Supplemental Appendix for How Labor Unions Increase Political Knowledge: Evidence from the United States

*David Macdonald. dm14@my.fsu.edu. Department of Political Science, Florida State University, Tallahassee, Florida, USA.

Descriptive Statistics

2012 ANES

	Obs	Variable	Mean	Std Dev	Min	Max
1	5361	Political knowledge	25.422	8.900	0.000	41.000
2	5750	Union member	0.098	0.297	0.000	1.000
3	5750	Education	2.077	0.887	1.000	3.000
4	5750	Online survey mode	0.659	0.474	0.000	1.000
5	5750	Female	0.511	0.500	0.000	1.000
6	5750	White	0.591	0.492	0.000	1.000
7	5696	Age	49.445	16.787	17.000	90.000
8	5696	Age-squared	2726.531	1679.555	289.000	8100.000
9	5268	Income	3.149	1.799	1.000	6.000
10	5744	Church attendance	2.602	1.620	1.000	5.000
11	5750	Unemployed	0.075	0.264	0.000	1.000
12	5742	Married	0.499	0.500	0.000	1.000
13	5747	Interest in politics	3.375	1.118	1.000	5.000

2004 NAES

	Obs	Variable	Mean	Std Dev	Min	Max
1	16005	Political Knowledge	3.949	1.692	0.000	7.000
2	79214	Union member	0.095	0.293	0.000	1.000
3	79214	Education	2.024	0.860	1.000	3.000
4	79214	Female	0.554	0.497	0.000	1.000
5	79214	White	0.798	0.402	0.000	1.000
6	78768	Age	48.016	16.560	18.000	97.000
7	78768	Age-squared	2579.783	1690.079	324.000	9409.000
8	79151	Unemployed	0.032	0.175	0.000	1.000
9	79041	Married	0.598	0.490	0.000	1.000
10	72045	Income	5.325	2.096	1.000	9.000
11	78845	Church attendance	2.923	1.333	1.000	5.000
12	60766	Interest in politics	3.099	0.907	1.000	4.000
13	43395	Public Sector	0.240	0.427	0.000	1.000
14	78951	Discuss Politics at Work	1.526	2.100	0.000	7.000

Knowledge Questions

2012 ANES

Table A3: Political Knowledge Questions (2012 ANES Matched Data)

Variable	Question	Percent Correct
preknow_prestimes	How many times someone can be elected president?	89.9
preknow_sizedef	Deficit compared to the 1990s?	83.1
preknow_senterm	Length of a U.S. Senate term?	35.1
preknow_medicare	What is Medicare?	78.1
preknow_leastsp	Program government spends the least on?	33.6
ineq_incgap_x	Has the income gap grown over the past 20 years?	77.9
ofcrec_speaker_correct	Office held by John Boehner?	40.8
ofcrec_vp_correct	Office held by Joe Biden?	85.4
ofcrec_pmuk_correct	Office held by David Cameron?	19.5
ofcrec_cj_correct	Office held by John Roberts?	32.3 (includes partly correct)
knowl_housemaj	Which party held House majority before election?	64.2
knowl_senmaj	Which party held Senate majority before election?	55.6
ptycons_ptyconswh	Which party is more conservative?	71.4
cses_poliinfone	Who is the Treasury secretary?	48.8
cses_polinftwo	What is the current unemployment rate?	61.3
cses_poliinfthree	Which party won the second most House seats?	57.6
cses_poliinffour	Who is the UN Secretary General?	25.3
libcpre_dpc	Barack Obama ideology?	67.3
libcpre_rpc	Mitt Romney ideology?	67.4
libcpre_ptyd	Democratic Party ideology?	69.4
libcpre_ptyr	Republican Party ideology?	70.0
spsrvpr_ssdpc	Barack Obama services and spending scale?	72.9
spsrvpr_ssrpc	Mitt Romney services and spending scale?	70.7
spsrvpr_ssdem	Democratic Party services and spending scale?	72.2
spsrvpr_ssrep	Republican Party services and spending scale?	69.7
defsppr_dpc	Barack Obama defense spending scale?	46.1
defsppr_rpc	Mitt Romney defense spending scale?	59.4
defsppr_dem	Democratic Party defense spending scale?	47.2
defsppr_rep	Republican Party defense spending scale?	60.9
inspre_dpc	Barack Obama government health insurance scale?	74.1
inspre_rpc	Mitt Romney government health insurance scale?	71.9
inspre_dem	Democratic Party government health insurance scale?	69.4
inspre_rep	Republican Party government health insurance scale?	73.3
guarpr_dpc	Barack Obama guaranteed jobs and income scale?	66.0
guarpr_rpc	Mitt Romney guaranteed jobs and income scale?	73.1
guarpr_dem	Democratic Party guaranteed jobs and income scale?	64.5
guarpr_rep	Republican Party guaranteed jobs and income scale?	72.0
aidblack_dpc	Barack Obama aid to blacks scale?	58.1
aidblack_rpc	Mitt Romney aid to blacks scale?	66.6
envjob_dpc	Barack Obama environment and jobs scale?	70.6
envjob_rpc	Mitt Romney environment and jobs scale?	59.6

2004 NAES

Table A4: Political Knowledge Questions (2004 NAES Matched Data)

Variable	Question	Percent correct
cMC01	Office held by Dick Cheney?	80.2
cMC03	Which branch determines constitutionality of laws?	67.6
cMC05	Majority to override a veto?	28.0
cMC07	Which party has the House majority?	68.9
cC07 and cC09 (combined)	Bush or Kerry favors government health insurance?	53.8
cCC34	Bush or Kerry favors Social Security in stock market?	50.1
cCB27	Level at which Kerry would repeal Bush tax cuts?	35.6

Regression Models

Panel Analysis of Workplace Discussion and Political Knowledge (2012 ANES)

The regression model displayed below is associated with Footnote 10 in the main paper. This OLS model shows that workplace discussion is positively and significantly associated with political knowledge (measured post-election), a relationship that holds when controlling for demographics, interest in politics, and pre-election political knowledge.

The following pre-election knowledge questions were combined into an additive index:

- preknow_prestimes
- preknow_sizedef
- preknow_senterm
- preknow_medicare
- preknow_leastsp
- ineq_incgap_x

The following post-election knowledge questions (the dependent variable) were combined into an additive index:

- ofcrec_speaker_correct
- ofcrec_vp_correct
- ofcrec_pmuk_correct
- ofcrec_cj_correct
- knowl_housemaj
- knowl_senmaj
- ptycons_ptyconswh
- cses_poliinfone
- cses_polinftwo
- cses_poliinfthree
- cses_poliinffour

Table 1: Workplace Discussion and Political Knowledge (2012 ANES Matched Data)

	(1)		(2)	
Workplace discussion of politics	0.388***	(0.061)	0.111**	(0.052)
Political knowledge (pre-election)	1.173***	(0.044)	0.784***	(0.047)
Union member			0.119	(0.148)
HS or less (Ref.)			—	—
Some college			0.476***	(0.123)
College degree			0.974***	(0.125)
Female			-0.462***	(0.081)
White			0.250*	(0.136)
Age			-0.014	(0.021)
Age-squared			0.000	(0.000)
Less than $20,000 (Ref.)			—	—
$20,000 - $40,000			0.325**	(0.124)
$40,000 - $60,000			0.522***	(0.173)
$60,000 - $80,000			0.436**	(0.177)
$80,000 - $100,000			1.230***	(0.202)
Over $100,000			0.985***	(0.188)
Never attend Church (Ref.)			—	—
Attend a few times a year			-0.084	(0.135)
Attend once or twice a month			-0.115	(0.166)
Attend almost every week			-0.408***	(0.151)
Attend every week			-0.147	(0.128)
Unemployed			0.371*	(0.201)
Married			-0.012	(0.119)
Never pay attention to politics (Ref.)			—	—
Pay attention some of the time			0.637*	(0.332)
Pay attention about half the time			1.132***	(0.327)
Pay attention most of the time			2.210***	(0.329)
Pay attention always			2.805***	(0.369)
Constant	0.817***	(0.238)	1.682**	(0.691)
State Fixed Effects?	✓		✓	
Observations	2,304		2,241	
R-squared	0.296		0.438	

Dependent variable is political knowledge score (post-election)
All control variables are measured pre-election
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

OLS and Poisson Regression Models (2012 ANES)

The regression model displayed below is associated with Figure 2 and Footnote 19 in the main paper. As the dependent variable is a count of correct political knowledge questions, I present both OLS and Poisson specifications of the model. Results are similar. Note that

the coefficient for union membership is for people with a high school diploma or less (the reference category for education).

Table 2: Union Membership and Political Knowledge (2012 ANES Matched Data)

	(1) OLS		(2) Poisson	
Union member	1.557**	(0.588)	0.072***	(0.024)
HS or less (Ref.)	—	—	—	—
Some college	2.591***	(0.317)	0.116***	(0.014)
College degree	4.735***	(0.331)	0.191***	(0.014)
Union membership × Some college	-0.639	(0.708)	-0.039	(0.027)
Union membership × College degree	-1.756**	(0.709)	-0.080***	(0.027)
Online survey mode	2.894***	(0.260)	0.121***	(0.011)
Female	-1.315***	(0.167)	-0.049***	(0.007)
White	2.313***	(0.336)	0.093***	(0.013)
Age	-0.007	(0.030)	0.000	(0.001)
Age-squared	0.000	(0.000)	0.000	(0.000)
Less than $20,000 (Ref.)	—	—	—	—
$20,000 - $40,000	1.874***	(0.301)	0.084***	(0.012)
$40,000 - $60,000	2.887***	(0.290)	0.125***	(0.012)
$60,000 - $80,000	3.495***	(0.393)	0.146***	(0.015)
$80,000 - $100,000	3.945***	(0.371)	0.159***	(0.013)
Over $100,000	5.070***	(0.360)	0.192***	(0.013)
Never attend Church (Ref.)	—	—	—	—
Attend a few times a year	-0.175	(0.294)	-0.009	(0.012)
Attend once or twice a month	-0.702*	(0.402)	-0.029*	(0.016)
Attend almost every week	-0.552	(0.347)	-0.021	(0.013)
Attend every week	-0.072	(0.224)	-0.003	(0.008)
Unemployed	0.732*	(0.431)	0.026	(0.018)
Married	-0.361	(0.226)	-0.015	(0.009)
Never pay attention to politics (Ref.)	—	—	—	—
Pay attention some of the time	5.002***	(0.775)	0.286***	(0.047)
Pay attention about half the time	7.086***	(0.719)	0.381***	(0.044)
Pay attention most of the time	9.617***	(0.684)	0.475***	(0.043)
Pay attention always	11.391***	(0.765)	0.537***	(0.045)
Constant	10.528***	(0.784)	2.511***	(0.042)
State Fixed Effects?	✓		✓	
Observations	4,880		4,880	
R-squared	0.398		—	

Dependent variable is political knowledge score
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

OLS and Poisson Regression Models (2004 NAES)

The regression model displayed below is associated with Figure 3 and Footnote 19 in the main paper. Similarly to the 2012 ANES, the dependent variable here is a count of correct political knowledge questions, I present both OLS and Poisson specifications of the model. Results are similar. Note that the coefficient for union membership is for people with a high school diploma or less (the reference category for education).

Table 3: Union Membership and Political Knowledge (2004 NAES Matched Data)

	(1) OLS		(2) Poisson	
Union membership	0.289***	(0.073)	0.090***	(0.019)
HS or less (Ref.)	—	—	—	—
Some college	0.457***	(0.031)	0.132***	(0.009)
College degree	0.881***	(0.039)	0.226***	(0.011)
Union member × Some college	-0.205*	(0.112)	-0.071**	(0.028)
Union member × College degree	-0.352***	(0.117)	-0.105***	(0.029)
Female	-0.383***	(0.026)	-0.093***	(0.007)
White	0.353***	(0.031)	0.101***	(0.009)
Age	0.019***	(0.005)	0.006***	(0.001)
Age-squared	-0.000*	(0.000)	-0.000**	(0.000)
Unemployed	0.106	(0.080)	0.028	(0.022)
Married	-0.038	(0.030)	-0.014*	(0.008)
Less than $10,000	—	—	—	—
$10,000 - $15,000	0.162**	(0.075)	0.061**	(0.027)
$15,000 - $25,000	0.350***	(0.082)	0.123***	(0.029)
$25,000 - $35,000	0.429***	(0.081)	0.150***	(0.029)
$35,000 - $50,000	0.581***	(0.075)	0.192***	(0.027)
$50,000 - $75,000	0.702***	(0.074)	0.222***	(0.026)
$75,000 - $100,000	0.836***	(0.077)	0.253***	(0.027)
$100,000 - $150,000	0.871***	(0.077)	0.256***	(0.026)
More than $150,000	0.935***	(0.091)	0.268***	(0.029)
Never attend Church (Ref.)	—	—	—	—
Attend Church a few times a year	-0.130***	(0.028)	-0.034***	(0.007)
Attend Church once or twice a month	-0.190***	(0.048)	-0.048***	(0.012)
Attend Church once a week	-0.221***	(0.043)	-0.056***	(0.011)
Attend Church more than once a week	-0.263***	(0.052)	-0.066***	(0.013)
Interested in politics hardly at all (Ref.)	—	—	—	—
Interested in politics now and then	0.567***	(0.071)	0.228***	(0.030)
Interested in politics sometime	1.133***	(0.064)	0.402***	(0.028)
Interested in politics most times	1.774***	(0.058)	0.548***	(0.027)
Constant	1.009***	(0.147)	0.426***	(0.049)
State Fixed Effects?	✓		✓	
Observations	13,888		13,888	
R-squared	0.331		—	

Dependent variable is political knowledge
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Controlling for Workplace Discussion of Politics (2004 NAES)

Below, I include a measure of workplace discussion—a theorized mechanism through which union membership influences political knowledge. Including this variable does not eliminate the influence of union membership, nor the significant interaction between union membership and education. This suggests that discussion is one way that unions inform their members, but also shows that union membership influences knowledge above and beyond discussion of politics, i.e., via information provision and campaign mobilization. This model refers to Footnote 15 in the main paper.

Table 4: Union Membership and Political Knowledge (2004 NAES Matched Data)

	B	SE
Union membership	0.280***	(0.074)
HS or less (Ref.)	—	—
Some college	0.451***	(0.031)
College degree	0.880***	(0.039)
Union member × Some college	-0.210*	(0.113)
Union member × College degree	-0.358***	(0.118)
Female	-0.360***	(0.026)
White	0.356***	(0.031)
Age	0.018***	(0.005)
Age-squared	-0.000	(0.000)
Unemployed	0.159*	(0.081)
Married	-0.029	(0.029)
Less than $10,000 (Ref.)	—	—
$10,000 - $15,000	0.152**	(0.074)
$15,000 - $25,000	0.339***	(0.083)
$25,000 - $35,000	0.418***	(0.080)
$35,000 - $50,000	0.558***	(0.074)
$50,000 - $75,000	0.676***	(0.072)
$75,000 - $100,000	0.809***	(0.076)
$100,000 - $150,000	0.839***	(0.076)
More than $150,000	0.901***	(0.090)
Never attend Church (Ref.)	—	—
Attend Church a few times a year	-0.137***	(0.028)
Attend Church once or twice a week	-0.199***	(0.046)
Attend Church once a week	-0.229***	(0.042)
Attend Church more than once a week	-0.268***	(0.051)
Interested in politics hardly at all (Ref.)	—	—
Interested in politics now and then	0.549***	(0.071)
Interested in politics sometime	1.093***	(0.065)
Interested in politics most times	1.714***	(0.059)
Discuss politics 0 days a week (Ref.)	—	—
Discuss politics 1 day a week	0.102**	(0.046)
Discuss politics 2 days a week	0.131***	(0.033)
Discuss politics 3 days a week	0.175***	(0.035)
Discuss politics 4 days a week	0.152***	(0.046)
Discuss politics 5 days a week	0.238***	(0.039)
Discuss politics 6 days a week	0.253**	(0.101)
Discuss politics 7 days a week	0.193***	(0.044)
Constant	0.982***	(0.154)
State Fixed Effects?	✓	
Observations	13,842	
R-squared	0.333	

Dependent variable is political knowledge score
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Examining Potential Post-Treatment Bias (2012 ANES)

Several of the control variables could be viewed as post-treatment, i.e., that they are influenced by union membership. For example, people, as a result of belonging to a labor union, could become more interest in politics, or see their incomes increase. Although several of these variables are crucial controls, and a failure to include them could introduce omitted variable bias, their inclusion could also bias estimates as a result of being plausibly post-treatment. To address this, I present an OLS models that drop the following potential post-treatment control variables: income, church attendance, unemployment, marital status, and interest in politics. These analyses are associated with Footnote 20 in the paper.

Table 5: Union Membership and Political Knowledge (2012 ANES Matched Data)

	(1)		(2)	
Union member	3.348***	(0.592)	2.148***	(0.624)
High school or less (Ref.)	—	—	—	—
Some college	4.449***	(0.328)	3.920***	(0.286)
College degree	7.944***	(0.467)	7.026***	(0.364)
Union membership × Some college	-1.428*	(0.726)	-0.982	(0.780)
Union membership × College degree	-2.773***	(0.757)	-1.641**	(0.746)
Online survey mode			3.598***	(0.312)
Female			-2.245***	(0.216)
White			2.788***	(0.391)
Age			0.156***	(0.026)
Age-squared			-0.001***	(0.000)
Constant	25.684***	(0.109)	14.758***	(0.745)
State Fixed Effects?	✓		✓	
Observations	5,361		5,311	
R-squared	0.181		0.300	

Dependent variable is political knowledge score
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Additional Years

Beyond the 2012 ANES and 2004 NAES, I also considered whether unions informed their members in a wider range of years. I used Cumulative ANES (CANES) data from 1968-2016, regressing the subjective interviewer rating (an admittedly imperfect measure of political knowledge) on an interaction between union membership and education. Column 1 examines years from 1968-1992. Column 2 examines years from 1996-2016. These models are associated with Table 5 in the main paper. These simple baseline model are meant to provide evidence showing that unions' ability to inform their members is not confined to the past few decades.

Table 6: Union Membership and Political Knowledge (CANES, 1968-2016)

	(1) 1968-1992		(2) 1996-2016	
Union membership	0.275***	(0.032)	0.290***	(0.057)
HS or less (Ref.)	—	—	—	—
Some college	0.693***	(0.020)	0.576***	(0.026)
College degree	1.335***	(0.022)	1.158***	(0.026)
Union membership × Some college	-0.198***	(0.051)	-0.109	(0.081)
Union membership × College degree	-0.192***	(0.064)	-0.309***	(0.078)
Constant	2.690***	(0.029)	2.757***	(0.027)
Year Fixed Effects?	✓		✓	
Observations	14,583		9,989	
R-squared	0.217		0.188	

Dependent variable is subjective interviewer rating of political information (1-5)
OLS coefficients
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Addressing Self-Selection into Labor Unions

Although research argues that people join labor unions for economic rather than political reasons, self-selection remains a potential issue. People who are more politically interested may choose to join unions, and this, rather than union information provision, may be the reason why union members are more politically knowledgeable than their non-union counterparts. To address this, I leverage variation in labor laws across the U.S. states. I split the 2012 ANES data into states that have right to work legislation and states that do not. Right to work laws prohibit union workplaces from requiring all employees to join. As such, people can "free-ride," and receive union benefits without having to pay union dues. In right to work states, people have fewer economic incentives to join a union and would be more likely to "select in" due to other motivations. If this is what is driving unions' influence on their members political knowledge, then I would expect the union influence on political knowledge to be stronger in right to work states. This is not the case, however, as shown in the table below. Rather, union membership only exerts a positive and significant influence on members' political knowledge levels in states without right to work laws, where people are less likely to "select in." In short, this suggests that self-selection is not driving the results observed in the paper. These models are associated with Table 6 in the main and Footnote 21 in the main paper.

Table 7: Union Membership, RTW, and Political Knowledge (2012 ANES Matched Data)

	(1) Non-RTW States		(2) RTW States	
Union membership	1.974***	(0.586)	0.634	(1.566)
HS or less (Ref.)	—	—	—	—
Some college	2.862***	(0.406)	2.275***	(0.357)
College degree	5.056***	(0.248)	4.299***	(0.588)
Union member × Some college	-1.123	(0.785)	0.520	(1.540)
Union member × College degree	-2.427***	(0.809)	-0.298	(1.590)
Online survey mode	2.773***	(0.372)	3.068***	(0.326)
Female	-1.385***	(0.202)	-1.211***	(0.304)
White	2.454***	(0.522)	2.180***	(0.296)
Age	-0.015	(0.040)	0.002	(0.049)
Age-squared	0.000	(0.000)	0.000	(0.000)
Less than $20,000 (Ref.)	—	—	—	—
$20,000 - $40,000	1.969***	(0.308)	1.742***	(0.556)
$40,000 - $60,000	2.568***	(0.348)	3.323***	(0.457)
$60,000 - $80,000	3.513***	(0.477)	3.487***	(0.670)
$80,000 - $100,000	4.261***	(0.468)	3.545***	(0.515)
Over $100,000	4.944***	(0.386)	5.261***	(0.728)
Never attend Church (Ref.)	—	—	—	—
Attend a few times a year	-0.640*	(0.354)	0.472	(0.330)
Attend once or twice a month	-0.939*	(0.526)	-0.362	(0.657)
Attend almost every week	-0.815*	(0.465)	-0.165	(0.436)
Attend every week	-0.095	(0.313)	0.063	(0.312)
Unemployed	0.548	(0.467)	1.023	(0.857)
Married	-0.416	(0.312)	-0.242	(0.311)
Never pay attention to politics (Ref.)	—	—	—	—
Pay attention some of the time	6.155***	(0.915)	3.750***	(1.321)
Pay attention about half the time	8.824***	(0.817)	5.009***	(1.126)
Pay attention most of the time	11.175***	(0.787)	7.805***	(1.085)
Pay attention always	13.167***	(0.930)	9.320***	(1.103)
Constant	9.926***	(1.020)	10.193***	(1.069)
State Fixed Effects?	✓		✓	
Observations	2,827		2,053	
R-squared	0.418		0.379	

Dependent variable is political knowledge score
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Private vs. Public Sector Unions

It is possible that private sector unions, which have declined in strength considerably since the 1950s, and public sector unions, which have not, differentially inform their members. To assess this possibility, I leveraged the larger sample size of the 2004 NAES, splitting the data into public and private sector employment, and the regressing political knowledge on a union member $\times$ education interaction and the same set of controls included in Figure 3 in the main paper. As shown below, the positive and significant coefficient for union membership for both the private and public sector suggests that it is unionization in and of itself (rather than the type of union), that benefits peoples' political knowledge levels, particularly the less educated. This is associated with Table 7 in the main paper.

Table 8: Union Membership, Sector, and Political Knowledge (2004 NAES Matched Data)

	(1) Private Sector		(2) Public Sector	
Union membership	0.246**	(0.106)	0.499**	(0.211)
HS or less (Ref.)	—	—	—	—
Some college	0.535***	(0.052)	0.312***	(0.112)
College degree	0.986***	(0.051)	0.946***	(0.099)
Union member × Some college	-0.211	(0.148)	-0.170	(0.304)
Union member × College degree	-0.536***	(0.186)	-0.391*	(0.204)
Female	-0.340***	(0.031)	-0.351***	(0.066)
White	0.334***	(0.045)	0.282***	(0.073)
Age	0.006	(0.009)	0.031	(0.019)
Age-squared	0.000	(0.000)	-0.000	(0.000)
Unemployed	—	—	—	—
Married	-0.106***	(0.039)	0.075	(0.065)
Less than $10,000 (Ref.)	—	—	—	—
$10,000 - $15,000	0.143	(0.168)	-0.170	(0.360)
$15,000 - $25,000	0.338**	(0.150)	0.340	(0.279)
$25,000 - $35,000	0.379**	(0.151)	0.249	(0.288)
$35,000 - $50,000	0.570***	(0.138)	0.377	(0.269)
$50,000 - $75,000	0.774***	(0.124)	0.401	(0.286)
$75,000 - $100,000	0.940***	(0.134)	0.556*	(0.302)
$100,000 - $150,000	0.999***	(0.127)	0.606**	(0.265)
Over $150,000	0.968***	(0.130)	0.856***	(0.287)
Never attend Church (Ref.)	—	—	—	—
Attend Church a few times a year	-0.101*	(0.053)	-0.298***	(0.087)
Attend Church once or twice a week	-0.161***	(0.056)	-0.227**	(0.102)
Attend Church once a week	-0.151***	(0.055)	-0.321***	(0.087)
Attend Church more than once a week	-0.137	(0.083)	-0.456***	(0.124)
Interested in politics hardly at all (Ref.)	—	—	—	—
Interested in politics now and then	0.613***	(0.092)	0.774***	(0.152)
Interested in politics sometime	1.162***	(0.083)	1.226***	(0.149)
Interested in politics most times	1.804***	(0.081)	1.859***	(0.148)
Constant	1.163***	(0.221)	0.790	(0.522)
State Fixed Effects?	✓		✓	
Observations	6,020		1,884	
R-squared	0.338		0.345	

Dependent variable is political knowledge score
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed

Examining Variation by State Union Strength

It is possible that individual labor unions are less politically engaged and have fewer resources, and thus information flows, and subsequent discussion of politics is less prevalent in contexts where organized labor is weak. To assess this possibility, I split 2012 ANES data into two categories: states with above and below the median level of membership.

Results below provide support for this, showing that union membership only exerts a positive and significant influence on political knowledge in contexts where organized labor is stronger, i.e., when more workers belong to labor unions. These models are associated with Table 8 in the main paper.

Table 9: Union Membership, Context, and Political Knowledge (2012 ANES Matched Data)

	(1) High Union States		(2) Low Union States	
Union membership	2.105***	(0.596)	0.523	(1.334)
HS or less (Ref.)	—	—	—	—
Some college	3.217***	(0.367)	2.015***	(0.315)
College degree	5.099***	(0.266)	4.312***	(0.528)
Union member × Some college	-1.678**	(0.699)	1.030	(1.565)
Union member × College degree	-2.276***	(0.797)	-1.021	(1.643)
Online survey mode	2.778***	(0.401)	3.051***	(0.282)
Female	-1.333***	(0.225)	-1.278***	(0.264)
White	2.508***	(0.541)	2.099***	(0.292)
Age	-0.002	(0.040)	-0.013	(0.049)
Age-squared	0.000	(0.000)	0.001	(0.000)
Less than $20,000 (Ref.)	—	—	—	—
$20,000 - $40,000	1.882***	(0.330)	1.858***	(0.492)
$40,000 - $60,000	2.566***	(0.365)	3.261***	(0.421)
$60,000 - $80,000	3.610***	(0.497)	3.360***	(0.626)
$80,000 - $100,000	4.210***	(0.501)	3.710***	(0.493)
Over $100,000	5.006***	(0.397)	5.175***	(0.638)
Never attend Church (Ref.)				
Attend a few times a year	-0.599	(0.385)	0.284	(0.290)
Attend once or twice a month	-0.730	(0.564)	-0.603	(0.594)
Attend almost every week	-0.945**	(0.452)	-0.098	(0.428)
Attend every week	0.026	(0.332)	-0.057	(0.279)
Unemployed	0.372	(0.459)	1.143	(0.776)
Married	-0.485	(0.328)	-0.166	(0.308)
Never pay attention to politics (Ref.)				
Pay attention some of the time	5.985***	(0.897)	4.068***	(1.272)
Pay attention about half the time	8.634***	(0.782)	5.501***	(1.128)
Pay attention most of the time	11.096***	(0.794)	8.155***	(1.061)
Pay attention always	12.882***	(0.919)	9.889***	(1.118)
Constant	9.562***	(1.058)	10.357***	(0.970)
State Fixed Effects?	✓		✓	
Observations	2,565		2,315	
R-squared	0.415		0.386	

Dependent variable is political knowledge score
OLS coefficients
Robust standard errors clustered by state in parentheses
*** p<0.01, ** p<0.05, * p<0.1, two-tailed