

Web-Appendix

A1. Description of the variables.

Variables	Mean	Std. Dev.	Min	Max
Voted in elections	0.86	0.35	0	1
Contacted politician	0.19	0.40	0	1
Worked in a party	0.05	0.22	0	1
Wear a badge	0.14	0.34	0	1
Signed a petition	0.39	0.49	0	1
Participated in demonstration	0.06	0.24	0	1
Boycotted products	0.32	0.47	0	1
Social media political participation	0.28	0.45	0	1
Trust in parliament	6.22	2.18	0	10
Trust in political parties	5.56	2.08	0	10
Trust in the government	5.82	2.42	0	10
Trust in politicians	5.31	2.13	0	10
Trust in civil servants	6.52	2.02	0	10
Health (EQ-5D)	0.85	0.18	-0.01	1.00
Age	50	18	19	91
Age ²	2827	1830	361	8281
Female	0.50	0.50	0.00	1.00
Education (primary level)	0.20	0.40	0.00	1.00
Education (secondary level)	0.51	0.50	0.00	1.00

A2. Description of the sample and weighting of variables.

In the collection of the survey data, the problem of self-selection bias, caused, e.g., by refusals to take part in the survey and unknown telephone numbers, was taken into account already before actually conducting the survey. In the first step, the Population Register Centre of Finland was asked to collect a random sample of 25,000 adult Finnish residents. Then, Statistics Finland linked these 25,000 individuals with several national data registers which include basic socio-economic data of Finnish citizens.

With this linkage, variables indicating, for example, gender, age, mother tongue, education, income and number of children among these 25,000 individuals were obtained. Next, a telephone survey company collected telephone numbers for the 25,000 individuals in the sample. Because of confidential telephone numbers and unregistered pre-paid phones, telephone numbers were identified for 15,611 individuals. After that, the survey company contacted these persons randomly by phone to recruit them in the survey. This continued until the minimum number of 2,000 respondents was reached.

The information obtained from the official registers was used to calculate appropriate weights for the 2,001 respondents. Using the original sample of 25,000, we calculated ‘population’ distributions for various socio-economic variables and used this information to calibrate the weights for respondents in the empirical analysis. In this process, we used a Stata programme called ipfraking (Kolenikov 2014), which implements weight-calibration procedures known as iterative proportional fitting, or raking, of complex survey weights. To calculate the weights, we selected the following variables, which produced the best match with the response and ‘population’ distributions: age group (18–34, 35–49, 50–64, 65–), marital status, education, disposable income (divided into quintiles) and home ownership status.

Reference

Kolenikov S (2014), Calibrating survey data using iterative proportional fitting (raking). *The Stata Journal* 14(1), pp. 22–59.

A3. The EQ-5D health instrument

The EQ-5D is a standardized measure of health related quality of life. It comprises five dimensions (questions) with each having three answering options:

MOBILITY

1. I have no problems in walking about / 2. I have some problems in walking about / 3. I am confined to bed

SELF-CARE

1. I have no problems with self-care / 2. I have some problems washing or dressing myself / 3. I am unable to wash or dress myself

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

1. I have no problems with performing my usual activities / 2. I have some problems with performing my usual activities / 3. I am unable to perform my usual activities

PAIN / DISCOMFORT

1. I have no pain or discomfort / 2. I have moderate pain or discomfort / 3. I have extreme pain or discomfort

ANXIETY / DEPRESSION

1. I am not anxious or depressed / 2. I am moderately anxious or depressed / 3. I am extremely anxious or depressed

For more information, see:

EuroQol Research Foundation (2018). *EQ-5D-3L User Guide. Basic information on how to use the EQ-5D-3L instrument.* Version 6.0. Available at <https://euroqol.org/>

A4. Detailed results.

Table A1. Results from Model 1 presented in Figure 1 (structural model only).

VARIABLES	Institutional participation		Non-institutional participation	
	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients
Health (EQ5D)	0.0330*	0.076*	-0.127**	-.09452**
	(0.0164)	(.03402)	(0.0424)	(.03141)
Age	0.00309**	.70246**	-0.000480	-.035088
	(0.00114)	(.2423)	(0.00291)	(.212663)
Age^2	-2.61e-05*	-.61219*	-5.33e-05*	-.402126*
	(1.13e-05)	(.26000)	(2.69e-05)	(.20198)
Gender (female)	0.00302	.018616	0.0751**	.14885**
	(0.00648)	(.03888)	(0.0163)	(.030976)
Education (secondary)	0.0316**	.194547**	0.104**	.205342**
	(0.0101)	(.0476)	(0.0203)	(.037351)
Education (tertiary)	0.0568**	.31536**	0.209**	.373849**
	(0.0160)	(.05506)	(0.0269)	(.042757)
Income (II quintile)	0.0184*	.09237*	-0.000236	-.00038
	(0.0101)	(.04644)	(0.0288)	(.04659)
Income (III quintile)	0.0122	.06123	0.0440	.071079
	(0.00992)	(.04728)	(0.0302)	(.04867)
Income (IV quintile)	0.0209*	.10439*	0.0152	.024365
	(0.0112)	(.051140)	(0.0311)	(.049894)
Income (V quintile)	0.0256*	.12170*	0.0218	.033377
	(0.0124)	(.054128)	(0.0343)	(.0523602)
Unemployed	-0.00695	-.022929	0.135**	.143180**
	(0.00924)	(.02966)	(0.0349)	(.036253)
Student	0.0141	.04724	-0.0212	-.02282
	(0.0118)	(.038023)	(0.0472)	(.050898)
Retired	0.0215*	.123112	0.0287	.052878
	(0.0114)	(.063830)	(0.0258)	(.04741)
Other	-0.00140	-.00292	0.146*	.09826*
	(0.0176)	(.0367)	(0.0601)	(.0404777)
Observations	1,974		1,974	

Standard errors in parentheses

** p<0.01, * p<0.05

Table A2. Results from Model 1 presented in Figure 3 (structural model only).

VARIABLES	Institutional participation		Non-institutional participation		Trust	
	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients
Trust	0.00821** (0.00251)	.176480** (.035582)	-0.0206*** (0.00461)	-.156673** (.033479)		
Health (EQ5D)	0.0208 (0.0192)	.041822 (.03665)	-0.0694 (0.0474)	-.049295 (.033885)	1.808** (0.293)	.168654** (.026498)
Age	0.00378** (0.00149)	.742889** (.260372)	0.000704 (0.00309)	.048991 (.215006)	-0.0377 (0.0219)	-.344225 (.200606)
Age^2	-3.37e-05* (1.47e-05)	-.67248* (.27918)	-6.49e-05* (2.92e-05)	-.458497* (.205718)	0.000550* (0.000217)	.510684* (.201269)
Gender (female)	0.00458 (0.00796)	.024993 (.041672)	0.0853** (0.0171)	.164784** (.031662)	0.0533 (0.107)	.013513 (.027063)
Education (secondary)	0.0335** (0.0125)	.182811** (.051490)	0.119** (0.0221)	.22923** (.039411)	0.321 (0.167)	.081478 (.041810)
Education (tertiary)	0.0578** (0.0194)	.287962** (.062392)	0.229** (0.0281)	.404673** (.044092)	0.988** (0.186)	.228905** (.041257)
Income (II quintile)	0.0143 (0.0114)	.061503 (.047402)	-0.00532 (0.0320)	-.00813 (.048907)	-0.0871 (0.223)	-.017478 (.0448769)
Income (III quintile)	0.0125 (0.0114)	.055413 (.048797)	0.0405 (0.0330)	.063636 (.051771)	-0.173 (0.225)	-.03569 (.046586)
Income (IV quintile)	0.0200 (0.0126)	.090090 (.053306)	0.00939 (0.0339)	.014969 (.053967)	-0.0341 (0.236)	-.007144 (.049382)
Income (V quintile)	0.0213 (0.0136)	.091233 (.056081)	0.0237 (0.0372)	.035976 (.056447)	0.320 (0.249)	.063704 (.049407)
Unemployed	-0.00178 (0.0109)	-.005266 (.032026)	0.126** (0.0361)	.131627** (.03726)	-0.716** (0.224)	-.098542** (.030548)
Student	0.0136 (0.0138)	.040890 (.040333)	-0.00591 (0.0480)	-.006294 (.051126)	0.195 (0.257)	.027277 (.035873)
Retired	0.0297** (0.0143)	.145851** (.066359)	0.0342 (0.0277)	.05946 (.047963)	-0.143 (0.187)	-.032581 (.042722)
Other	-0.00446 (0.0212)	-.008462 (.040272)	0.126* (0.0604)	.084662* (.040804)	-0.271 (0.445)	-.023965 (.039175)
Observations	1,858		1,858		1,858	

Standard errors in parentheses

** p<0.01, * p<0.05

Table A3. Validation results with the ESS data (Round 8, structural model only).

VARIABLES	Institutional participation		Non-institutional participation	
	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients
Health (SRH)	-0.00 (0.00)	-0.00 (0.01)	-0.01** (0.00)	-0.03** (0.01)
Age	0.005** (0.001)	0.64** (0.06)	0.00** (0.00)	0.17** (0.04)
Age^2	-0.00** (0.00)	-0.53** (0.06)	-0.00** (0.00)	-0.30** (0.04)
Gender (female)	-0.01** (0.00)	-0.05** (0.01)	0.00 (0.00)	0.00 (0.01)
Education (secondary)	0.05** (0.00)	.017** (0.01)	0.11** (0.01)	0.18** (0.01)
Education (tertiary)	0.09** (0.01)	0.31** (0.01)	0.21** (0.01)	0.32** (0.01)
Income (II quintile)	-0.01 (0.00)	-0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)
Income (III quintile)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)	0.00 (0.01)
Income (IV quintile)	0.00 (0.00)	0.02 (0.01)	0.02** (0.01)	0.02* (0.01)
Income (V quintile)	0.01 (0.00)	0.02 (0.01)	0.02* (0.01)	0.02* (0.01)
Unemployed	-0.01 (0.01)	-0.01 (0.01)	0.03* (0.01)	0.02* (0.01)
Student	0.02** (0.01)	0.04** (0.01)	-0.07** (0.01)	0.10** (0.01)
Retired	0.00 (0.00)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)
Other	-0.00 (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Observations	32,852		32,852	

Standard errors in parentheses

** p<0.01, * p<0.05

Table A4. Validation results with the ESS data (Round 8, structural model only).

VARIABLES	Institutional participation		Non-institutional participation		Trust	
	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients	Unstandardised coefficients	Standardised coefficients
Trust	0.01** (0.00)	0.10** (0.01)	-0.005*** (0.001)	-0.03** (0.01)		
Health (SRH)	-0.00 (0.00)	-0.02 (0.01)	-0.01** (0.002)	-0.02** (0.01)	0.19** (0.01)	0.09** (0.01)
Age	0.00** (0.00)	0.65** (0.06)	0.00** (0.00)	0.14** (0.04)	-0.03** (0.00)	-0.22** (0.04)
Age^2	-0.00** (0.00)	-0.54** (0.06)	-0.00** (0.00)	-0.27** (0.04)	0.00** (0.00)	0.31** (0.04)
Gender (female)	-0.01** (0.00)	-0.05** (0.01)	0.00 (0.00)	0.00 (0.00)	0.03 (0.02)	0.01 (0.01)
Education (secondary)	0.05** (0.00)	0.17** (0.01)	0.11** (0.01)	0.18** (0.01)	0.23** (0.03)	0.06** (0.01)
Education (tertiary)	0.09** (0.01)	0.30** (0.01)	0.21** (0.01)	0.32** (0.01)	0.59** (0.04)	0.13** (0.01)
Income (II quintile)	-0.00 (0.00)	-0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.025** (0.04)	-0.04** (0.01)
Income (III quintile)	-0.00 (0.00)	-0.01 (0.01)	-0.00 (0.00)	-0.00 (0.01)	-0.06** (0.02)	-0.02** (0.01)
Income (IV quintile)	0.01 (0.00)	0.02 (0.01)	0.01* (0.01)	0.02* (0.02)	-0.03 (0.03)	-0.00 (0.01)
Income (V quintile)	0.00 (0.00)	0.01 (0.01)	0.01* (0.01)	0.02 (0.01)	0.06 (0.04)	0.01 (0.01)
Unemployed	-0.00 (0.00)	-0.01 (0.01)	0.03** (0.01)	0.02** (0.01)	-0.30** (0.06)	-0.03** (0.01)
Student	0.02** (0.01)	0.04** (.01)	0.07** (0.01)	0.06** (0.01)	0.40** (0.06)	0.06 (0.01)
Retired	0.00 (0.00)	-0.00 (.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.05)	0.00 (0.01)
Other	-0.00 (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.1* (0.01)	-0.11** (0.06)	-0.02** (0.01)
Observations	31,721		31,721		31,721	

Standard errors in parentheses

** p<0.01, * p<0.05