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## Unequal electoral participation: the negative effects of long work hours and unsociable work schedules in Europe

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# Appendix

## Notes

1. Working unsociable schedules is even more common among parents with young children because parents either cannot afford institutional child care or wish to maximize their time with children while undertaking the employment by 'shift' or 'tag-team' parenting (Barnett & Gareis, 2007; Han, 2004; Hattery, 2001; Wight, Raley, & Bianchi, 2008).

Barnett, R. C., & Gareis, K. C. (2007). Shift work, parenting behaviors, and children's socioemotional well-being: A within-family study. *Journal of Family Issues*, 28, 727–748.

Han, W.-J. (2004). Nonstandard work schedules and child care decisions: Evidence from the NICHD study of early child care. *Early Childhood Research Quarterly*, 19, 231–256.

Hattery, A. J. (2001). Tag-team parenting: Costs and benefits of utilizing nonoverlapping shift work in families with young children. *Families in Society: The Journal of Contemporary Human Services*, 82, 419–427.

Wight, V. R., Raley, S. B., & Bianchi, S. M. (2008). Time for children, one's spouse and oneself among parents who work nonstandard hours. *Social Forces*, 87, 243–271.

2. Civil skills are communications and organizational capacities and they are essential for political participation (Brady et al. 1995), as they enable citizens to communicate politically (Stadelmann-Steffen and Koller 2014) and arguably they influence political competence and democratic capacities which are determined by the authority structure at work place (Pateman 1970: cited in Phillips et al. 2010).

Brady, HE, Verba, S and Schlozman, KL. (1995) 'Beyond SES: A Resource Model of Political Participation,' *American Political Science Review*, 89, 2, 271–294.

Stadelmann-Steffen, I and Koller, D. (2014) 'What Type of Resources? Household Effects and Female Electoral Participation,' *Swiss Political Science Review*, 20, 4, 529–549.

Phillips, A, Medearis, J and O'Neill, D. (2010) 'Profile: The Political Theory of Carole Pateman,' *PS: Political Science & Politics*, 43.

3. While some studies show that working 48 or more hours per week is linked with adverse mental and physical health outcomes (Kivimäki et al. 2015; Spurgeon 2003), other studies show workers' health starts to decline at a much lower threshold of 40 hours per week (Bannai and Tamakoshi 2014). Therefore, we use a threshold between 48 and 40 hours per week to define long work hours as > 45 hours per week.

Kivimäki, M, Jokela, M, Nyberg, ST, Singh-Manoux, A, Fransson, EI, Alfredsson, L, et al. (2015) 'Long working hours and risk of coronary heart disease and stroke: a systematic review and meta-analysis of published and unpublished data for 603 838 individuals,' *The Lancet*, 386, 10005, 1739–1746.

Spurgeon, A. (2003) 'Working Time : Its Impact on Safety and Health,' *Geneva: ILO*.

Bannai, A and Tamakoshi, A. (2014) 'The association between long working hours and health: a systematic review of epidemiological evidence,' *Scandinavian Journal of Work, Environment & Health*, 40, 1, 5–18.

4. We do not assume that the effect of any of our predictors varies between countries. Consequently, a simple random-intercept model would be sufficient. This assumption is supported by calculating the ICC

for the overall sample (males and females). With a value of 0.06, the ICC is very small, suggesting that there is no substantial variation at country level. In fact, given the low ICC, a multi-level approach might not even be necessary for our analysis. However, while not interpreting the hierarchical structure explicitly, controlling for country-level variation is sensible.

5. We tested alternative measures of subjective health (health being hampered) and the level of social engagement of the respondent compared to the respondent's peers. Neither of these indicators have significant mediation effect on voting.
6. Our analysis so far controls for marital/union status and having a dependent child under age 14 as an attempt to partial out some of the gender difference in the effect of working long hours and unsociable schedules. The double shifts of paid and unpaid work among women could be a reason why working time and timing reduce women's political participation but not men's in two occupation groups: managers/professionals/technicians and clerical/service/sales. Yet the gender difference we have found is robust against this adjustment. We also examined whether or not the frequency of women providing care for a family member, doing household work or voluntary community services could explain the gendered effects on electoral participation. The gender differences remain even when this factor is controlled for in the analysis.
7. Such health problems may diminish an individual's odds of voting in a national election, especially if they persist over a period of time. Moreover, while self-reported health is strongly correlated with clinical measures of physical and mental illnesses (Lorem et al. 2020; Williams et al. 2017), it may still mask actual health problems, thus further limiting our ability to test it as a mediator. Similarly, the indicator of social engagement is likely subject to measurement error as the question on social engagement or connectedness in the ESS data does not separate contact with colleagues from social contact outside work. It is plausible that individuals working long hours may still have close contact with colleagues, which may in fact increase the likelihood of political engagement, contingent upon colleagues' level of social and political engagement. The sheer act of casting a vote on a national election day does not require much personal resources, be it time or energy or health or social connectedness. However, the decision to vote for a party evolves from a process of becoming informed about the salient political issues of interest to a voter over time. It is in this process that good health, particularly adequate mental and cognitive capacity, and adequate social engagement likely facilitate political participation.

Lorem, G, Cook, S, Leon, DA, Emaus, N and Schirmer, H. (2020) 'Self-reported health as a predictor of mortality: A cohort study of its relation to other health measurements and observation time,' *Scientific reports*, 10, 1, 1-9.

Williams, G, Di Nardo, F and Verma, A. (2017) 'The relationship between self-reported health status and signs of psychological distress within European urban contexts,' *Eur J Public Health*, 27, suppl\_2, 68-73.

**Table S1 – Frequency distributions of all variables**

	Female (n=8595)		Male (n=9114)		Total (n=17709)	
	n	%	n	%	n	%
Total sample	8595	100.00	9114	100.00	17709	100.00
Voted, last national election	6705.887	78.02	7149.779	78.45	13856.93	78.25
No	1889.113	21.98	1964.221	21.55	3852.066	21.75
Long work hours	1140.031	13.26	3142.024	34.47	4344.968	24.54
No	7454.969	86.74	5971.976	65.53	13364.03	75.46
Unsociable work schedule	3311.662	38.53	3958.648	43.43	7284.858	41.14
No	5283.338	61.47	5155.352	56.57	10424.14	58.86
Health						
Fair/bad/very bad	2252.265	26.20	2233.042	24.50	4480.256	25.30
Good/very good	6342.735	73.80	6880.958	75.50	13228.74	74.70
Social engagement						
Low	1387.424	16.14	1574.714	17.28	2965.507	16.75
Moderate - high	7207.576	83.86	7539.286	82.72	14743.49	83.25
Education						
Primary	1545.084	17.98	1818.046	19.95	3368.977	19.02
Secondary	4585.099	53.35	4982.31	54.67	9571.326	54.05
Tertiary	2464.817	28.68	2313.643	25.39	4768.697	26.93
Religious	5048.147	58.73	4976.874	54.61	10012.78	56.54
No	3546.853	41.27	4137.126	45.39	7696.218	43.46
Children under 14	2912.413	33.88	3114.824	34.18	6028.101	34.04
No	5682.587	66.12	5999.176	65.82	11680.9	65.96
Married	5018.073	58.38	5773.679	63.35	10806.48	61.02
No	3576.927	41.62	3340.321	36.65	6902.519	38.98
Occupational class						
Managers/Professionals/Technicians	4317.24	50.23	4147.488	45.51	8450.72	47.72
Clerical support/Service & Sales	3096.281	36.02	1314.012	14.42	4346.206	24.54
Agricultural, Forest & Fishery/Craft	256.4014	2.98	1970.797	21.62	2282.488	12.89
Machine operators & Assemblers	925.078	10.76	1681.703	18.45	2629.587	14.85
Political interest						
High	3752.334	43.66	5114.549	56.12	8903.841	50.28
Low	4842.666	56.34	3999.451	43.88	8805.159	49.72
Close to party	3910.077	45.49	4573.231	50.18	8497.205	47.98
No	4684.923	54.51	4540.769	49.82	9211.795	52.02
Electoral system						

Proportional	3852.742	44.83	4164.552	45.69	8019.87	45.29
Other (Plurality/Mixed)	4742.258	55.17	4949.448	54.31	9689.13	54.71
Voting restrictions	2401.424	27.94	2246.337	24.65	4637.995	26.19
No	6193.576	72.06	6867.663	75.35	13071	73.81
Voting on Sunday	6010.424	69.93	6554.291	71.91	12570.6	70.98
No	2584.576	30.07	2559.709	28.09	5138.397	29.02
Continuous variables	Mean	SD	Mean	SD	Mean	SD
Age	43.034	11.371	43.11	11.956	43.073	11.675
GDP per capita (2010)	32.538	11.59	33.613	11.571	33.091	11.592
Satisfied with democracy (/10)	4.931	2.449	5.19	2.58	5.065	2.52

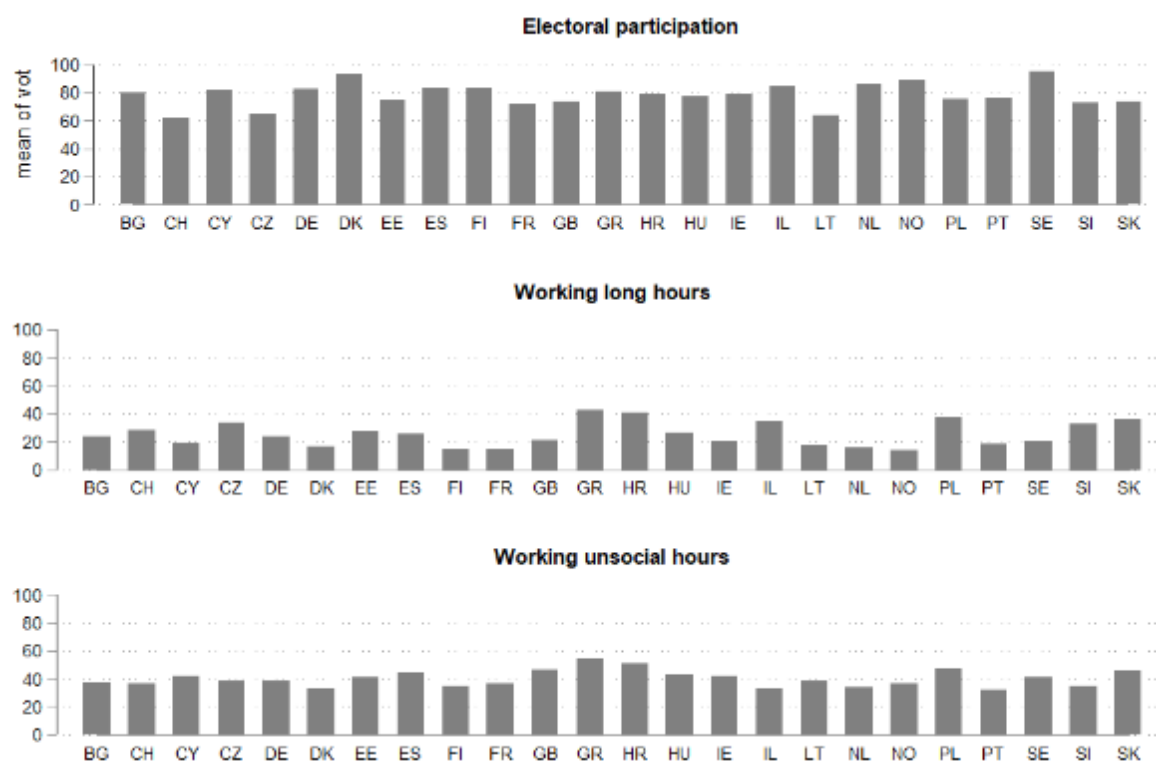
Note: Statistics include study weights.

**Table S2 – Demographic Characteristics of Subpopulations**

	% Total		% working 45+ hrs/wk		% working often evenings/nights/weekends	
	Women	Men	Women	Men	Women	Men
	n =					
% of total	8595	9114	1157.53	3170.36	3311.662	3958.648
	100	100	15.40	34.37	38.53	43.43
Voted in last election	78.02	78.45	76.19	79.21	73.57	76.24
Didn't vote	21.98	21.55	23.81	20.79	26.43	23.76
Education						
Primary	17.98	19.95	17.95	19.41	19.08	22.86
Secondary	53.35	54.67	46.09	51.48	54.46	53.70
Tertiary	28.68	25.39	13.26	29.11	26.46	23.44
Age						
Min	18	18	18	18	18	18
Mean	43.03	43.11	42.83	42.97	42.48	42.64
SD	11.37	11.96	10.99	11.55	11.70	11.88
Max	88	79	88	79	88	79
Children < 14	33.88	34.18	29.59	33.96	33.32	35.60
No children < 14	66.12	65.82	70.41	64.84	66.68	64.40
Married/in union	58.38	63.35	56.62	65.98	53.55	62.60
Not married/single	41.62	36.65	43.38	34.02	46.45	37.40
Occupation						
Managers/Professionals/Technicians	50.23	45.51	52.57	52.43	46.29	40.75
Clerical support/Service & Sales	36.02	14.42	9.61	9.60	40.45	17.44
Agricultural, Forest & Fishery/Craft	2.98	21.62	20.61	20.72	3.28	19.57
Machine operators & Assemblers	10.76	18.45	17.21	17.24	9.98	22.24

Note: Statistics include study weights.

**Figure S1 – Frequencies for key variables in total population of 25 European countries 2010**



**Table S3** Effects of long working hours and unsociable schedules on voting 2010 in Europe: full regressions by gender and occupational groups

Men and Women	(1) All occupations	(2) Managers/ Professionals/ Technicians	(3) Clerical/ Service & Sales	(4) Ag, Forest & Fisheries/ Craft	(5) Operators & Assemblers
Long work hours	-0.06* [0.03]	0.01 [0.05]	-0.34* [0.17]	0.20 [0.16]	-0.33* [0.15]
Unsociable work schedule	-0.21** [0.07]	-0.34* [0.15]	-0.30*** [0.07]	0.10 [0.23]	-0.05 [0.09]
Poor health	-0.16* [0.07]	-0.02 [0.15]	-0.21 [0.15]	-0.33* [0.15]	-0.19 [0.23]
Low social engagement	-0.27*** [0.07]	-0.26* [0.10]	-0.17* [0.08]	-0.20 [0.11]	-0.42*** [0.10]
Political interest	0.84*** [0.11]	0.86*** [0.09]	0.83* [0.37]	0.68** [0.25]	0.99*** [0.08]
Age	0.77*** [0.06]	0.77*** [0.09]	0.79*** [0.11]	0.69** [0.27]	0.72*** [0.15]
Education, secondary	0.15** [0.05]	0.14 [0.18]	-0.01 [0.21]	0.37 [0.24]	0.22 [0.13]
Education, tertiary	0.48*** [0.11]	0.51** [0.18]	0.17 [0.16]	1.60* [0.72]	0.61 [0.39]
Religious	0.14** [0.05]	0.09 [0.16]	0.31*** [0.08]	0.16 [0.13]	-0.08 [0.14]
Children under 14	-0.02 [0.05]	0.09 [0.09]	-0.20 [0.11]	0.08 [0.15]	-0.15 [0.12]
Married	0.18 [0.13]	0.18 [0.14]	0.09 [0.15]	0.25 [0.19]	0.27 [0.19]
Occupation, Clerical Service & Sales	-0.11 [0.09]	--	--	--	--
Occupation, Agr, Forest & Craft	-0.24*** [0.07]	--	--	--	--
Occupation, Operators & Assemblers	-0.35*** [0.10]	--	--	--	--
Close to party	1.02*** [0.10]	0.91*** [0.08]	0.87*** [0.13]	1.20*** [0.16]	1.45*** [0.19]
Satisfied with democracy	0.12 [0.08]	0.16 [0.19]	0.22** [0.08]	0.15 [0.11]	-0.16 [0.11]
GDP per capita (2010)	0.02 [0.23]	0.04 [0.25]	-0.10 [0.26]	-0.04 [0.25]	-0.02 [0.18]

Electoral system	0.37*	0.29	0.30	0.34	0.64***
	[0.18]	[0.26]	[0.17]	[0.21]	[0.17]
Voting restrictions	-0.07	-0.13	-0.09	-0.04	-0.42***
	[0.13]	[0.19]	[0.15]	[0.15]	[0.09]
Voting on Sunday	0.10	0.06	0.13	0.23	0.26**
	[0.26]	[0.28]	[0.30]	[0.28]	[0.09]
Constant	-1.26*	-1.25	-0.94	-1.83*	-1.34**
	[0.61]	[0.70]	[0.71]	[0.84]	[0.45]
Country-level clustering effect	0.21	0.22	0.15	0.11	0.00
	[0.12]	[0.12]	[0.14]	[0.15]	[0.00]
<i>N</i>	17709	8173	4380	2381	2775

<b>Women</b>	(1)	(2)	(3)	(4)	(5)
Long work hours	-0.20*	0.02	-0.62***	-0.53	0.22
	[0.10]	[0.15]	[0.12]	[0.56]	[0.33]
Unsociable work schedule	-0.28***	-0.41**	-0.26***	0.41	-0.10
	[0.08]	[0.13]	[0.07]	[0.43]	[0.25]
Poor health	-0.10	-0.02	-0.06	-0.82	-0.23
	[0.15]	[0.21]	[0.15]	[0.62]	[0.20]
Low social engagement	-0.24	-0.10	-0.15	-0.76	-0.66***
	[0.15]	[0.22]	[0.13]	[0.58]	[0.14]
Political interest	0.93***	0.95***	0.90*	0.29	1.30***
	[0.13]	[0.12]	[0.37]	[0.33]	[0.36]
Age	0.93***	0.95***	0.74***	2.11**	1.45***
	[0.06]	[0.07]	[0.11]	[0.80]	[0.35]
Education, secondary	0.03	0.36	-0.11	-0.24	0.27
	[0.12]	[0.21]	[0.23]	[0.66]	[0.30]
Education, tertiary	0.26	0.59*	0.24*	1.26	0.39
	[0.14]	[0.26]	[0.10]	[0.96]	[0.40]
Religious	0.21*	0.19	0.27**	-1.15*	0.31
	[0.09]	[0.14]	[0.10]	[0.57]	[0.17]
Children under 14	-0.01	0.11	-0.23	1.16	0.18
	[0.08]	[0.12]	[0.13]	[0.69]	[0.17]
Married	0.08	0.16	0.15	-0.36	-0.29
	[0.16]	[0.27]	[0.13]	[0.42]	[0.41]
Occupation, Clerical Service & Sales	-0.24	--	--	--	--
	[0.15]				
Occupation, Agr, Forest & Craft	-0.42**	--	--	--	--
	[0.15]				
Occupation, Operators & Assemblers	-0.75***	--	--	--	--
	[0.16]				
Close to party	0.96***	0.89***	0.89***	0.89	1.74***



Satisfied with democracy	[0.13] 0.18	[0.10] 0.11	[0.16] 0.18*	[0.52] 1.02**	[0.18] -0.07
GDP per capita (2010)	[0.11] -0.05	[0.22] 0.08	[0.09] -0.06	[0.34] -0.83	[0.15] -0.32
Electoral system	[0.25] 0.45*	[0.26] 0.30	[0.28] 0.46**	[0.60] 1.14	[0.23] 0.85***
Voting restrictions	[0.19] -0.07	[0.33] -0.17	[0.17] 0.01	[0.60] -0.68	[0.21] -0.50**
Voting on Sunday	[0.20] 0.14	[0.27] 0.13	[0.19] 0.18	[0.65] 0.25	[0.17] 0.60***
Constant	[0.29] -1.28 [0.69]	[0.32] -1.77* [0.74]	[0.32] -1.08 [0.76]	[0.48] -2.27 [1.76]	[0.17] -2.89*** [0.74]
Country-level clustering effect	0.24 [0.14]	0.24 [0.13]	0.16 [0.20]	0.24 [0.33]	0.00 [0.00]
<i>N</i>	8595	4251	3038	316	990

<b>Men</b>	(1)	(2)	(3)	(4)	(5)
Long work hours	0.02 [0.05]	0.15 [0.08]	-0.07 [0.28]	0.26 [0.16]	-0.52** [0.18]
Unsociable work schedule	-0.14	-0.30	-0.33	0.07	-0.03
Poor health	[0.09] -0.22*	[0.21] -0.05	[0.23] -0.53*	[0.23] -0.31	[0.15] -0.21
Low social engagement	[0.10] -0.28***	[0.11] -0.36***	[0.24] -0.17	[0.27] -0.17	[0.34] -0.32
Political interest	[0.08] 0.81***	[0.05] 0.87***	[0.37] 0.74*	[0.14] 0.76**	[0.20] 0.89***
Age	[0.12] 0.61***	[0.10] 0.60***	[0.38] 0.94**	[0.24] 0.58*	[0.10] 0.37**
Education, secondary	[0.08] 0.21***	[0.15] -0.04	[0.29] 0.20	[0.27] 0.37	[0.14] 0.23*
Education, tertiary	[0.04] 0.67**	[0.24] 0.49*	[0.18] 0.12	[0.24] 2.64***	[0.11] 0.84
Religious	[0.21] 0.07	[0.23] -0.05	[0.44] 0.36	[0.75] 0.26**	[0.58] -0.22
Children under 14	[0.06] -0.04	[0.19] 0.08	[0.36] -0.06	[0.09] -0.04	[0.20] -0.33
Married	[0.06] 0.29*	[0.07] 0.23	[0.16] -0.10	[0.19] 0.35	[0.18] 0.57***
Occupation, Clerical Service & Sales	[0.13] -0.02 [0.12]	[0.18] --	[0.40] --	[0.23] --	[0.09] --

Occupation, Agr, Forest & Craft	-0.07 [0.10]	--	--	--	--
Occupation, Operators & Assemblers	-0.08 [0.13]	--	--	--	--
Close to party	1.07** [0.10]	0.95*** [0.11]	0.83*** [0.16]	1.25*** [0.12]	1.40*** [0.26]
Satisfied with democracy	0.08 [0.12]	0.21 [0.19]	0.27 [0.27]	0.02 [0.14]	-0.23* [0.11]
GDP per capita (2010)	0.03 [0.24]	-0.00 [0.31]	-0.31 [0.34]	-0.00 [0.25]	0.14 [0.18]
Electoral system	0.28 [0.18]	0.26 [0.24]	-0.01 [0.28]	0.25 [0.21]	0.61*** [0.18]
Voting restrictions	-0.10 [0.11]	-0.08 [0.15]	-0.48* [0.19]	-0.06 [0.15]	-0.41*** [0.10]
Voting on Sunday	0.08 [0.26]	0.04 [0.31]	0.11 [0.30]	0.21 [0.30]	0.15 [0.09]
Constant	-1.17 [0.61]	-0.88 [0.81]	-0.50 [0.92]	-1.63* [0.82]	-0.78 [0.50]
Country-level clustering effect	0.18 [0.12]	0.18 [0.12]	0.06 [0.07]	0.07 [0.14]	0.00 [0.00]
<i>N</i>	9114	3922	1342	2065	1785

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table S4** Robustness Check: Working hours (continuous, standardized) and unsociable schedules on voting 2010 in Europe

	(1) total	(2) male	(3) female
Long work hours	-0.04 [0.03]	-0.03 [0.06]	-0.04 [0.05]
Unsociable work schedule	-0.20** [0.07]	-0.12 [0.08]	-0.30*** [0.08]
Poor health	-0.16* [0.07]	-0.22* [0.10]	-0.11 [0.15]
Low social engagement	-0.27*** [0.07]	-0.28*** [0.08]	-0.24 [0.16]
Political interest	0.84*** [0.10]	0.81*** [0.12]	0.92*** [0.13]

Age	0.77*** [0.06]	0.61*** [0.08]	0.93*** [0.06]
Education, secondary	0.15** [0.05]	0.21*** [0.04]	0.04 [0.12]
Education, tertiary	0.48*** [0.11]	0.67** [0.21]	0.26 [0.15]
Religious	0.14** [0.05]	0.07 [0.05]	0.20* [0.09]
Children under 14	-0.03 [0.05]	-0.04 [0.06]	-0.01 [0.08]
Married	0.18 [0.14]	0.29* [0.14]	0.08 [0.16]
Occupation, Clerical Service & Sales	-0.12 [0.08]	-0.04 [0.13]	-0.23 [0.14]
Occupation, Agr, Forest & Craft	-0.24*** [0.07]	-0.08 [0.10]	-0.44** [0.15]
Occupation, Operators & Assemblers	-0.35*** [0.10]	-0.10 [0.13]	-0.76*** [0.16]
Close to party	0.12 [0.08]	0.08 [0.12]	0.17 [0.11]
Satisfied with democracy	1.02*** [0.10]	1.07*** [0.10]	0.96*** [0.13]
GDP per capita (2010)	0.02 [0.23]	0.03 [0.24]	-0.04 [0.25]
Electoral system	0.37* [0.18]	0.28 [0.19]	0.45* [0.20]
Voting restrictions	-0.07 [0.13]	-0.09 [0.11]	-0.07 [0.20]
Voting on Sunday	0.10 [0.26]	0.08 [0.26]	0.14 [0.29]
Constant	-1.27* [0.61]	-1.17 [0.61]	-1.29 [0.69]
Country-level clustering effect	0.21 [0.12]	0.17 [0.12]	0.24 [0.14]
<i>N</i>	17709	9114	8595

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table S5** Robustness Check: Long working hours and unsociable schedules on voting 2010 in Europe, controlling for household income (deciles)

	(1) total	(2) male	(3) female
Long work hours	-0.07 [0.06]	0.02 [0.10]	-0.22** [0.08]
Unsociable work schedule	-0.18 [0.10]	-0.11 [0.11]	-0.24* [0.11]
Poor health	-0.17** [0.05]	-0.21** [0.08]	-0.15 [0.15]
Low social engagement	-0.27*** [0.07]	-0.37*** [0.10]	-0.13 [0.14]
Political interest (high/moderate)	0.84*** [0.08]	0.82*** [0.10]	0.91*** [0.11]
Age	0.78*** [0.06]	0.57*** [0.08]	1.03*** [0.09]
Education, secondary	0.05 [0.08]	0.05 [0.07]	0.01 [0.15]
Education, tertiary	0.38* [0.17]	0.51 [0.29]	0.26 [0.17]
Religious	0.11 [0.06]	-0.05 [0.07]	0.28** [0.09]
Children under 14	-0.03 [0.06]	-0.08 [0.04]	0.02 [0.10]
Married	0.16 [0.13]	0.28* [0.13]	0.06 [0.15]
Occupation, Clerical Service & Sales	-0.05 [0.10]	-0.01 [0.13]	-0.14 [0.12]
Occupation, Agr, Forest & Craft	-0.24* [0.10]	-0.07 [0.10]	-0.57** [0.19]
Occupation, Operators & Assemblers	-0.30*** [0.08]	-0.07 [0.14]	-0.64*** [0.12]
Household income (decile)	0.04 [0.03]	0.05 [0.04]	0.04 [0.02]
Satisfied with democracy	0.13	0.10	0.19

Close to party	[0.08] 1.00***	[0.12] 1.04***	[0.14] 0.95***
GDP per capita (2010)	[0.08] 0.02	[0.09] -0.00	[0.14] -0.01
Electoral system	[0.22] 0.40	[0.23] 0.31	[0.25] 0.48*
Voting restrictions	[0.20] -0.04	[0.20] -0.06	[0.22] -0.05
Voting on Sunday	[0.15] 0.10	[0.13] 0.06	[0.22] 0.18
Constant	[0.27] -1.48*	[0.26] -1.14	[0.31] -1.88**
Country-level clustering effect	[0.60] 0.21	[0.60] 0.17	[0.72] 0.25
<i>N</i>	[0.12] 14206	[0.11] 7389	[0.15] 6817

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table S6** Robustness Check: Long working hours and unsociable schedules on voting 2010 in Europe: interactions between health and work hours and work schedules

	(1) total	(2) male	(3) female
Long work hours	-0.04 [0.06]	0.05 [0.11]	-0.21* [0.11]
Poor health	-0.23** [0.08]	-0.35* [0.17]	-0.11 [0.15]
Long work hours x Poor health	-0.09 [0.16]	-0.11 [0.32]	0.04 [0.12]
Unsociable work schedule	-0.26** [0.10]	-0.23** [0.09]	-0.28* [0.11]
Unsociable work schedule x Poor health	0.20 [0.17]	0.36 [0.19]	-0.00 [0.22]
Low social engagement	-0.27*** [0.07]	-0.28*** [0.08]	-0.24 [0.15]
Political interest (high/moderate)	0.84***	0.81***	0.93***

Age	[0.11] 0.77***	[0.12] 0.61***	[0.13] 0.93***
Education, secondary	[0.06] 0.15**	[0.08] 0.21***	[0.06] 0.03
Education, tertiary	[0.05] 0.48***	[0.04] 0.67**	[0.12] 0.26
Religious	[0.11] 0.14**	[0.21] 0.07	[0.14] 0.21*
Children under 14	[0.05] -0.02	[0.06] -0.05	[0.09] -0.01
Married	[0.05] 0.18	[0.06] 0.29*	[0.08] 0.08
Occupation, Clerical Service & Sales	[0.13] -0.11	[0.14] -0.02	[0.16] -0.24
Occupation, Agr, Forest & Craft	[0.09] -0.24***	[0.12] -0.07	[0.15] -0.43**
Occupation, Operators & Assemblers	[0.07] -0.34***	[0.10] -0.08	[0.15] -0.75***
Satisfied with democracy	[0.10] 0.12	[0.13] 0.08	[0.16] 0.18
Close to party	[0.08] 1.02***	[0.12] 1.07***	[0.11] 0.96***
GDP per capita (2010)	[0.10] 0.02	[0.10] 0.03	[0.14] -0.05
Electoral system	[0.23] 0.37*	[0.24] 0.28	[0.25] 0.45*
Voting restrictions	[0.18] -0.07	[0.18] -0.09	[0.19] -0.06
Voting on Sunday	[0.13] 0.10	[0.11] 0.08	[0.20] 0.14
Constant	[0.26] -1.25*	[0.26] -1.14	[0.29] -1.28
Country-level clustering effect	[0.61] 0.21	[0.61] 0.18	[0.69] 0.24
<i>N</i>	[0.12] 17709	[0.12] 9114	[0.14] 8595

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table S7** Robustness Check: Long working hours and unsociable schedules on voting 2010 in Europe: interactions between social engagement and work hours and work schedules

	(1) total	(2) male	(3) female
Long work hours	-0.08 [0.04]	-0.03 [0.06]	-0.18 [0.11]
Poor health	-0.32*** [0.08]	-0.32 [0.21]	-0.33 [0.23]
Long work hours x Poor health	0.07 [0.11]	0.24 [0.14]	-0.12 [0.16]
Unsociable work schedule	-0.22* [0.09]	-0.12 [0.14]	-0.32*** [0.05]
Unsociable work schedule x Poor health	0.07 [0.11]	-0.11 [0.30]	0.25 [0.23]
Low social engagement	-0.16* [0.07]	-0.22* [0.10]	-0.11 [0.15]
Political interest (high/moderate)	0.84*** [0.11]	0.81*** [0.12]	0.93*** [0.13]
Age	0.77*** [0.06]	0.61*** [0.08]	0.93*** [0.06]
Education, secondary	0.15** [0.05]	0.21*** [0.04]	0.03 [0.12]
Education, tertiary	0.48*** [0.11]	0.67** [0.20]	0.25 [0.14]
Religious	0.14** [0.05]	0.07 [0.06]	0.20* [0.09]
Children under 14	-0.02 [0.05]	-0.04 [0.06]	-0.01 [0.08]
Married	0.18 [0.13]	0.29* [0.13]	0.08 [0.16]
Occupation, Clerical Service & Sales	-0.11 [0.09]	-0.02 [0.12]	-0.24 [0.15]
Occupation, Agr, Forest & Craft	-0.24*** [0.07]	-0.07 [0.10]	-0.42** [0.16]
Occupation, Operators & Assemblers	-0.35*** [0.10]	-0.08 [0.13]	-0.75*** [0.16]
Satisfied with	0.12	0.08	0.17

democracy			
Close to party	[0.08] 1.02***	[0.12] 1.07***	[0.11] 0.96***
GDP per capita (2010)	[0.10] 0.02	[0.10] 0.03	[0.14] -0.05
Electoral system	[0.23] 0.37*	[0.24] 0.28	[0.26] 0.46*
Voting restrictions	[0.18] -0.06	[0.18] -0.09	[0.19] -0.07
Voting on Sunday	[0.13] 0.10	[0.11] 0.08	[0.20] 0.14
	[0.26]	[0.26]	[0.29]
Constant	-1.25*	-1.17	-1.25
	[0.61]	[0.61]	[0.70]
Country-level clustering effect	0.21	0.18	0.24
	[0.12]	[0.12]	[0.14]
<i>N</i>	17709	9114	8595

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table S8** Robustness Check: Effects of long working hours and unsociable schedules on voting 2010 in Europe, excluding closeness to party

	(1)	(2)	(3)	(4)	(5)
Men and Women	All occupations	Managers/ Professionals/ Technicians	Clerical/ Service & Sales	Ag, Forest & Fisheries/ Craft	Operators & Assemblers
Long work hours	-0.05* [0.03]	-0.00 [0.05]	-0.34* [0.18]	0.16 [0.17]	-0.22 [0.14]
Unsociable work schedule	-0.21*** [0.06]	-0.32** [0.14]	-0.30*** [0.08]	0.11 [0.20]	-0.06 [0.10]
Poor health	-0.16** [0.07]	-0.02 [0.16]	-0.22 [0.14]	-0.29* [0.15]	-0.11 [0.18]
Low social engagement	-0.29*** [0.08]	-0.27*** [0.09]	-0.20** [0.08]	-0.19* [0.10]	-0.43*** [0.12]
Political interest	1.06*** [0.11]	1.07*** [0.10]	1.02*** [0.33]	0.89*** [0.23]	1.18*** [0.07]
Age	0.83*** [0.07]	0.83*** [0.09]	0.85*** [0.11]	0.76*** [0.27]	0.79*** [0.13]
Education, secondary	0.22*** [0.06]	0.08 [0.20]	-0.00 [0.20]	0.29 [0.21]	0.30** [0.12]
Education, tertiary	0.71*** [0.11]	0.50*** [0.19]	0.22 [0.15]	1.41* [0.73]	0.69 [0.42]
Religious	0.19*** [0.05]	0.11 [0.16]	0.35*** [0.08]	0.26* [0.15]	0.04 [0.13]
Children under 14	-0.02	0.09	-0.20*	0.07	-0.14



	[0.06]	[0.07]	[0.12]	[0.16]	[0.09]
Married	0.16	0.15	0.11	0.15	0.22
	[0.12]	[0.13]	[0.14]	[0.19]	[0.17]
Satisfied with democracy	0.20**	0.25	0.27***	0.21	-0.04
	[0.10]	[0.19]	[0.08]	[0.13]	[0.10]
GDP per capita (2010)	0.09	0.09	-0.08	0.05	0.00
	[0.23]	[0.26]	[0.26]	[0.24]	[0.24]
Electoral system	0.34*	0.26	0.30*	0.36	0.53**
	[0.18]	[0.26]	[0.18]	[0.22]	[0.24]
Voting restrictions	-0.09	-0.14	-0.14	-0.02	-0.35***
	[0.13]	[0.18]	[0.15]	[0.16]	[0.11]
Voting on Sunday	0.10	0.08	0.10	0.20	0.09
	[0.26]	[0.28]	[0.30]	[0.26]	[0.25]
Constant	-1.50**	-1.18	-0.91	-1.76**	-1.18*
	[0.62]	[0.72]	[0.73]	[0.82]	[0.71]
Country-level clustering effect	0.22*	0.23*	0.17	0.11	0.06
	[0.13]	[0.12]	[0.15]	[0.14]	[0.09]
<i>N</i>	17709	8173	4380	2381	2775

<b>Women</b>	(1)	(2)	(3)	(4)	(5)
Long work hours	-0.17*	-0.02	-0.64***	-0.45	0.25
	[0.09]	[0.15]	[0.13]	[0.56]	[0.33]
Unsociable work schedule	-0.28***	-0.40***	-0.26***	0.27	-0.07
	[0.07]	[0.13]	[0.09]	[0.45]	[0.25]
Poor health	-0.10	0.01	-0.05	-0.77	-0.16
	[0.15]	[0.21]	[0.13]	[0.61]	[0.17]
Low social engagement	-0.32**	-0.17	-0.18	-0.87	-0.63***
	[0.15]	[0.22]	[0.12]	[0.59]	[0.11]
Political interest	1.14***	1.16***	1.07***	0.38	1.47***
	[0.11]	[0.12]	[0.32]	[0.28]	[0.37]
Age	1.00***	1.03***	0.81***	2.20***	1.52***
	[0.07]	[0.08]	[0.10]	[0.80]	[0.35]
Education, secondary	0.23*	0.31	-0.05	-0.41	0.30
	[0.13]	[0.23]	[0.24]	[0.66]	[0.35]
Education, tertiary	0.65***	0.56**	0.32***	1.06	0.80**
	[0.15]	[0.28]	[0.08]	[0.95]	[0.39]
Religious	0.22***	0.18	0.32***	-0.94*	0.35**
	[0.08]	[0.12]	[0.10]	[0.50]	[0.14]
Children under 14	0.00	0.13	-0.23*	1.23*	0.19
	[0.08]	[0.11]	[0.14]	[0.68]	[0.14]
Married	0.07	0.11	0.18*	-0.39	-0.25
	[0.14]	[0.25]	[0.10]	[0.40]	[0.39]
Satisfied with democracy	0.27**	0.18	0.24***	1.09***	0.08

GDP per capita (2010)	[0.13] 0.03	[0.22] 0.11	[0.07] -0.05	[0.37] -0.73	[0.21] -0.34
Electoral system	[0.25] 0.43**	[0.26] 0.28	[0.28] 0.47***	[0.59] 1.01*	[0.29] 0.78***
Voting restrictions	[0.20] -0.11	[0.33] -0.18	[0.18] -0.06	[0.61] -0.54	[0.26] -0.58***
Voting on Sunday	[0.19] 0.14	[0.26] 0.14	[0.19] 0.16	[0.65] 0.31	[0.18] 0.36**
Constant	[0.29] -1.75**	[0.31] -1.68**	[0.33] -1.09	[0.46] -2.44	[0.18] -2.58***
Country-level clustering effect	[0.68] 0.24*	[0.75] 0.24*	[0.78] 0.18	[1.75] 0.30	[0.87] 0.00
<i>N</i>	[0.14] 8595	[0.12] 4251	[0.19] 3038	[0.36] 316	[0.00] 990

<b>Men</b>	(1)	(2)	(3)	(4)	(5)
Long work hours	-0.17* [0.09]	0.12* [0.07]	-0.06 [0.29]	0.20 [0.16]	-0.42*** [0.16]
Unsociable work schedule	-0.28***	-0.27	-0.39* [0.21]	0.10 [0.20]	-0.06 [0.09]
Poor health	-0.10 [0.15]	-0.09 [0.12]	-0.56** [0.24]	-0.28 [0.25]	-0.13 [0.29]
Low social engagement	-0.32**	-0.33***	-0.25	-0.14	-0.31
Political interest	1.14*** [0.11]	1.06*** [0.11]	0.93*** [0.35]	0.97*** [0.22]	1.07*** [0.09]
Age	1.00*** [0.07]	0.63*** [0.14]	1.02*** [0.31]	0.65** [0.26]	0.45*** [0.14]
Education, secondary	0.23* [0.13]	-0.08 [0.25]	0.11 [0.16]	0.31 [0.19]	0.27** [0.11]
Education, tertiary	0.65*** [0.15]	0.52** [0.21]	0.07 [0.40]	2.49*** [0.66]	0.71 [0.58]
Religious	0.22*** [0.08]	0.02 [0.21]	0.40 [0.34]	0.33*** [0.12]	-0.09 [0.18]
Children under 14	0.00 [0.08]	0.07 [0.06]	-0.02 [0.15]	-0.05 [0.20]	-0.26* [0.15]
Married	0.07 [0.14]	0.23 [0.18]	-0.12 [0.38]	0.25 [0.22]	0.43*** [0.08]
Satisfied with democracy	0.27**	0.31	0.32	0.09	-0.05
GDP per capita (2010)	[0.13] 0.03	[0.19] 0.06	[0.25] -0.24	[0.16] 0.08	[0.11] 0.15
Electoral system	[0.25] 0.43**	[0.32] 0.21	[0.33] -0.07	[0.24] 0.28	[0.20] 0.55***

Voting restrictions	[0.20] -0.11	[0.25] -0.07	[0.28] -0.44**	[0.21] -0.05	[0.19] -0.29***
Voting on Sunday	[0.19] 0.14	[0.16] 0.06	[0.19] 0.07	[0.15] 0.17	[0.09] 0.10
Constant	[0.29] -1.75**	[0.31] -0.83	[0.31] -0.42	[0.28] -1.53*	[0.11] -0.74
Country-level clustering effect	[0.68] 0.24*	[0.83] 0.21	[0.94] 0.07	[0.80] 0.07	[0.56] 0.00
	[0.14]	[0.13]	[0.07]	[0.15]	[0.00]
<i>N</i>	8595	3922	1342	2065	1785

Standard errors in brackets

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table S9** Robustness Check: Effects of long working hours and unsociable schedules on voting 2010 in Europe, interacting gender (female) with work hours and work schedules

	(1) All occupations	(2) Managers/ Professionals/ Technicians	(3) Clerical/ Service & Sales	(4) Ag, Forest & Fisheries/ Craft	(5) Operators & Assemblers
Long work hours	0.00 [0.04]	0.10 [0.07]	-0.03 [0.29]	0.24 [0.16]	-0.55*** [0.19]
Female	0.20*** [0.07]	0.29 [0.21]	0.05 [0.16]	-0.05 [0.27]	-0.27 [0.19]
Long work hours x Female	-0.12 [0.10]	-0.05 [0.18]	-0.55** [0.24]	-0.44 [0.33]	0.81** [0.34]
Unsociable work schedule	-0.14 [0.09]	-0.31 [0.21]	-0.37 [0.25]	0.06 [0.23]	0.00 [0.16]
Unsociable work schedule x Female	-0.14* [0.09]	-0.09 [0.20]	0.11 [0.29]	0.40 [0.39]	-0.23 [0.34]
Poor health	-0.17** [0.07]	-0.03 [0.15]	-0.20 [0.15]	-0.32** [0.15]	-0.19 [0.23]
Low social engagement	-0.28*** [0.07]	-0.24** [0.10]	-0.18** [0.08]	-0.19* [0.10]	-0.42*** [0.09]
Political interest (high/moderate)	0.87*** [0.12]	0.90*** [0.08]	0.83** [0.36]	0.69*** [0.24]	0.98*** [0.08]
Age	0.03*** [0.00]	0.03*** [0.00]	0.03*** [0.00]	0.03*** [0.01]	0.03*** [0.01]
Education, secondary	0.21*** [0.06]	0.11 [0.18]	-0.01 [0.21]	0.37 [0.24]	0.23* [0.13]
Education, tertiary	0.64***	0.47***	0.18	1.60**	0.59

Religious	[0.12] 0.13***	[0.18] 0.07	[0.16] 0.32***	[0.75] 0.17	[0.40] -0.05
Children under 14	[0.05] -0.03	[0.17] 0.08	[0.09] -0.21*	[0.12] 0.08	[0.13] -0.16
Married	[0.05] 0.18	[0.08] 0.19	[0.11] 0.10	[0.14] 0.24	[0.11] 0.26
Satisfied with democracy	[0.14] 0.03	[0.13] 0.03	[0.15] 0.04***	[0.19] 0.03	[0.18] -0.03
Close to party	[0.02] 1.03***	[0.04] 0.92***	[0.02] 0.87***	[0.02] 1.21***	[0.02] 1.46***
GDP per capita (2010)	[0.10] 0.00	[0.08] 0.00	[0.13] -0.01	[0.16] -0.00	[0.19] -0.00
Electoral system	[0.01] 0.36**	[0.02] 0.30	[0.02] 0.31*	[0.02] 0.34	[0.01] 0.64***
Voting restrictions	[0.18] -0.07	[0.25] -0.13	[0.17] -0.10	[0.21] -0.04	[0.17] -0.43***
Voting on Sunday	[0.13] 0.10	[0.19] 0.07	[0.15] 0.12	[0.16] 0.23	[0.09] 0.27***
Constant	[0.26] -1.62***	[0.29] -1.42**	[0.30] -0.96	[0.27] -1.82**	[0.10] -1.27***
Country-level clustering effect	[0.60] 0.20*	[0.70] 0.22*	[0.71] 0.15	[0.83] 0.11	[0.46] 0.00
<i>N</i>	[0.12] 17709	[0.12] 8173	[0.14] 4380	[0.14] 2381	[0.00] 2775

Standard errors in brackets

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table S10** Mediation effects of long working hours and unsociable schedules on voting 2010 in Europe through health, social engagement, and political interest

<b>Men and Women</b>	(1) All occupations	(2) Managers/ Professionals/ Technicians	(3) Clerical/ Service & Sales	(4) Ag, Forest & Fisheries/ Craft	(5) Operators & Assemblers
Long work hours	-0.06* [0.03]	0.01 [0.05]	-0.34* [0.17]	0.20 [0.16]	-0.33* [0.15]
Unsociable work schedule	-0.21** [0.07]	-0.34* [0.15]	-0.30*** [0.07]	0.10 [0.23]	-0.05 [0.09]
Poor health	-0.16* [0.07]	-0.02 [0.15]	-0.21 [0.15]	-0.33* [0.15]	-0.19 [0.23]
Low social engagement	-0.27*** [0.07]	-0.26* [0.10]	-0.17* [0.08]	-0.20 [0.11]	-0.42*** [0.10]

Political interest	0.84*** [0.11]	0.86*** [0.09]	0.83* [0.37]	0.68** [0.25]	0.99*** [0.08]
Constant	-1.26* [0.61]	-1.25 [0.70]	-0.94 [0.71]	-1.83* [0.84]	-1.34** [0.45]
<i>Poor health</i>					
Long work hours	-0.10 [0.08]	-0.02 [0.14]	-0.10 [0.15]	-0.06 [0.12]	-0.14 [0.09]
Unsociable work schedule	0.13* [0.05]	0.20 [0.11]	0.11* [0.06]	0.08 [0.19]	-0.21 [0.20]
Constant	-1.33*** [0.11]	-1.63*** [0.11]	-1.20*** [0.10]	-1.09*** [0.14]	-0.76*** [0.13]
<i>Low social engagement</i>					
Long work hours	0.07 [0.09]	0.17 [0.10]	0.22 [0.19]	-0.18 [0.12]	-0.03 [0.14]
Unsociable work schedule	0.08 [0.06]	0.14** [0.05]	0.02 [0.09]	0.10 [0.26]	-0.08 [0.15]
Constant	-1.71*** [0.17]	-1.95*** [0.17]	-1.68*** [0.18]	-1.52*** [0.20]	-1.29*** [0.18]
<i>Political interest</i>					
Long work hours	0.44*** [0.13]	0.38*** [0.05]	0.33 [0.23]	0.04 [0.18]	0.31 [0.19]
Unsociable work schedule	-0.24*** [0.03]	-0.06 [0.04]	-0.30* [0.12]	0.02 [0.09]	-0.31* [0.15]
Constant	-0.14 [0.12]	0.25 [0.13]	-0.42*** [0.11]	-0.44*** [0.11]	-0.54*** [0.13]
<i>N</i>	17709	8173	4380	2381	2775
<b>Women</b>					
	(1)	(2)	(3)	(4)	(5)
Long work hours	-0.20* [0.10]	0.02 [0.15]	-0.62*** [0.12]	-0.53 [0.56]	0.22 [0.33]
Unsociable work schedule	-0.28*** [0.08]	-0.41** [0.13]	-0.26*** [0.07]	0.41 [0.43]	-0.10 [0.25]
Poor health	-0.10 [0.15]	-0.02 [0.21]	-0.06 [0.15]	-0.82 [0.62]	-0.23 [0.20]
Low social engagement	-0.24 [0.15]	-0.10 [0.22]	-0.15 [0.13]	-0.76 [0.58]	-0.66*** [0.14]
Political interest	0.93*** [0.13]	0.95*** [0.12]	0.90* [0.37]	0.29 [0.33]	1.30*** [0.36]
Constant	-1.28 [0.69]	-1.77* [0.74]	-1.08 [0.76]	-2.27 [1.76]	-2.89*** [0.74]
<i>Poor health</i>					
Long work hours	0.00	-0.09	0.07	1.04**	0.35

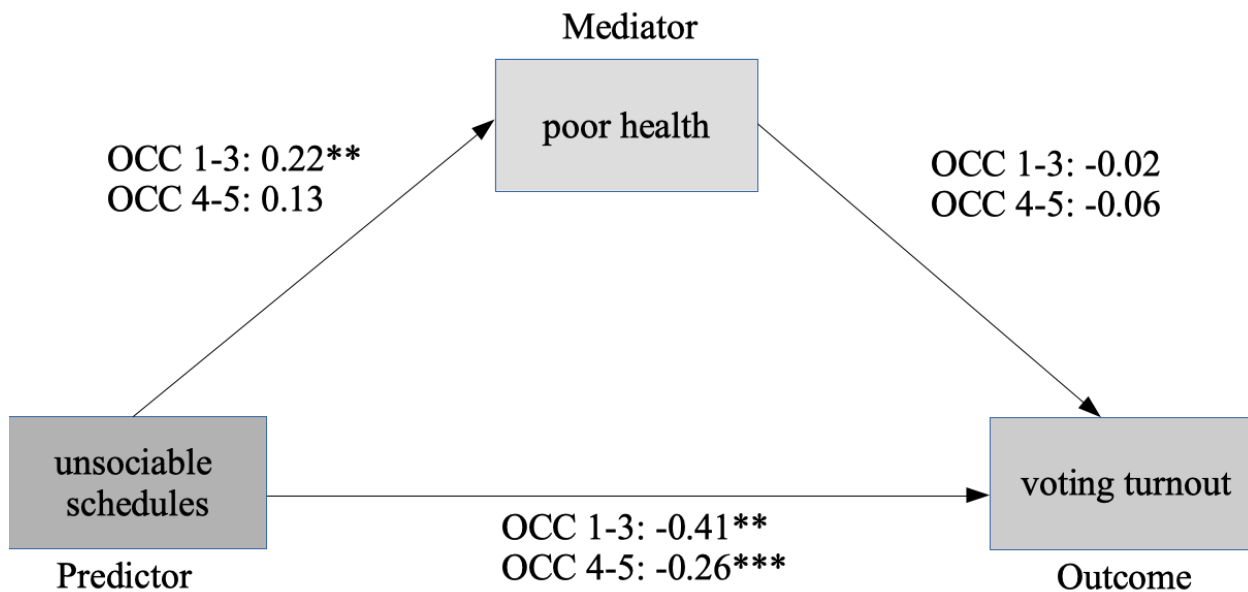
Unsociable work schedule	[0.15] 0.10	[0.19] 0.22**	[0.22] 0.13	[0.37] -0.40	[0.30] -0.55*
Constant	[0.09] -1.25*** [0.13]	[0.07] -1.58*** [0.14]	[0.14] -1.16*** [0.13]	[0.32] -0.98*** [0.22]	[0.27] -0.43* [0.20]
<i>Low social engagement</i>					
Long work hours	0.03 [0.10]	-0.00 [0.17]	0.11 [0.26]	0.91* [0.41]	0.35 [0.26]
Unsociable work schedule	0.11* [0.05]	0.15 [0.09]	0.07 [0.08]	-0.41 [0.51]	-0.04 [0.19]
Constant	-1.74*** [0.19]	-2.05*** [0.20]	-1.61*** [0.20]	-1.47*** [0.41]	-1.19*** [0.20]
<i>Political interest</i>					
Long work hours	0.39*** [0.11]	0.27** [0.10]	0.06 [0.17]	-0.29 [0.48]	0.40 [0.49]
Unsociable work schedule	-0.30** [0.10]	-0.07 [0.10]	-0.38* [0.15]	-0.19 [0.33]	-0.62 [0.33]
Constant	-0.32* [0.14]	0.04 [0.15]	-0.56*** [0.14]	-1.09** [0.35]	-0.75*** [0.19]
<i>N</i>	8595	4251	3038	316	990
<b>Men</b>					
Long work hours	(1) 0.02 [0.05]	(2) 0.15 [0.08]	(3) -0.07 [0.28]	(4) 0.26 [0.16]	(5) -0.52** [0.18]
Unsociable work schedule	-0.14 [0.09]	-0.30 [0.21]	-0.33 [0.23]	0.07 [0.23]	-0.03 [0.15]
Poor health	-0.22* [0.10]	-0.05 [0.11]	-0.53* [0.24]	-0.31 [0.27]	-0.21 [0.34]
Low social engagement	-0.28***	-0.36***	-0.17	-0.17	-0.32
Political interest	[0.08] 0.81***	[0.05] 0.87***	[0.37] 0.74*	[0.14] 0.76**	[0.20] 0.89***
Constant	[0.12] -1.17 [0.61]	[0.10] -0.88 [0.81]	[0.38] -0.50 [0.92]	[0.24] -1.63* [0.82]	[0.10] -0.78 [0.50]
<i>Poor health</i>					
Long work hours	-0.10 [0.06]	0.09 [0.15]	-0.13 [0.11]	-0.16 [0.16]	-0.20 [0.13]
Unsociable work schedule	0.15 [0.10]	0.17 [0.17]	0.02 [0.27]	0.12 [0.19]	0.01 [0.25]
Constant	-1.41*** [0.11]	-1.71*** [0.09]	-1.18*** [0.16]	-1.11*** [0.16]	-0.98*** [0.17]

<i>Low social engagement</i>					
Long work hours	0.06 [0.13]	0.12 [0.21]	0.61* [0.30]	-0.26* [0.13]	-0.01 [0.13]
Unsociable work schedule	0.09 [0.10]	0.18 [0.09]	0.04 [0.22]	0.15 [0.26]	-0.03 [0.18]
Constant	-1.71*** [0.16]	-1.86*** [0.16]	-2.00*** [0.21]	-1.54*** [0.20]	-1.38*** [0.17]
<i>Political interest</i>					
Long work hours	0.25 [0.14]	0.10 [0.10]	0.15 [0.19]	0.03 [0.21]	0.15 [0.19]
Unsociable work schedule	-0.18*** [0.04]	0.02 [0.10]	-0.25 [0.16]	0.07 [0.11]	-0.27 [0.16]
Constant	0.10 [0.12]	0.65*** [0.14]	0.03 [0.09]	-0.36*** [0.10]	-0.36* [0.15]
<i>N</i>	9114	3922	1342	2065	1785

Standard errors in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

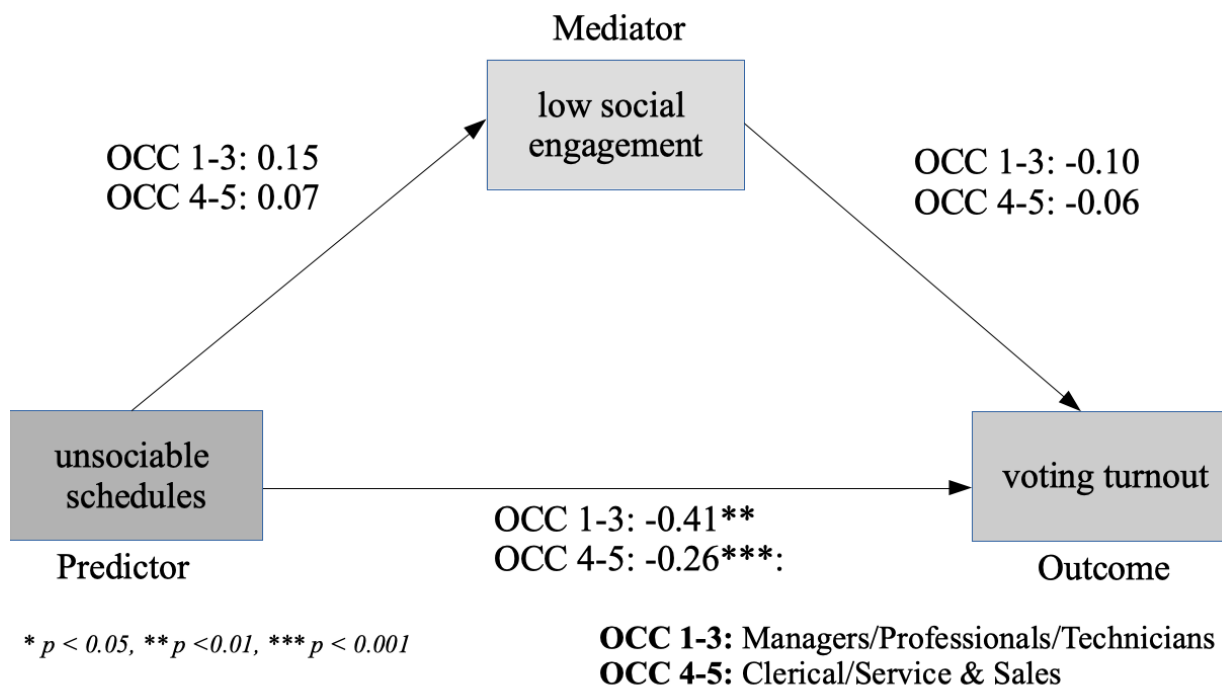
**Figure S2 – Effects of unsociable work schedule on voting via poor health in women**



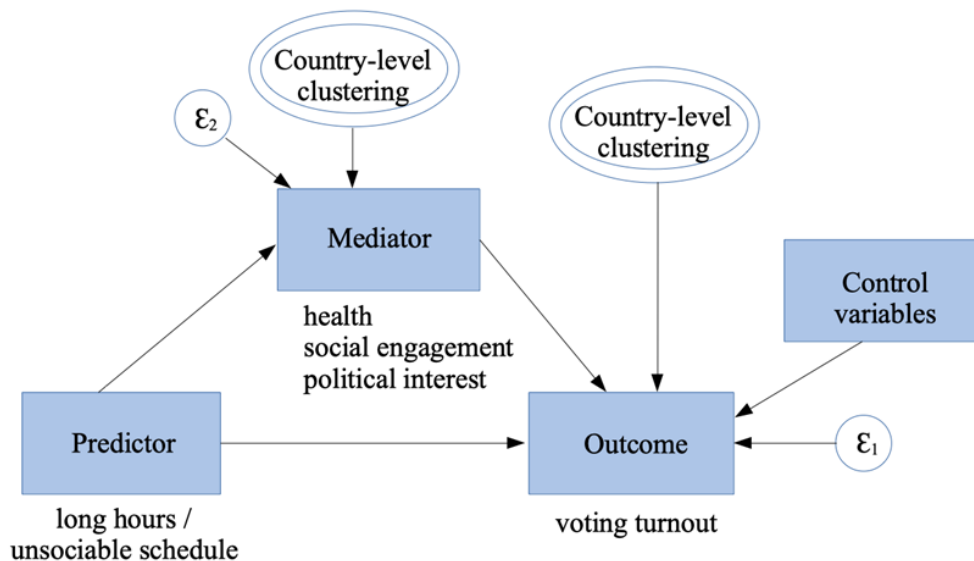
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**OCC 1-3:** Managers/Professionals/Technicians  
**OCC 4-5:** Clerical/Service & Sales

**Figure S3 – Effects of unsociable work schedule on voting via low social engagement in women**



**Figure 1 Conceptual diagram and overview of the Generalized Structural Equation Models for testing the hypotheses**

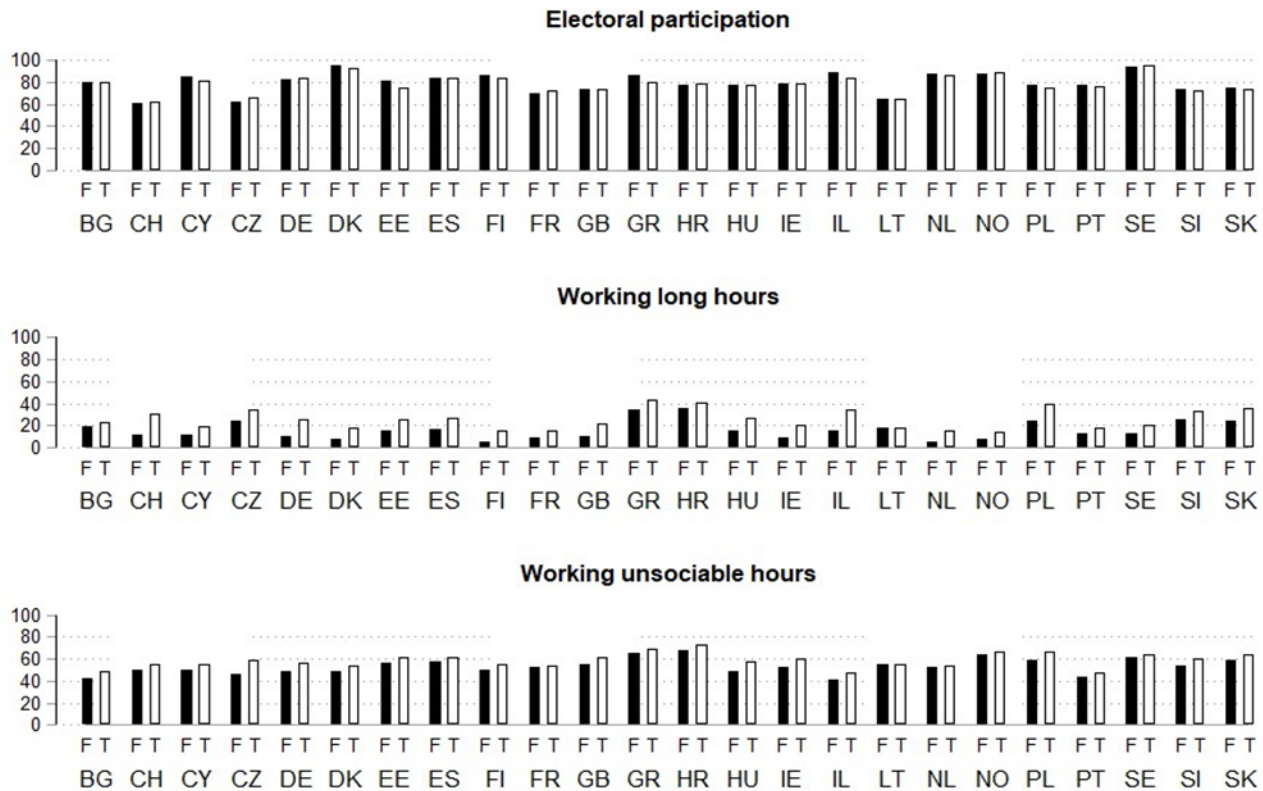


Note: Country-level clustering refers to the random intercepts.  $\epsilon_1$  and  $\epsilon_2$  denote error terms. Controls include individual-level characteristics (age, education, religiousness, having children at home, marital status, occupational status, satisfied with democracy, closeness to party) and country-level co-variables (per capita GDP, voting system features, and electoral system).

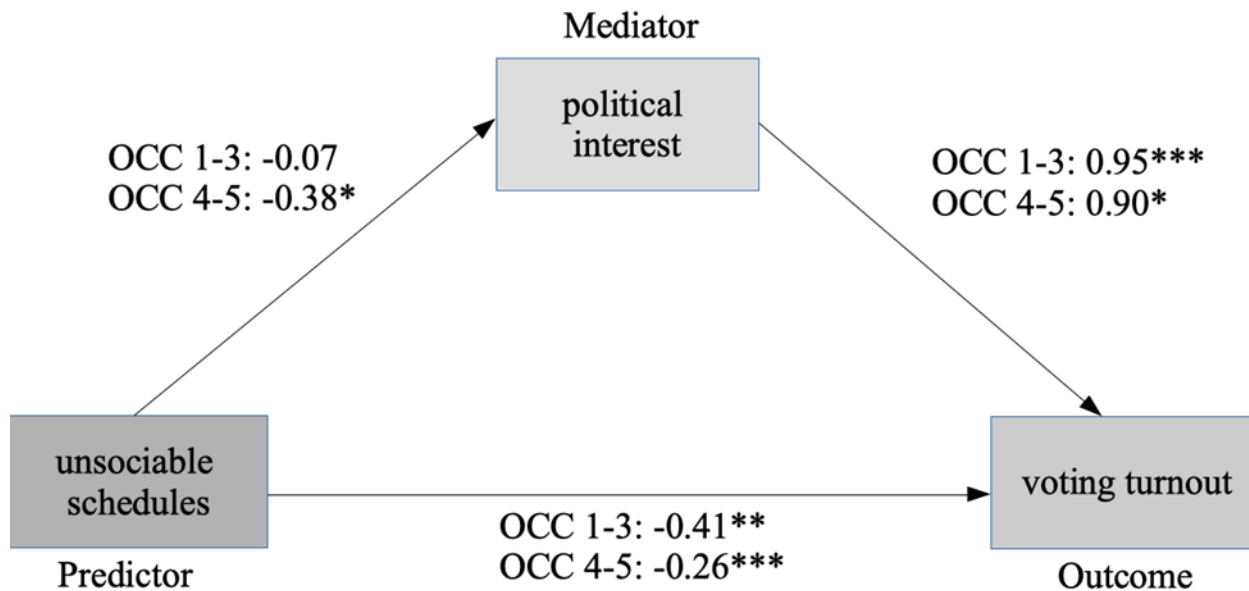


**Figure 2 Frequencies of key variables by country and gender 2010**

(solid bars for women and hollow bars for men)



**Figure 4 Effects of unsociable work schedule on voting via political interest in women**

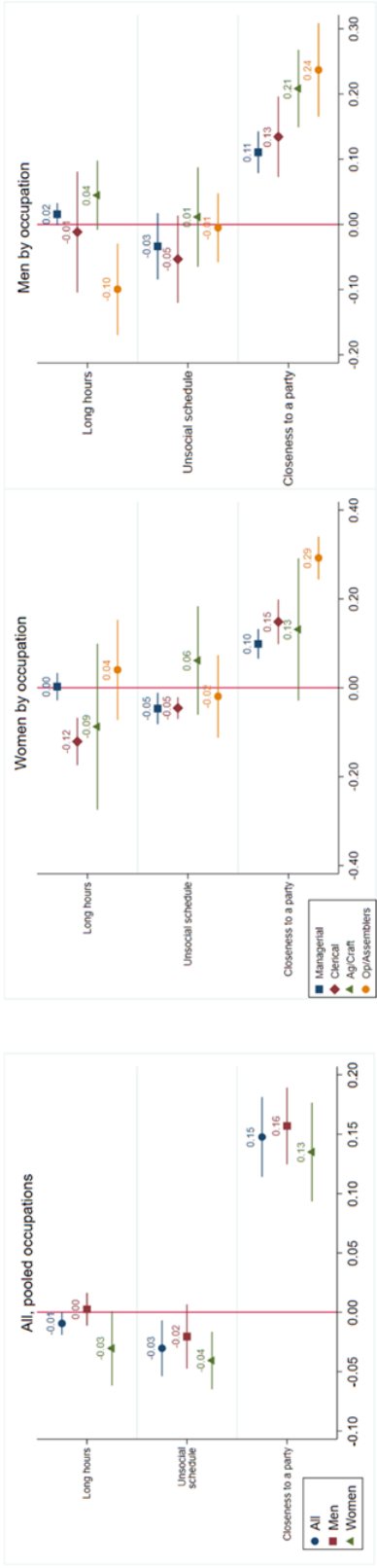


\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**OCC 1-3:** Managers/Professionals/Technicians  
**OCC 4-5:** Clerical/Service & Sales

Figure 3 Marginal probability changes by gender and occupational class

Coefficient plots of marginal probability changes by men, women, and occupational class



Notes: Probability changes derived from models controlling for health, social engagement, political interest, age, marital status, having a child < age 14, religion, education, GDP, proportional voting, voting restriction and Sunday. When spikes intersect with 0.0, the coefficient is insignificant.