Supplemental Appendix:

"The Role of Affective Orientations in Promoting Perceived Polarization"

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1 Variable coding/wording

1.1 ANES Cumulative File

For all thermometers: "I'd like to get your feelings toward some of our political leaders (groups) and other people who are in the news these days (1990: have been in the news). I'll read the name of a person (group) and I'd like you to rate that person (group) using (1986-LATER: something we call) the feeling thermometer. Ratings between 50 and 100 (1986-LATER: degrees) mean that you feel favorably and warm toward the person (group); ratings between 0 and 50 degrees mean that you don't feel favorably toward the person (group) and that you don't care too much for that person. (1986-LATER: You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the person (group).) If we come to a person (group) whose name you don't recognize, you don't need to rate that person (group). Just tell me and we'll move on to the next one. (1978-1984: If you do recognize the name, but you don't feel particularly warm or cold toward the person (group), then you would rate the person (group) at the 50 degree mark.)"

- Conservative thermometer (VCF0212): 0-100; recoded so all categories end in 0 (11 point)
- Liberal thermometer (VCF0211): 0-100; recoded so all categories end in 0 (11 point)
- Democratic Party thermometer (VCF0218): 0-100; recoded so all categories end in 0 (11 point)
- Republican Party thermometer (VCF0224): 0-100; recoded so all categories end in 0 (11 point)
- Democratic candidate thermometer (VCF0424): 0-100; recoded so all categories end in 0 (11 point)

- Republican candidate thermometer (VCF0426): 0-100; recoded so all categories end in 0 (11 point)
- Government spending and services (VCF0839, VCF0541, VCF0542): "Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. (2004: Suppose these people are at one end of a scale, at point 1.) Other people feel that it is important for the government to provide many more services even if it means an increase in spending. (2004: Suppose these people are at the other end, at point 7. And of course, some other people have opinions somewhere in between, at points 2,3,4,5, or 6.) Where would you place [your-self/the Democratic Party/the Republican Party] on this scale, or haven't you thought much about this? (7-POINT SCALE SHOWN TO R)"
- Defense spending (VCF0843, VCF0549, VCF0550): "Some people believe that we should spend much less money for defense. (1996,2004: Suppose these people are at one end of a scale, at point 1.) Others feel that defense spending should be greatly increased. (1996,2004: Suppose these people are at the other end, at point 7.) (2004: And, of course, some other people have opinions somewhere in between, at points 2,3,4,5, or 6). Where would you place [yourself/the Democratic Party/the Republican Party] on this scale or haven't you thought much about this? (7-POINT SCALE SHOWN TO R)"
- Aid to blacks (VCF0830, VCF0517, VCF0518): "Some people feel that the government in Washington should make every (prior to 1996 only: possible) effort to improve the social and economic position of blacks. (1996-LATER: Suppose these people are at one end of a scale, at point 1). Others feel that the government should not make any special effort to help blacks because they should help themselves. (1996-LATER: Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2,3,4,5 or 6). ALL YEARS:

Where would you place [yourself/the Democratic Party/the Republican Party] on this scale, or haven't you thought much about it?"

- Guaranteed jobs (VCF0809, VCF0513, VCF0514): "Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. (1972-1978,1996-LATER: Suppose these people are at one end of a scale, at point 1). Others think the government should just let each person get ahead on his/their own. (1972-1978,1996: Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at pints 2,3,4,5 or 6.) Where would you place [yourself/the Democratic Party/the Republican Party] on this scale, or haven't you thought much about this? (7-POINT SCALE SHOWN TO R)"
- Health Insurance (VCF0806, VCF0508, VCF0509): "There is much concern about the rapid rise in medical and hospital costs. Some (1988,1994-LATER: people) feel there should be a government insurance plan which would cover all medical and hospital expenses (1984 AND LATER: for everyone). (1996,2004: Suppose these people are at one end of a scale, at point 1). Others feel that (1988,1994-1996: all) medical expenses should be paid by individuals, and through private insurance (1984 AND LATER: plans) like Blue Cross (1984-1994: or [1996: some] other company paid plans). (1996,2004: Suppose these people are at the other end, at point 7. And of course, some people have opinions somewhere in between at points 2,3,4,5 or 6.) Where would you place [yourself/the Democratic Party/the Republican Party] on this scale, or haven't you thought much about this? (7-POINT SCALE SHOWN TO R)"
- Strength of partisan attachments (VCF0301):
 - 1. Independent
 - 2. Lean

3.	Weak
4.	Strong
• Inter	rviewer information rating (VCF0050a)
1.	Very low
2.	Fairly low
3.	Average
4.	Fairly high
5.	Very high
• Inter	rest in politics (VCF0310)
1.	Not much interested
2.	Somewhat interested
3.	Very much interested
• Edu	cation (VCF0140a)
1.	8 grades or less
2.	9-12 grades
3.	High school
	A

3. Weak

4. Strong

2. Lean

1. Independent

 \bullet Strength of ideological identification (VCF0803):

2. 17 to 33 percentile	
3. 34 to 67 percentile	
4. 68 to 95 percentile	
5. 96 to 100 percentile	
• Age (VCF0101): Age in years.	
• Female (VCF0104)	
0. Male	
1. Female	
• Black (VCF0105a)	
0. Not black	
1. Black	
• South (VCF0112)	
0. Does not live in south	
1. Does live in south	

4. HS + non-academic training

5. Some college

7. Advanced

• Income (VCF0114)

1. 0 to 16 percentile

6. BA

1.2 1992-1996 ANES Panel

- Democratic Party thermometer (V923317, V960292): 0–100
- Republican Party thermometer (V923318, V960293): 0–100
- Democratic candidate thermometer (V923306, V960272): 0-100
- Republican candidate thermometer (V923305, V960273): 0–100
- Liberals thermometer (V925326, V961032): 0–100
- Conservatives thermometer (V925319, V961031): 0-100
- Government spending and services (V923701, V923702, V923703, V960455, V960453):
 1 (liberal) 7 (conservative)
- Defense spending (V923707, V923708, V923709, V960469, V960466): 1 (liberal) 7
 (conservative)
- Guaranteed jobs (V923718, V923719, V923720, V960485, V960484): 1 (liberal) 7
 (conservative)
- Health insurance (V923716): 1 (liberal) 7 (conservative)
- Government aid to minorities (V923724): 1 (liberal) 7 (conservative)
- Party ideology (V923517, V923518, V960380, V960379): 1 (liberal) 7 (conservative)
- Strength of partisan attachments (V923634):
 - 1. Independent
 - 2. Lean
 - 3. Weak
 - 4. Strong

• Interviewer information rating (v924205)
1. Very low
2. Fairly low
3. Average
4. Fairly high
5. Very high
• Interest in politics (V925102)
1. Not much interested
2. Somewhat interested
3. Very much interested
• Education (V923908)
1. 8 grades or less
2. 9-12 grades
3. High school
4. HS + non-academic training
5. Some college

 \bullet Strength of ideological identification (V923509):

1. Independent

2. Lean

3. Weak

4. Strong

- 6. BA
- 7. Advanced
- Income (V924104)
 - 1. 0 to 16 percentile
 - 2. 17 to 33 percentile
 - 3. 34 to 67 percentile
 - 4. 68 to 95 percentile
 - 5. 96 to 100 percentile
- Age (V923903): Age in years.
- Female (V924201)
 - 0. Male
 - 1. Female
- Black (V924202)
 - 0. Not black
 - 1. Black
- South (V923014)
 - 0. Does not live in south
 - 1. Does live in south

1.3 2008-2009 ANES Panel

For all variables, W# refers to the wave in which the item was asked. For instance, W2 indicates Wave 2, and W6 indicates Wave 6.

Negative party affect, negative candidate affect, candidate ideological identifications, and candidate issue positions are each measured in both Wave 6 and Wave 9.

- Negative party affect (W6E2, W6E3, W6E4, W6E5, W6E7): "Do you [like/dislike] the [Democratic Party/Republican Party] a great deal, a moderate amount, or a little?"
 - 1. Dislike a great deal
 - 2. Dislike a moderate amount
 - 3. Dislike a little
 - 4. Neither like nor dislike
 - 5. Like a little
 - 6. Like a moderate amount
 - 7. Like a great deal
- Negative candidate affect (W6E14, W6E15, W6E16, W6E38, W6E39, W6E40): "Do you [like/dislike] [John McCain/Barack Obama] a great deal, a moderate amount, or a little?"
 - 1. Dislike a great deal
 - 2. Dislike a moderate amount
 - 3. Dislike a little
 - 4. Neither like nor dislike
 - 5. Like a little
 - 6. Like a moderate amount
 - 7. Like a great deal
- Ideological identifications (W6G1, W6G2, W6G3, W6G4): "When it comes to politics, would you describe [yourself/John McCain/Barack Obama] as liberal, conservative, or neither liberal nor conservative? Would you call [yourself/John McCain/Barack Obama] very [liberal/conservative] or somewhat [liberal/conservative]? Do you think of [yourself/John McCain/Barack Obama] as closer to liberals, or conservatives, or neither of these? [For candidate placements (W6H5, W6H6, W6H7, W6H8, W6H10, W6H11, W6H12)]
 - 1. Very liberal

- 2. Liberal
- 3. Closer to liberals
- 4. Neither liberal nor conservative
- 5. Closer to conservatives
- 6. Conservative
- 7. Very conservative
- Issue positions (W6PB1-W6PB26; W6PJ1-W6PJ26): "Does [Barack Obama/John McCain] [favor/oppose/or neither favor nor oppose] [insert policy]. Does [Barack Obama/John McCain] [favor/oppose] that a great deal, moderately, or a little?" 7-point oppose a great deal to favor a great deal.
 - An amendment to the U.S. Constitution banning marriage between two people who are the same sex?
 - Raising federal income taxes for people who make more than \$200,000 per year?
 - The U.S. government paying for all of the cost of prescription drugs for senior citizens who are living on very little income?
 - The U.S. government paying for all necessary medical care for all Americans?
 - Imagine that the U.S. government suspects a person in the United States of being a terrorist [does Obama/McCain favor/oppose] the government being able to put this person in prison for months without ever bringing the person to court and charging him or her with a crime?
 - The U.S. government being required to get a court order before it can listen in on phone calls made by American citizens who are suspected of being terrorists?
 - Citizens of other countries who have come to live in the United States without the permission of the U.S. government are called "illegal immigrants." [does Obama/McCain favor/oppose] allowing illegal immigrants to work in the United States for up to three years, after which they would have to go back to their home country?
 - The U.S. government making it possible for illegal immigrants to become U.S. citizens?
- Issue extremity (W1P1-W1P25; W1P1_0_2-W1P25_0_2; W1P1_F_2-W1P25_F_2): Same items as candidate issue positions.
 - 1. Neither favor nor oppose
 - 2. Favor or oppose a little
 - 3. Moderate favor or oppose
 - 4. Favor or oppose a great deal
- Strength of partisan attachments (DERO8W1):

- 1. Independent
- 2. Lean
- 3. Weak
- 4. Strong
- Interest in politics (W6Y2, W6Y3 W6Y4, W6Y5, W6Y8, W6Y9, W6Y10): 5-point not at all likely-extremely likely
 - In the future, how likely are you to join in a protest march, rally, or demonstration?
 - In the future, how likely are you to attend a meeting of a town or city government or school board?
 - In the future, how likely are you to sign a petition on the Internet about a political or social issue
 - In the future, how likely are you to sign a petition on paper about a political or social issue?
 - In the future, how likely are you to attend a meeting to talk about political or social concerns?
 - In the future, how likely are you to invite someone to attend a meeting about political or social concerns?
 - In the future, how likely are you to distribute information or advertisements supporting a political or social interest group?
- Political knowledge (W2U2-W2U7): 0 if incorrect, 1 if correct. Knowledge is average number of correct responses.
 - Do you happen to know how many times an individual can be elected President of the United States under current laws?
 - For how many years is a United States Senator elected that is, how many years are there in one **full** term of office for a U.S. Senator?
 - How many U.S. Senators are there from each state?
 - For how many years is a member of the United States House of Representatives elected that is, how many years are there in one full term of office for a U.S. House member?
 - According to federal law, if the President of the United States dies, is no longer willing or able to serve, or is removed from office by Congress, the Vice President would become the President. If the Vice President were unable or unwilling to serve, who would be eligible to become president next? (The Chief Justice of the Supreme Court, the Secretary of State, or the Speaker of the House of Representatives / The Speaker of the House of Representatives, the Secretary of States, or the Chief Justice of the Supreme Court)?

- What percentage vote of the House and the Senate is needed to override a Presidential veto? (A bare majority, two-thirds, three-fourths, or ninety percent / Ninety percent, three-fourths, two-thirds, or a bare majority)?

• Education (DER05)

- 1. No high school diploma
- 2. High school diploma
- 3. Some college, no bachelor's degree
- 4. Bachelor's degree
- 5. Graduate degree

• Income (DER06)

- 1. less than \$5,000
- 2. \$5,000 to \$7,499
- 3. \$7,500 to \$9,999
- 4. \$10,000 to \$12,499
- 5. \$12,500 to \$14,999
- 6. \$15,000 to \$19,999
- 7. \$20,000 to \$24,999
- 8. \$25,000 to \$29,999
- 9. \$30,000 to \$34,999
- 10. \$35,000 to \$39,999
- 11. \$40,000 to \$49,999
- 12. \$50,000 to \$59,999
- 13. \$60,000 to \$74,999
- 14. \$75,000 to \$84,999
- 15. \$85,000 to \$99,999
- 16. \$100,000 to \$124,999
- 17. \$125,000 to \$149,999
- 18. \$150,000 to \$174,999
- 19. \$175,000 or more.
- Age (RAGER): Age in years.
- Female (DER01)
 - 0. Male

- 1. Female
- Black (RRACEBLA)
 - 0. Not black
 - 1. Black
- South (W1XSTATE)
 - 0. Does not live in south
 - 1. Does live in south

2 Dimensional Analysis of Polarization Measures

From our view, both affective and perceived polarization are latent constructs that exist irrespective of any particular survey items we might use to capture them. Of course, we use survey items to capture these things – feelings toward various political stimuli, as well as perceptions of where the parties standard on major issues. Affective polarization, as captured by differential feelings toward the parties, ideological groups, and presidential candidates, may not all track each other perfectly, but they should each have a substantial proportion of their variance shared with the latent affective polarization dimension. Same goes for perceived polarization. The perceived differences between the parties may not track perfectly across issues, but readily decipherable patterns should exist over time, variance – due to latent perceived polarization – should be shared across issues and the survey items used to capture them.

Table A1: Measurement properties of perceived polarization indicators and scale.

	<u>Cumula</u>	tive File	<u>1992-19</u>	96 Panel
	Factor 1	Factor 2	Factor 1	Factor 2
	0 = 1	0.00	0.00	0.00
Government Services	0.74	0.23	0.80	0.02
Ideology	0.52	0.18	0.47	0.09
Guaranteed Jobs	0.79	-0.30	0.81	-0.01
Defense Spending	0.70	0.27	0.65	-0.07
Health Insurance	0.73	-0.10		
Aid to Minorities	0.74	-0.19		
Eigenvalue	3.01	0.30	1.94	0.01
Variance Explained	86%	9%	99%	0.5%
Cronbach's α	0.	86	0.	76

Note: panel results from 1996 wave.

In Tables A1, A2, and A3 we present the loadings, eigenvalues, and proportion of shared variance explained by exploratory factor analysis, as well as Cronbach's α reliability estimates. Starting with the indicators of perceived polarization in Table A1, we can see that

Table A2: Measurement properties of **perceived** polarization indicators and scale, 2008-2009 ANES Panel.

	Factor 1	Factor 2
	ractor r	ractor 2
Ideology	0.41	-0.11
Taxes	0.53	-0.31
Immigration	0.45	0.37
Healthcare	0.52	-0.25
Citizenship	0.49	0.41
Terrorism	0.55	0.05
FISA	0.57	-0.01
Gay Marriage	0.44	-0.04
Script	0.32	-0.10
Eigenvalue	2.10	0.49
Variance Explained	64%	15%
Cronbach's α	0.	71

Note: panel results from 09 wave.

Table A3: Measurement properties of affective polarization indicators and scale.

	<u>Cumula</u>	tive File	1992-1996 Panel		
	Factor 1	Factor 2	Factor 1	Factor 2	
Parties	0.78	-0.02	0.86	0.01	
Ideological Groups	0.43	0.11	0.53	0.14	
Candidates	0.77	-0.04	0.81	-0.10	
Eigenvalue	1.40	0.01	1.69	0.03	
Variance Explained	99%	1%	98%	1.7%	
Cronbach's α	0.	69	0.	77	

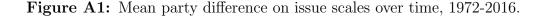
Note: panel results from 1996 wave.

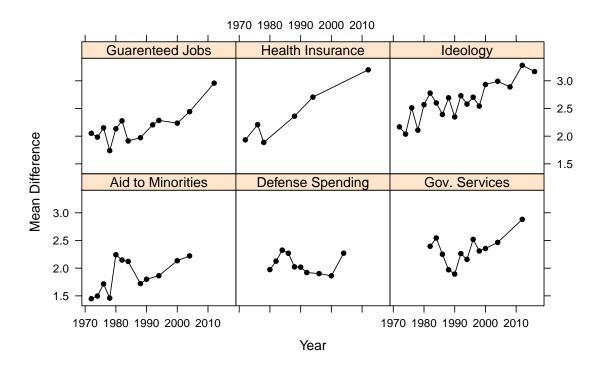
all loadings on the first factor are high (and, certainly greater than the 0.30 cutoff that many employ as a general rule of thumb, and that the first eigenvalue is substantially larger that associated with the second factor (which is below the cutoff value of 1 that many employ). Indeed, the first factor accounts for 86% of variance shared across issues in the cumulative file, compared to only 9% for the second factor. Moreover, a unidimensional scale of the items is highly reliable, sharing 86% of variation with the true, but unobserved, latent perceived polarization construct in the cumulative file, and 77% in the 1992-1996 panel data. To us, this is evidence that perceptions of party differences across issues can accurately be conceived of as indicative of a single latent construct.

Such is also the case with affective polarization. In Table A3, we see high loadings for each affective polarization indicator on the first factor for both datasets,¹ and substantially lower loadings on the second. Moreover, the first factor accounts for about 99% of shared variance across the items, and the unidimensional scale is reliable with an α of 0.69 (0.70 is the cutoff many employ; this value is within the 95% confidence interval for the estimate). We acknowledge that the loading for ideological groups is smaller than that for parties or candidates. However, the loading is still larger than the 0.30 cutoff, and much higher on the first factor than the second. Taken together, the loading simply suggests that affective polarization according to ideological groups taps into latent affective polarization a little "worse" than do the party or candidate measures – a result that makes sense given longstanding findings of ideological "innocence" (i.e., low levels of ideological sophistication) among the mass public. In both cases, then, we believe that dimensionality analyses support our theoretical view and measurement approach when it comes to both types of polarization.

In order to further support our assumptions and strategy, we also plot each of the indicators of perceived and affective polarization over time so that temporal trends in the variables can be compared. These estimates appear in Figures A1 and A2. Although none of the mea-

¹We do not report factor loadings for the 2008-2009 panel because included only party- and candidate-based measures of affective polarization. Still, these variables are highly correlated (r = 0.58) and form a reliable scale $(\alpha = 0.73)$.

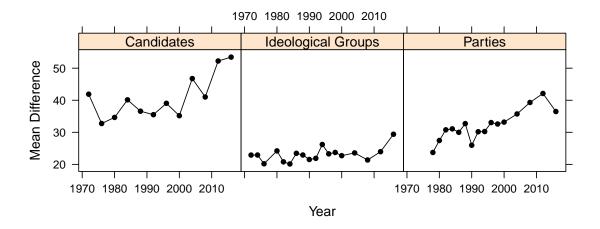




sures of affective or perceived polarization are particularly linear over time, they all increase over time, on average. There are two visually perceptible cases where polarization decreased from 2012 to 2016: party-based affective polarization and perceived ideological differences between the parties. In the former case, the decrease is due to a dip in in-party evaluations (Iyengar, Lelkes, Levendusky, Malhotra & Westwood 2019). In the latter case, the difference is not actually statistically significant (p = 0.08).

We also note that all available measures of perceived polarization were high in 1984 (compared to 1980 and 1988), as were candidate- and party-based measures of affective polarization. Of course, this does not prove problematic for our measurement strategy – rather it, demonstrates that the perceptible undulations in the time series are reflected across items, providing some reassurance that a common dimension influences item-specific temporal trends.

Figure A2: Mean absolute difference in counter-partisan/ideological feeling thermometers over time, 1972-2016.



3 Model Specification and Robustness

The burden for establishing causality is a large one. We cannot tinker with lag structure since the two panel datasets with relevant data (that we know of) only include two waves of that data. However, we can alter model specification in terms of the variables included in each model in an attempt to assuage potential concerns about selection on observables.

In order to avoid randomly removing independent variables, we adopted a more systematic approach developed by Young (2009) and Young and Holsteen (2017), which they call a "model robustness" analysis. These checks are designed to reveal the stability of estimates across model specifications, providing some empirical grasp of how the various characteristics of coefficient estimates (e.g., sign, statistical significance, magnitude) change as the set of independent variables changes. First, we decide on a core set of theoretical and control variables. These are the variables we used in the models in the main text (including the first version of the manuscript). Then, we specify regression models with all possible combinations of these 12 control variables. This results in 2^{12} , or 4,096, possible specifications each for models explaining affective polarization and perceived polarization at time t. Finally, we examine the distribution of coefficient estimates associated with our key independent variables.

ables – affective and perceived polarization at t-1 – across models, including sign, statistical significance, and variability of the "model distribution" of coefficient estimates.

In the 1992-1996 ANES panel models of affective polarization, the coefficient estimate associated with perceived polarization is positive and statistically significant (at the p < 0.05 level) 76% of the time across 4,096 different model specifications. Moreover, the model standard error (based on distribution of coefficients across models) is 0.103. In models where perceived polarization is the dependent variable, affective polarization is positive and significant 100% of the time across all model specifications. Its model standard error is 0.059. Thus, not only is the statistical significance of the effect of affective polarization on perceived polarization perfectly stable across all model specifications, there is also less variability – by about half – in the magnitude of the estimate. Although 76% may seem reasonable for the perceived polarization estimates, we would rarely accept a p-value of 0.24 – a scenario where the probability of a t-statistic being at least as large as we observe is only 0.76. In other words, not only is the effect of perceived polarization quite variable over model specifications, it is not statistically significant in a model with controls for potential theoretical and sociodemographic confounders.

The difference in estimate characteristics are even plainer in the 2008-2009 panel data. Here, perceived polarization at t-1 is positive and significant only 54% of the time across 4,096 different model specifications, with a model standard error of 0.1371. Affective polarization at t-1 is positive and significant 100% of the time across model specifications, with a model standard error of 0.0386. Not only are the affective polarization completely stable in sign and significance across specifications, the magnitude of coefficients are half as variable as those associated with perceived polarization.

4 Disaggregating Affective Polarization

In Table A4, we present three models using the 2008-2009 ANES panel data. Most germane to the discussion at hand, we disaggregated the affective polarization scale (note that in this dataset, the scale is composed of only differential feelings toward parties and candidates). The central finding presented in the manuscript is robust to disaggregation. In both cases, these measures at t-1 predict perceived polarization at t, but perceived polarization at t-1 does not predict either measure of affective polarization at t. This is particularly striking because, as we discussed above, the multiple item perceived polarization scale should contain less measurement error than the individual affective polarization measures. Therefore, the associated coefficient estimate for perceived polarization should be fairly precise. Yet, it is still not statistically significant.²

Results are not as clean in the 1992-1996 ANES panel data, as depicted in Table A5. Here, perceived polarization in 1992 does predict party- and candidate-based affective polarization in 1996, but not ideological group-based affective polarization in 1996. One potential explanation for this discrepancy is measurement error. The multiple item perceived polarization scale is inherently more reliable than the individual affective polarization indicators (Ansolabehere, Rodden & Snyder 2008), which makes statistical controlling and comparison of effects much more difficult than practitioners oftentimes realize (Westfall & Yarkoni 2016). In other words, the operationalization of these two constructs are no longer on equal footing. This makes substantive inferences challenging, especially since we are primarily interested in comparing the effects of affective and perceived polarization.

It is likely that multicollinearity is behind some of these results, as well, especially when it comes to the effects of the affective polarization indicators. This makes sense if you accept our measurement perspective and contextualize these results using the findings of the factor analyses presented above. These indicators of affective polarization are correlated because

²These findings hold also if we use only one measure of affective polarization at a time, rather than both, albeit disaggregated. We opted to present results this way only because it saves some space.

 $\textbf{Table A4:} \ \, \textbf{Cross-lagged panel models of temporal relationship between affective and perceived polarization, with affective polarization disaggregated. ANES 2008-2009 Panel.}$

Party Affect _{t-1} Perceived Polarization _t Party Affect _{t-1} Candidate Affect _{t-1} Candidate Affect _{t-1} 0.077* (0.033) (0.022) (0.028) Candidate Affect _{t-1} 0.170* (0.030) (0.023) (0.023) Perceived Polarization _{t-1} 0.356* (0.020) (0.024) (0.021) Ideological Strength _{t-1} 0.041 (0.024) (0.021) (0.024) Ideological Strength _{t-1} 0.065* (0.027) (0.022) (0.025) Partisan Strength _{t-1} 0.065* (0.028) (0.022) (0.025) Issue Extremity _{t-1} 0.099* (0.025) (0.020) (0.023) Interest in Politics _{t-1} 0.114* (0.024) (0.020) (0.023) Information about Politics _{t-1} 0.067* (0.022) (0.025) (0.023) Education _{t-1} 0.066* (0.027) (0.022) (0.025) Age _{t-1} 0.030 (0.028) (0.022) (0.025) Age _{t-1} 0.030 (0.028) (0.021) (0.023) Income _{t-1} 0.078* (0.025) (0.020) (0.023) Income _{t-1} 0.078* (0.024) (0.020) (0.023) Black _{t-1} 0.038 (0.024) (0.020) (0.023) Black _{t-1} 0.038 (0.024) (0.020) (0.023) South _{t-1} -0.028 (0.024) (0.020) (0.023) Intercept 0.024 (0.024) (0.019) (0.022) Intercept				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			·	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Party Affect _{t-1}	0.077^{*}	0.561^*	0.177^*
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	•	(0.033)	(0.022)	(0.028)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Candidate Affect _{t-1}	0.170^{*}	,	` '
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.030)	(0.023)	(0.023)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Perceived Polarization _{t-1}	0.356^{*}	,	` '
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V -	(0.024)	(0.021)	(0.024)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ideological Strength _{t-1}	,	,	` /
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.027)	(0.022)	(0.025)
$\begin{array}{c} \text{Issue Extremity}_{t-1} & (0.028) & (0.022) & (0.025) \\ 0.099^* & 0.051^* & 0.058^* \\ 0.025) & (0.020) & (0.023) \\ \text{Interest in Politics}_{t-1} & 0.114^* & 0.012 & 0.046^* \\ 0.024) & (0.020) & (0.023) \\ \text{Information about Politics}_{t-1} & 0.067^* & 0.006 & -0.026 \\ 0.027) & (0.022) & (0.025) \\ \text{Education}_{t-1} & 0.030 & 0.028 & -0.047 \\ 0.027) & (0.022) & (0.025) \\ \text{Age}_{t-1} & -0.005 & -0.021 & -0.009 \\ 0.025) & (0.020) & (0.023) \\ \text{Income}_{t-1} & 0.078^* & -0.004 & 0.028 \\ 0.026) & (0.021) & (0.024) \\ \text{Female}_{t-1} & -0.024 & 0.011 & 0.016 \\ 0.024) & (0.020) & (0.023) \\ \text{Black}_{t-1} & 0.038 & -0.025 & -0.003 \\ 0.024) & (0.020) & (0.023) \\ \text{South}_{t-1} & -0.028 & 0.008 & 0.011 \\ 0.024) & (0.029) & (0.022) \\ \text{Intercept} & 0.220 & -0.293^* & 0.074 \\ 0.144) & (0.115) & (0.131) \\ \end{array}$	Partisan Strength _{t-1}	0.065^{*}	0.157^{*}	0.107^{*}
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	(0.028)	(0.022)	(0.025)
$\begin{array}{c} \text{Interest in Politics}_{t-1} & (0.025) & (0.020) & (0.023) \\ \hline \text{Interest in Politics}_{t-1} & 0.114^* & 0.012 & 0.046^* \\ & (0.024) & (0.020) & (0.023) \\ \hline \text{Information about Politics}_{t-1} & 0.067^* & 0.006 & -0.026 \\ & (0.027) & (0.022) & (0.025) \\ \hline \text{Education}_{t-1} & 0.030 & 0.028 & -0.047 \\ & (0.027) & (0.022) & (0.025) \\ \hline \text{Age}_{t-1} & -0.005 & -0.021 & -0.009 \\ & (0.025) & (0.020) & (0.023) \\ \hline \text{Income}_{t-1} & 0.078^* & -0.004 & 0.028 \\ & (0.026) & (0.021) & (0.024) \\ \hline \text{Female}_{t-1} & -0.024 & 0.011 & 0.016 \\ & (0.024) & (0.020) & (0.023) \\ \hline \text{Black}_{t-1} & 0.038 & -0.025 & -0.003 \\ & (0.024) & (0.020) & (0.023) \\ \hline \text{South}_{t-1} & -0.028 & 0.008 & 0.011 \\ & (0.024) & (0.019) & (0.022) \\ \hline \text{Intercept} & 0.220 & -0.293^* & 0.074 \\ & (0.144) & (0.115) & (0.131) \\ \hline \end{array}$	Issue Extremity _{t-1}	` /		` /
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V 1 -	(0.025)	(0.020)	(0.023)
$\begin{array}{c} \text{Information about Politics}_{t-1} & (0.024) & (0.020) & (0.023) \\ \hline \text{Information about Politics}_{t-1} & 0.067^* & 0.006 & -0.026 \\ \hline (0.027) & (0.022) & (0.025) \\ \hline \text{Education}_{t-1} & 0.030 & 0.028 & -0.047 \\ \hline (0.027) & (0.022) & (0.025) \\ \hline \text{Age}_{t-1} & -0.005 & -0.021 & -0.009 \\ \hline (0.025) & (0.020) & (0.023) \\ \hline \text{Income}_{t-1} & 0.078^* & -0.004 & 0.028 \\ \hline (0.026) & (0.021) & (0.024) \\ \hline \text{Female}_{t-1} & -0.024 & 0.011 & 0.016 \\ \hline (0.024) & (0.020) & (0.023) \\ \hline \text{Black}_{t-1} & 0.038 & -0.025 & -0.003 \\ \hline (0.024) & (0.020) & (0.023) \\ \hline \text{South}_{t-1} & -0.028 & 0.008 & 0.011 \\ \hline (0.024) & (0.019) & (0.022) \\ \hline \text{Intercept} & 0.220 & -0.293^* & 0.074 \\ \hline (0.144) & (0.115) & (0.131) \\ \hline \end{array}$	Interest in Politics _{t-1}	0.114^{*}	,	` '
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	V -	(0.024)	(0.020)	(0.023)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Information about Politics _{t-1}	,	,	-0.026
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	V -	(0.027)	(0.022)	(0.025)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$Education_{t-1}$	$0.030^{'}$	0.028	-0.047
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.027)	(0.022)	(0.025)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Age_{t-1}	-0.005	-0.021	-0.009
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.025)	(0.020)	(0.023)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$Income_{t-1}$	` /	-0.004	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-	(0.026)	(0.021)	(0.024)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Female_{t-1}	-0.024	0.011	0.016
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.024)	(0.020)	(0.023)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\mathrm{Black}_{\mathrm{t-1}}$	0.038	-0.025	-0.003
Intercept		(0.024)	(0.020)	(0.023)
Intercept $0.220 -0.293^* 0.074 $ $(0.144) (0.115) (0.131)$	$\mathrm{South}_{\mathrm{t-1}}$	-0.028	0.008	0.011
$(0.144) \qquad (0.115) \qquad (0.131)$		(0.024)	(0.019)	(0.022)
	Intercept	0.220	-0.293*	0.074
1 120		(0.144)	(0.115)	(0.131)
1 199			,	
1,130	n		1,138	

Standardized MLE coefficients w/ standard errors in parentheses.

^{*} $p \leq 0.05$ with respect to a two-tailed test.

they are substantially generated by the same latent psychological processes. As further evidence, the three indicators of affective polarization exhibit the highest variance inflation factors (VIFs) – the most common measure of multicollinearity – across all four models. This is striking: the indicators of affective polarization have higher VIFs even in the model where perceived polarization is the dependent variable (i.e., where perceived polarization appears as both a dependent, 1996, and independent, 1992, variable).

We certainly do not want to hand-wave these discrepancies away. We would, of course, feel much better about completely consistent results across all possible specifications of our models and operationalizations of our key constructs. That said, it seems to us we have substantially more evidence for the causal effect of affective polarization on perceived polarization across analyses. Results from the alternative specifications of the 08-09 ANES panel data are completely consistent with the conclusions in the manuscript. And, we observe more consistency than we do inconsistency in the alternate 92-96 panel analyses: some indicator of affective polarization is always statistically significant, but such is not the case for perceived polarization.

Table A5: Cross-lagged panel models of temporal relationship between affective and perceived polarization, with affective polarization disaggregated. ANES 1992-1996 Panel.

	Perceived	Party	Candidate	Ideology
	Polarization _t	$Affect_t$	$Affect_t$	$Affect_t$
		0		0
$\mathbf{Party} \ \mathbf{Affect}_{\text{t-1}}$	0.075	0.273^{*}	0.103	0.070
•	(0.062)	(0.061)	(0.064)	(0.60)
${f Candidate\ Affect_{t-1}}$	-0.009	0.122^{*}	0.217^{*}	0.060
	(0.060)	(0.060)	(0.061)	(0.059)
${\bf Ideological\ Group\ Affect_{t-1}}$	0.113^{*}	0.068	0.117^{*}	0.425^{*}
	(0.054)	(0.055)	(0.056)	(0.049)
${\bf Perceived~Polarization_{t-1}}$	0.389^{*}	0.119^*	0.119^{*}	0.029
	(0.045)	(0.049)	(0.051)	(0.048)
$Ideological\ Strength_{t-1}$	-0.003	0.060	0.074	0.089
	(0.049)	(0.050)	(0.051)	(0.048)
Partisan Strength _{t-1}	0.042	0.057	0.003	0.015
	(0.049)	(0.049)	(0.051)	(0.048)
Issue Extremity _{t-1}	0.130^{*}	0.087	0.069	0.028
	(0.046)	(0.046)	(0.048)	(0.045)
Interest in $Politics_{t-1}$	-0.092*	0.045	0.048	-0.050
	(0.047)	(0.047)	(0.049)	(0.046)
Information about $Politics_{t-1}$	0.188^*	0.023	0.076	0.016
	(0.050)	(0.051)	(0.052)	(0.049)
$Education_{t-1}$	-0.058	-0.089	-0.129*	0.086
	(0.051)	(0.051)	(0.053)	(0.050)
$ m Age_{t ext{-}1}$	-0.096*	0.003	-0.093*	0.021
	(0.046)	(0.046)	(0.047)	(0.045)
$Income_{t-1}$	0.007	0.069	0.089	0.047
	(0.049)	(0.049)	(0.051)	(0.048)
$Female_{t-1}$	0.034	0.046	-0.003	0.011
	(0.045)	(0.045)	(0.046)	(0.044)
Black_{t-1}	0.019	-0.002	0.011	-0.066
	(0.045)	(0.046)	(0.047)	(0.044)
$\mathrm{South}_{\mathrm{t-1}}$	0.018	-0.040	-0.058	-0.003
	(0.044)	(0.045)	(0.046)	(0.044)
Intercept	0.879^{*}	-0.263	0.342	-0.145
	(0.313)	(0.204)	(0.319)	(0.298)
			_	
n		34	:9	

Standardized MLE coefficients w/ standard errors in parentheses.

^{*} $p \le 0.05$ with respect to a two-tailed test.

5 Full Results, Sophistication Models

 $\begin{tabular}{ll} \textbf{Table A6:} & \textbf{Cross-lagged panel models on samples stratified by level of political information,} \\ \textbf{1992-1996 ANES panel.} \\ \end{tabular}$

	Low Info		Mid Info		High Info	
	$Perceived_t$	$Affective_t$	$Perceived_t$	$Affective_t$	$Perceived_t$	$Affective_t$
1992-1996 ANES Panel						
Affective $Polarization_{t-1}$	0.100	0.067	0.103*	0.336*	0.200*	0.556*
	(0.189)	(0.193)	(0.097)	(0.090)	(0.064)	(0.050)
Perceived Polarization $_{t-1}$	0.312	0.331	0.258^{*}	0.153	0.373^{*}	0.019
	(0.203)	(0.207)	(0.093)	(0.092)	(0.052)	(0.050)
$Ideological\ Strength_{t-1}$	0.089	0.098	-0.012	0.039	-0.011	0.136^{*}
	(0.142)	(0.145)	(0.087)	(0.084)	(0.058)	(0.051)
Partisan Strength _{t-1}	-0.135	0.154	0.093	-0.032	0.073	0.026
	(0.186)	(0.190)	(0.083)	(0.084)	(0.059)	(0.052)
Issue Extremity _{t-1}	0.175	-0.239	0.316*	0.171*	0.074	0.064
	(0.162)	(0.163)	(0.080)	(0.081)	(0.055)	(0.049)
Interest in $Politics_{t-1}$	0.381	0.258	-0.093	0.050	-0.085	0.005
	(0.213)	(0.221)	(0.082)	(0.080)	(0.054)	(0.048)
$\mathrm{Education}_{t-1}$	-0.219	-0.130	0.022	0.138	-0.055	-0.149*
	(0.204)	(0.210)	(0.099)	(0.095)	(0.058)	(0.051)
$\mathrm{Age}_{\mathrm{t-1}}$	-0.178	-0.024	-0.069	0.058	-0.149*	-0.073
	(0.192)	(0.197)	(0.094)	(0.091)	(0.052)	(0.047)
$Income_{t-1}$	-0.266	-0.018	-0.063	0.013	0.107	0.109*
	(0.158)	(0.166)	(0.088)	(0.078)	(0.056)	(0.050)
$Female_{t-1}$	-0.107	0.068	0.019	0.131	-0.008	-0.025
	(0.178)	(0.182)	(0.082)	(0.078)	(0.052)	(0.046)
$\mathrm{Black}_{\mathrm{t-1}}$	0.274	0.117	-0.215*	-0.075	0.027	-0.011
	(0.154)	(0.161)	(0.085)	(0.084)	(0.053)	(0.047)
$South_{t-1}$	-0.073	-0.158	0.155	-0.025	-0.014	-0.039
	(0.172)	(0.174)	(0.085)	(0.084)	(0.052)	(0.046)
Intercept	0.854	0.339	0.941	-0.435	1.500*	0.543
	(0.889)	(0.899)	(0.603)	(0.563)	(0.413)	(0.355)
n	3	5	11	.9	26	67

Standardized maximum likelihood coefficients with standard errors in parentheses.

^{*} $p \le 0.05$ with respect to a two-tailed test.

	Low Info		$\underline{\mathrm{Mid}}$		$\underline{\text{High}}$	
	$Perceived_t$	$Affective_t$	$Perceived_t$	$Affective_t$	$Perceived_t$	$Affective_t$
2008-2009 ANES Panel						
Affective Polarization _{t-1}	0.076	0.565^{*}	0.159^*	0.715*	0.186*	0.672^{*}
•	(0.079)	(0.054)	(0.044)	(0.027)	(0.049)	(0.028)
Perceived Polarization _{t-1}	0.396^{*}	$0.066^{'}$	0.325^{st}	-0.002	0.343^{*}	$0.029^{'}$
	(0.067)	(0.058)	(0.038)	(0.031)	(0.041)	(0.032)
$Ideological\ Strength_{t-1}$	$0.083^{'}$	-0.035	$0.047^{'}$	0.037	$0.015^{'}$	$0.024^{'}$
	(0.069)	(0.056)	(0.042)	(0.032)	(0.049)	(0.036)
Partisan Strength _{t-1}	0.061	0.255^{*}	0.097^{*}	0.107^*	0.085	0.157^{*}
-	(0.074)	(0.058)	(0.044)	(0.034)	(0.049)	(0.035)
Issue Extremity _{t-1}	0.263^{*}	0.113^{*}	0.110*	0.020	0.086	0.115^{*}
	(0.064)	(0.053)	(0.039)	(0.030)	(0.045)	(0.033)
Interest in $Politics_{t-1}$	-0.001	-0.042	0.135^{*}	0.014	0.135^{*}	0.020
	(0.068)	(0.054)	(0.039)	(0.030)	(0.044)	(0.032)
$Education_{t-1}$	0.046	0.057	0.055	-0.011	-0.022*	0.007
	(0.075)	(0.060)	(0.040)	(0.031)	(0.046)	(0.033)
Age_{t-1}	-0.005	-0.087	-0.045	0.025	0.048	-0.041
	(0.066)	(0.053)	(0.037)	(0.028)	(0.044)	(0.032)
$Income_{t-1}$	0.135	-0.038	0.070	0.069*	0.042	-0.031
	(0.071)	(0.057)	(0.040)	(0.030)	(0.046)	(0.033)
Female_{t-1}	-0.120	0.061	-0.029	0.023	0.000	0.004
	(0.069)	(0.055)	(0.038)	(0.029)	(0.043)	(0.031)
Black_{t-1}	0.127	0.045	0.074*	-0.045	0.002	0.004
	(0.071)	(0.057)	(0.038)	(0.029)	(0.044)	(0.032)
$\mathrm{South}_{\mathrm{t-1}}$	-0.059	-0.085	-0.021	0.011	-0.023	-0.004
	(0.068)	(0.054)	(0.037)	(0.028)	(0.044)	(0.032)
Intercept	-0.065	-0.100	0.351	-0.248	1.057^{*}	-0.225
	(0.335)	(0.266)	(0.217)	(0.161)	(0.313)	(0.214)
n	14	17	48	32	40	00

Standardized maximum likelihood coefficients with standard errors in parentheses.

^{*} $p \leq 0.05$ with respect to a two-tailed test.

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