperception by 0.452 SD	$P = 0.010$
		Aggregate all <i>P</i> -values	Stouffer $Z = 164.91$	$P < 0.002$
	Municipality	Share of significant results	2823 of 3468 specifications	$P = 0.002$
		Median effect size	Rank info. decreases the slope of misperception by 0.650 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 162.15$	$P < 0.002$
	Age	Share of significant results	3282 of 3648 specifications	$P = 0.004$
		Median effect size	Rank info. decreases the slope of misperception by 0.830 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 207.01$	$P < 0.002$
Fairness of income	Education	Share of significant results	3111 of 3648 specifications	$P = 0.004$
		Median effect size	Rank info. decreases the slope of misperception by 0.702 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 179.92$	$P < 0.002$
	Municipality	Share of significant results	2859 of 3468 specifications	$P < 0.002$
		Median effect size	Rank info. decreases the slope of misperception by 0.791 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 199.05$	$P < 0.002$
Wage satisfaction	Education	Share of significant results	3324 of 3744 specifications	$P < 0.002$
		Median effect size	Rank info. decreases the slope of misperception by 0.612 SD	$P < 0.002$
		Aggregate all <i>P</i> -values	Stouffer $Z = 172.85$	$P < 0.002$
Life satisfaction	Occupation	Share of significant results	1245 of 3672 specifications	$P = 0.040$
		Median effect size	Rank info. decreases the slope of misperception by 0.341 SD	$P = 0.026$
		Aggregate all <i>P</i> -values	Stouffer $Z = 106.11$	$P = 0.034$

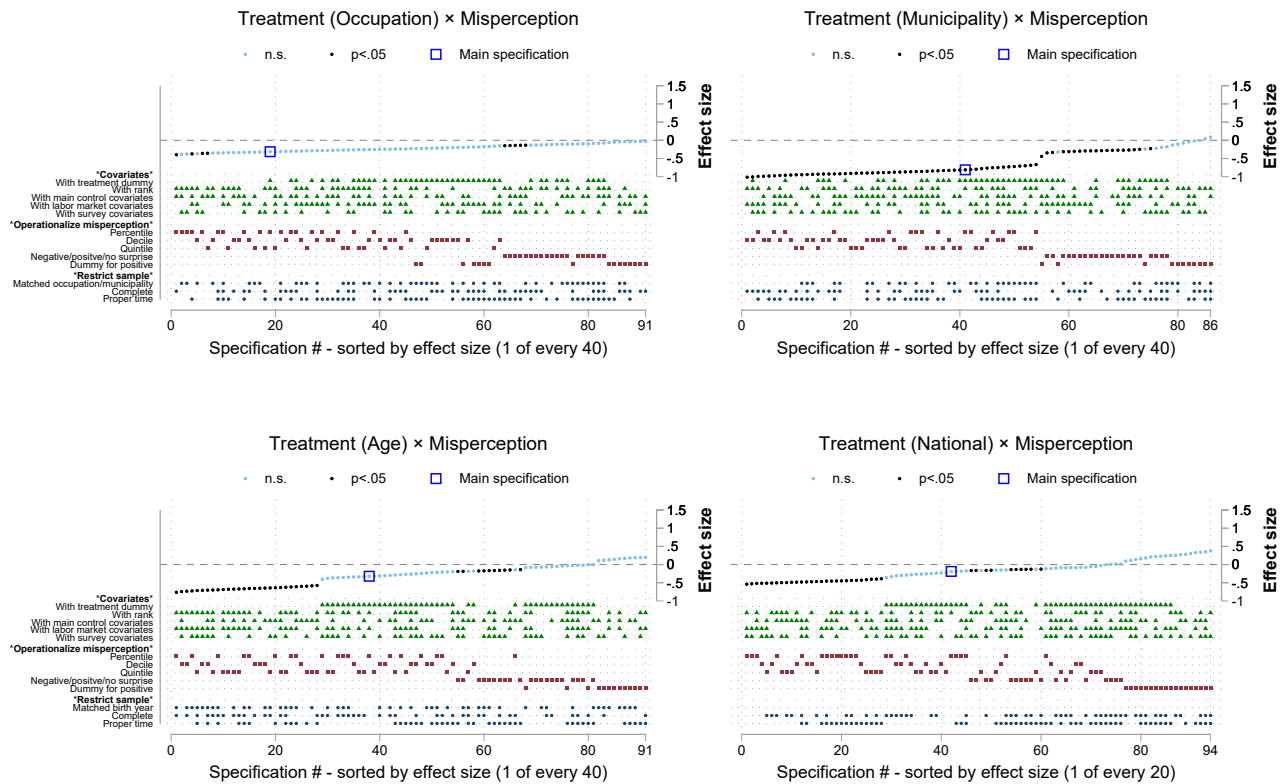
For each outcome and treatment, we shuffled the treatment dummy for 500 times and estimated all the specifications in Table E1 with each shuffled sample. The share of significant results is the proportion of significant results with the dominant sign out of all specifications. The Stouffer *Z*-value is constructed by converting each *P*-value to a *Z*-score and computing the weighted average of the *Z*-scores with the weight equal to 1 divided by the square root of the number of the *P*-values (specifications). Each overall *P*-value is computed by the proportion of shuffled samples leading to a test statistic at least as extreme as in the observed sample. I.e., when there are 50 out of 500 shuffled samples showing a share of significant results that is larger than the share of the observed sample, the *p*-value is 0.10. When no shuffled sample is as extreme as the observed, we report $P < 0.002$ because it is less frequent than 1 out of the 500 shuffled samples.

Figure E2. . Descriptive specification curve: Satisfaction with own disposable income



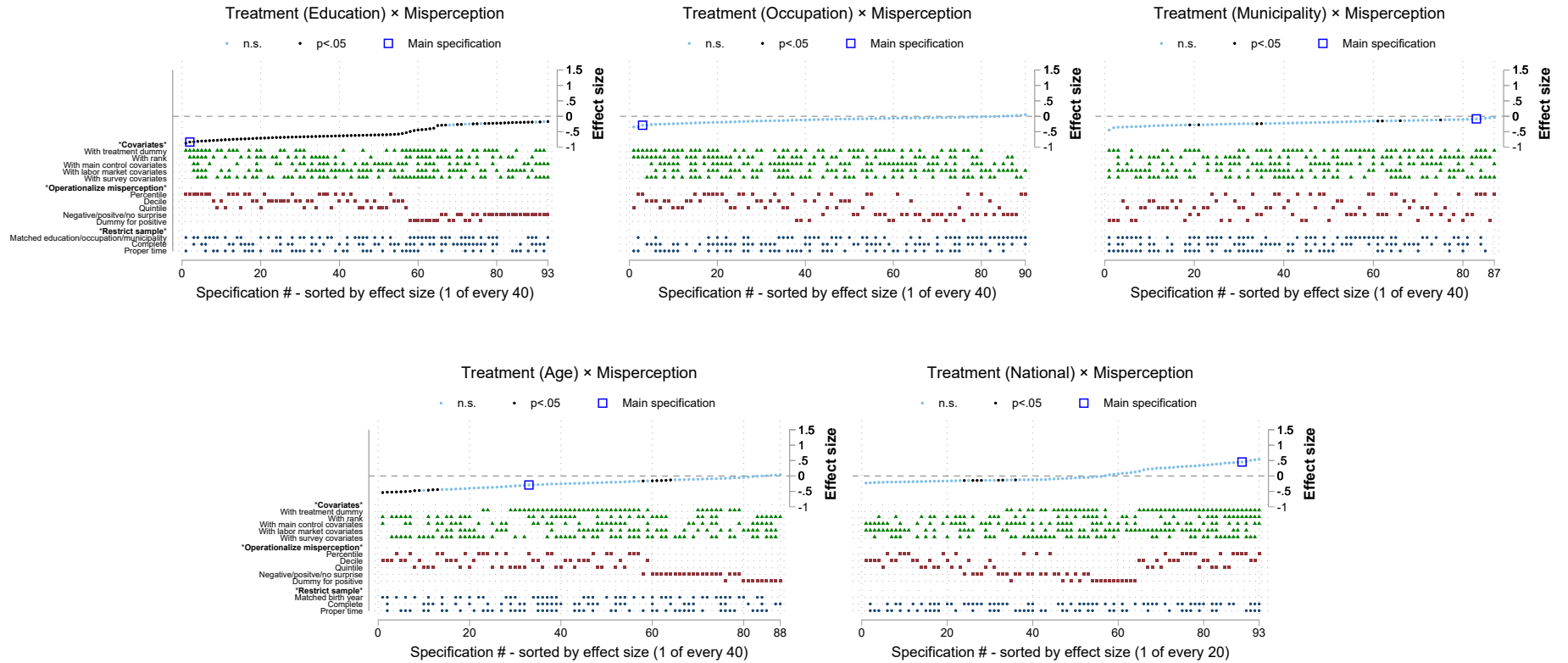
The figures show the descriptive specification curves for satisfaction with own disposable income for the five treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment \times Misperception on feeling disappointed/pleased with own disposable income. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 2 is plotted. All estimations use robust standard errors.

Figure E3. . Descriptive specification curve: Perceived fairness of own disposable income



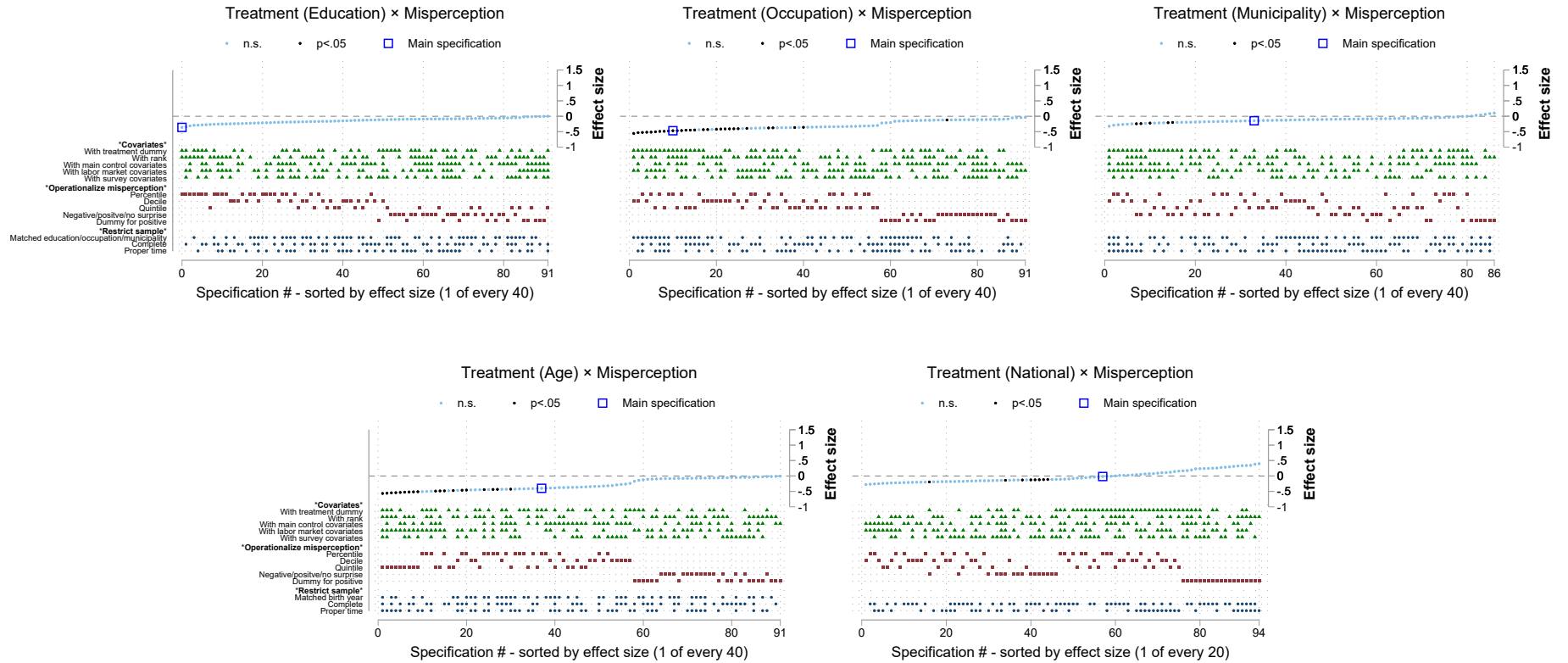
The figures show the descriptive specification curves for perceived fairness of own disposable income for the four treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment×Misperception on fairness of income. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 2 is plotted. All estimations use robust standard errors.

Figure E4. . Descriptive specification curve: Wage satisfaction



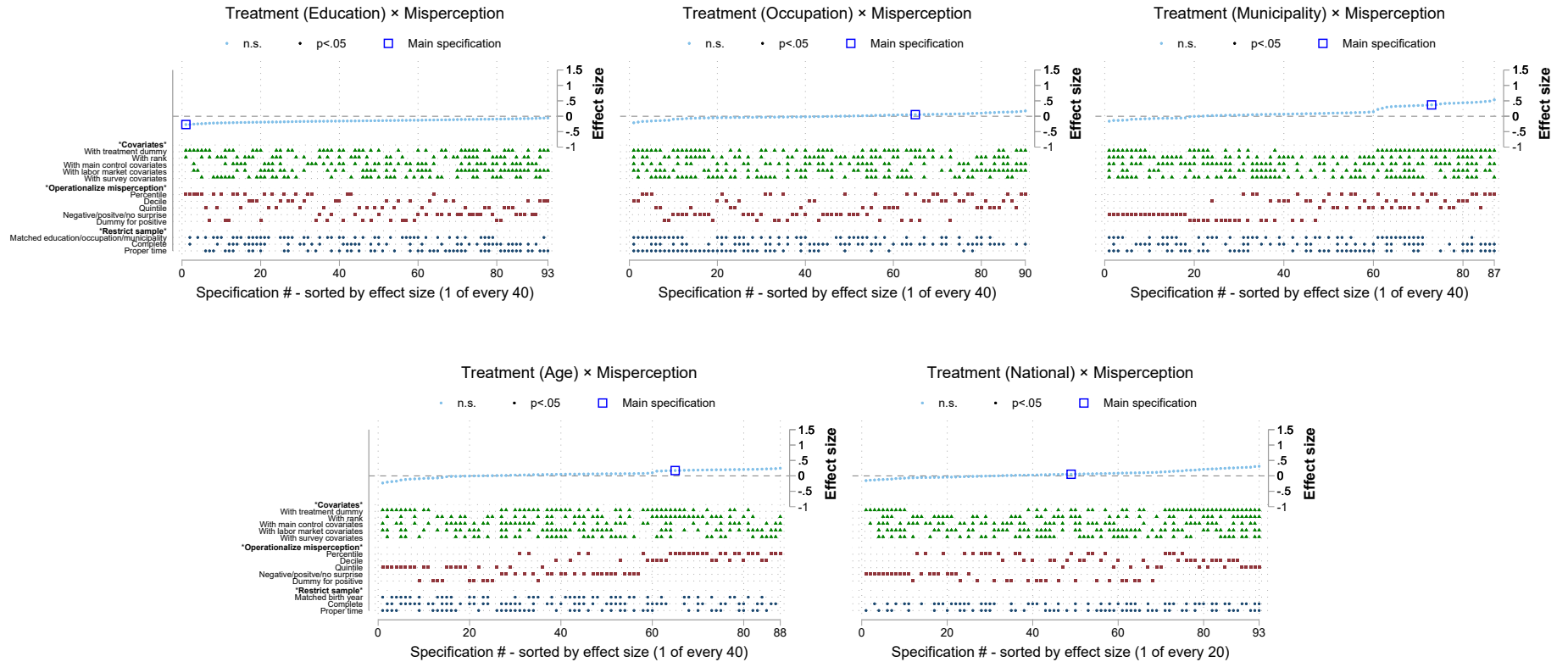
The figures show the descriptive specification curves for wage satisfaction for the five treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment × Misperception on wage satisfaction. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 2 is plotted. All estimations use robust standard errors.

Figure E5. . Descriptive specification curve: Life satisfaction



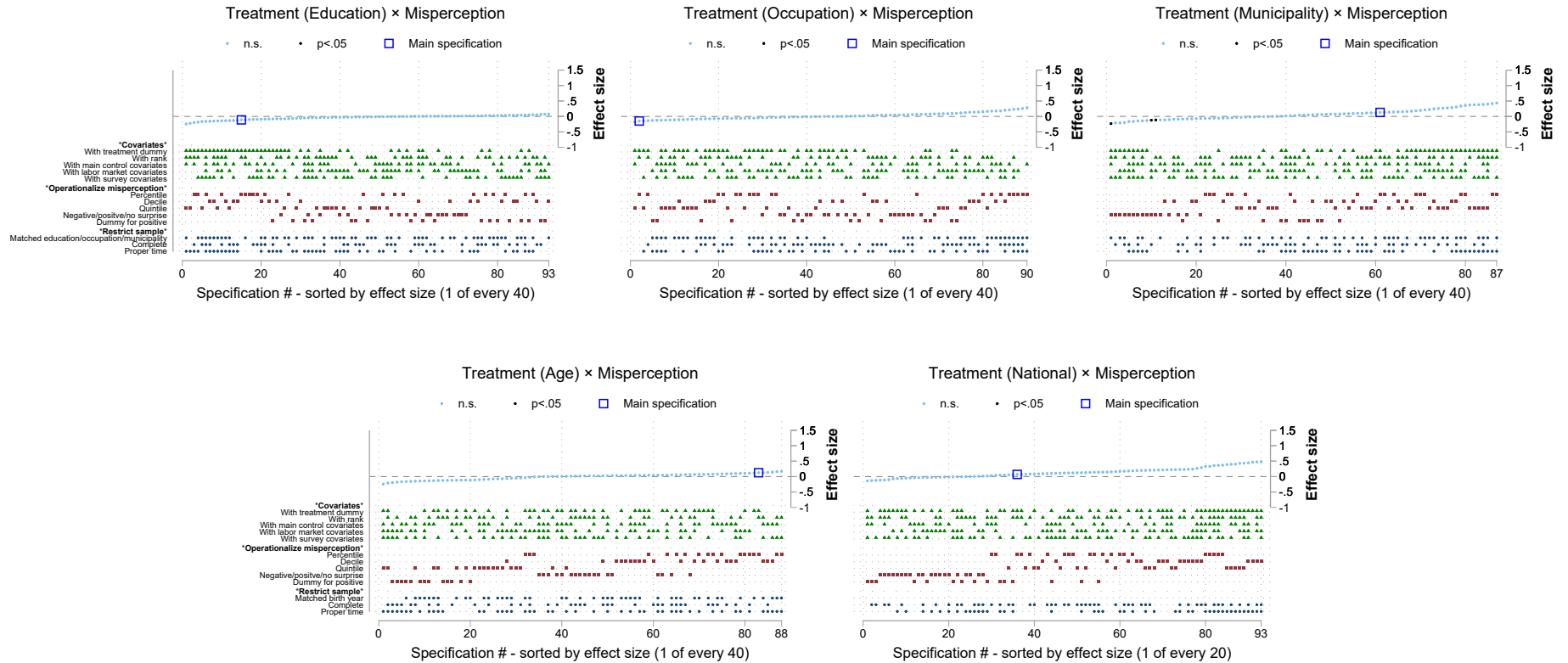
The figures show the descriptive specification curves for life satisfaction for the five treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment×Misperception on life satisfaction. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 3 is plotted. All estimations use robust standard errors.

Figure E6. . Descriptive specification curve: Job satisfaction



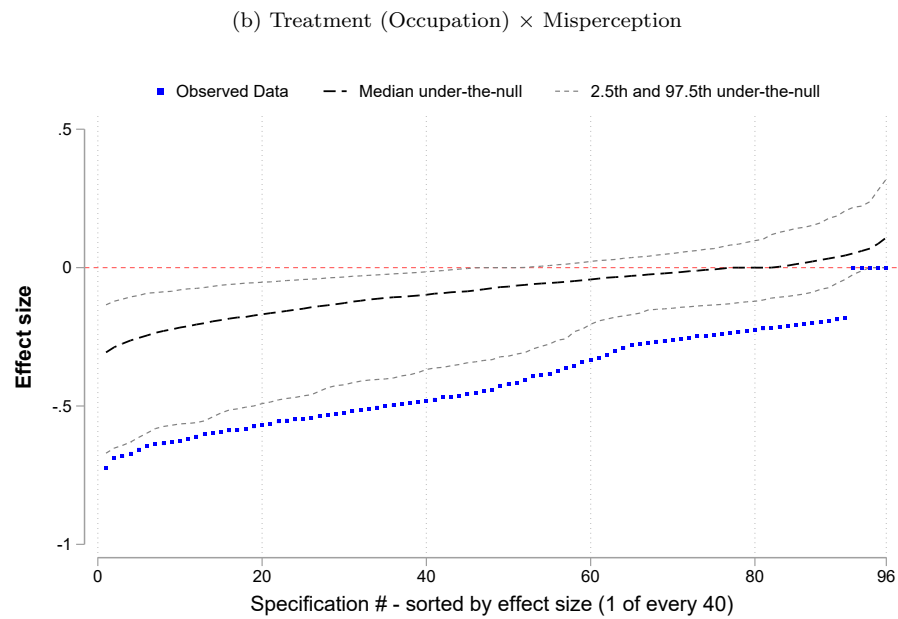
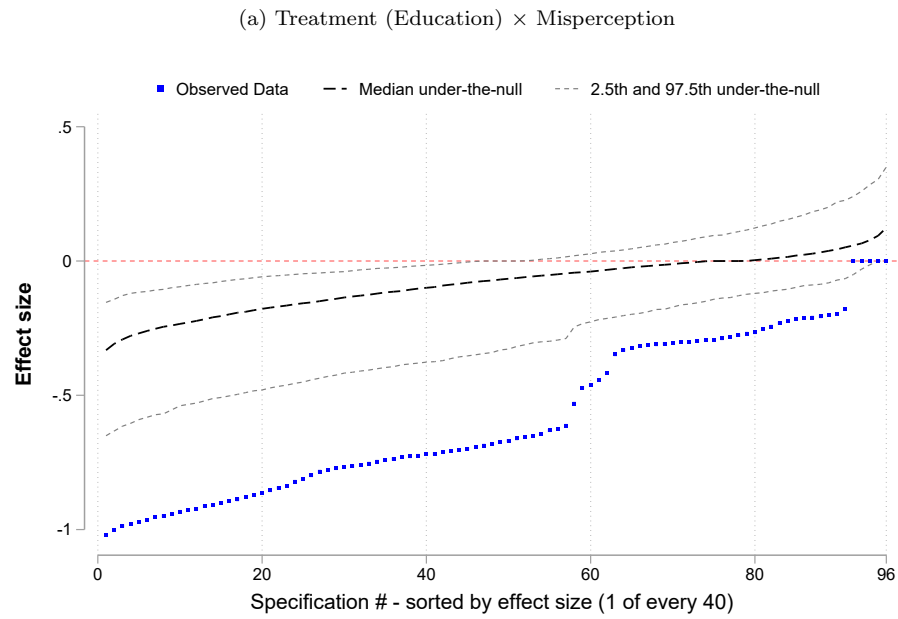
The figures show the descriptive specification curves for job satisfaction for the five treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment × Misperception on job satisfaction. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 3 is plotted. All estimations use robust standard errors.

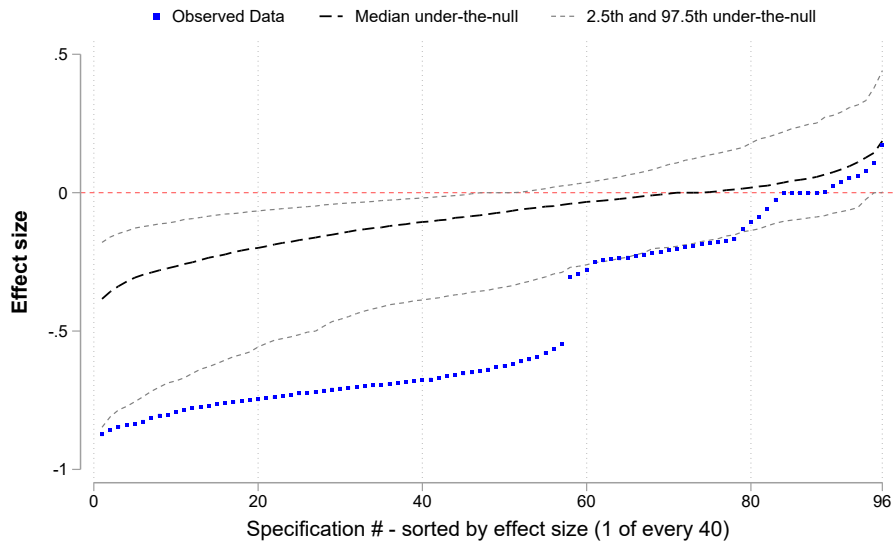
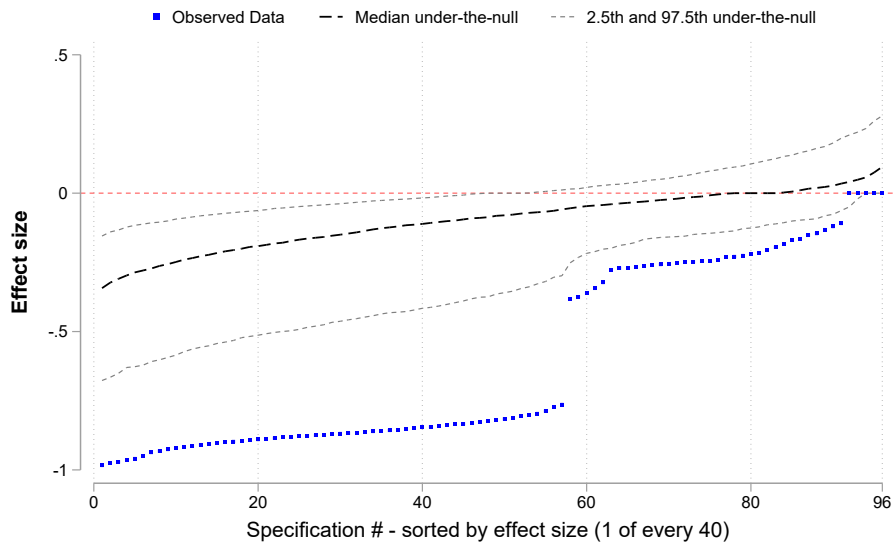
Figure E7. . Descriptive specification curve: Job meaningfulness



The figures show the descriptive specification curves for perceived meaningfulness of job for the five treatments. In the top panel of each figure, each dot depicts the estimate of the effect of Treatment \times Misperception on feeling job is meaningful. The dots vertically aligned below in the bottom panel indicate the model specification behind those estimates. For treatment NATIONAL, a total of 1920 specifications were estimated. For each of the other four treatments, a total of around 3840 specifications were estimated; to facilitate visual inspection, the estimates are sorted and one out of every 40 (20) estimates is plotted. NS, not significant ($P \geq 0.05$). For comparison, the effect size of the main specification of Table 3 is plotted. All estimations use robust standard errors.

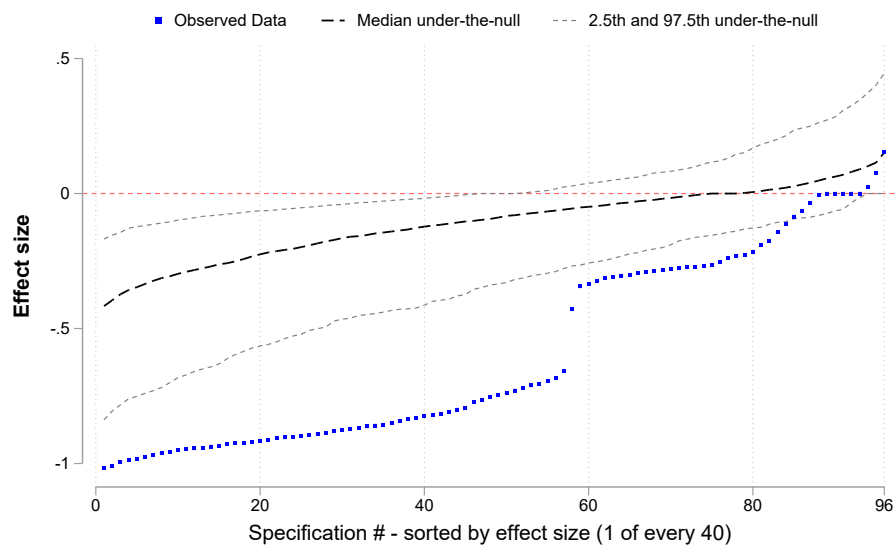
Figure E8. . Observed and expected under-the-null specification curves: Satisfaction with own disposable income



(c) Treatment (Municipality) \times Misperception(d) Treatment (Age) \times Misperception

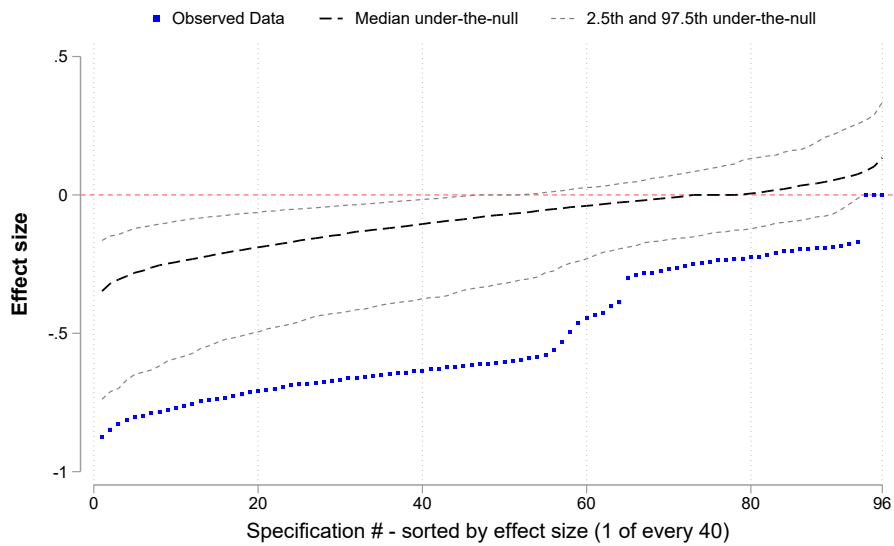
Notes: Observed and expected under-the-null specification curves for Satisfaction with own disposable income. The expected curves are based on 500 shuffled samples where the randomly assigned variable, treatment dummy, is shuffled. All specifications are estimated in each shuffled sample (3840 specifications). The curves plot the estimate of the coefficient of the interaction term, $Treatment \times Misperception$. The resulting estimates for each shuffled sample are ranked from smallest to largest. The dashed lines depict the 2.5th, 50th and 97.5th percentiles for each of these ranked estimates.

Figure E9. . Observed and expected under-the-null specification curves: Fairness of own income

(a) Treatment (Municipality) \times Misperception

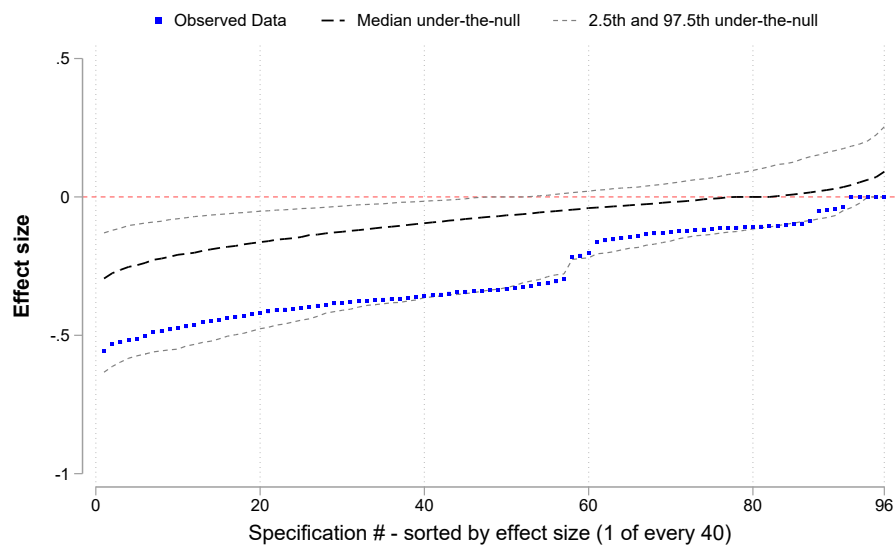
Notes: Observed and expected under-the-null specification curves for Perceived fairness of own disposable income. The expected curves are based on 500 shuffled samples where the randomly assigned variable, treatment dummy, is shuffled. All specifications are estimated in each shuffled sample (3840 specifications). The curves plot the estimate of the coefficient of the interaction term, $Treatment \times Misperception$. The resulting estimates for each shuffled sample are ranked from smallest to largest. The dashed lines depict the 2.5th, 50th and 97.5th percentiles for each of these ranked estimates.

Figure E10. . Observed and expected under-the-null specification curves: Wage satisfaction

(a) Treatment (Education) \times Misperception

Notes: Observed and expected under-the-null specification curves for Wage satisfaction in treatment Education. The expected curves are based on 500 shuffled samples where the randomly assigned variable, treatment dummy, is shuffled. All specifications are estimated in each shuffled sample (3840 specifications). The curves plot the estimate of the coefficient of the interaction term, $Treatment \times Misperception$. The resulting estimates for each shuffled sample are ranked from smallest to largest. The dashed lines depict the 2.5th, 50th and 97.5th percentiles for each of these ranked estimates.

Figure E11. . Observed and expected under-the-null specification curves: Life satisfaction

(a) Treatment (Occupation) \times Misperception

Notes: Observed and expected under-the-null specification curves for Life satisfaction in treatment Occupation. The expected curves are based on 500 shuffled samples where the randomly assigned variable, treatment dummy, is shuffled. All specifications are estimated in each shuffled sample (3840 specifications). The curves plot the estimate of the coefficient of the interaction term, $Treatment \times Misperception$. The resulting estimates for each shuffled sample are ranked from smallest to largest. The dashed lines depict the 2.5th, 50th and 97.5th percentiles for each of these ranked estimates.