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RESEARCH PAPER



Testing political knowledge as a mediator of the relationship between news use and affective polarization

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ABSTRACT

Fueled by news media, affective polarization is on the rise in the United States. This study tests the possibility that people learn to be polarized from news by investigating whether political knowledge mediates the relationship between news use and affective polarization. Analysis of the 2016 American National Election Studies (ANES) survey (N = 4,271) shows that news media use is associated with higher levels of political knowledge, and also that higher levels of political knowledge are associated with increases in affective polarization. We find that those who actively use news media are more likely to have political knowledge, which, in turn, leads them to have more polarized attitudes toward candidates. The findings of the current study are discussed in light of scholarly conversations on affective polarization in American politics.

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Affective polarization; political polarization; political knowledge; news consumption; political learning; presidential election

Introduction

This study investigates the idea that people learn to dislike “the other side” in politics through the news media. Political discourse in the American public sphere has become increasingly contentious, divisive, and uncivil, and these negative aspects of contemporary politics arguably reached a boiling point during the 2016 Presidential Election (Groshek & Koc-Michalska, 2017). Research shows that American citizens have become increasingly polarized along affective, rather than ideological, lines (Hansen & Kosiara-Pedersen, 2017; Hmielowski et al., 2015; Iyengar et al., 2012). Because affective polarization is associated with a number of negative democratic outcomes, including intolerance or intergroup prejudice (Lelkes & Westwood, 2017) and the avoidance of dissimilar others (Strickler, 2017), it represents perhaps one of the most important challenges facing the cohesiveness of the contemporary American public and, thus, to the continued viability of American democracy.

Prior research shows that news media play an important role in exacerbating the affective polarization of the American public. Specifically, research has investigated the role of selective exposure to partisan news media (e.g., Garrett et al., 2014; Hmielowski et al., 2015; Lau et al., 2017; Levendusky, 2013; Tsifti & Nir, 2017; Warner, 2017), negative coverage of political candidates (e.g., Hansen & Kosiara-Pedersen, 2017; Iyengar et al., 2012; Lau et al., 2017), and coverage of public conflict (e.g., Levendusky & Malhotra, 2016) as factors that contribute to affective polarization. However, research has not clearly addressed how these factors do so – that is, the mechanisms driving the influence of news media use on affective polarization.

This study fills that gap in the literature by testing the role of political knowledge in the polarization process over time. Research shows that people learn from the news media (Dimitrova et al., 2014; Eveland, 2001, 2002; Eveland et al., 2003; Kenski & Stroud, 2006; Liu et al., 2013), and

political knowledge can be linked to individuals' emotional responses to opposing political parties and candidates (Druckman & Levendusky, 2019; Webster & Abramowitz, 2017). This claim implies that political knowledge should mediate the relationship between news media use and affective polarization over time, and we test it using the American National Election Studies (ANES) data collected pre-election and post-election in 2016. Employing the PROCESS macro for SPSS (Hayes, 2013), we test the over-time relationships among pre-election news use and post-election knowledge and affective polarization, all while controlling for respondents' prior levels of affective polarization. Results are discussed in light of contemporary public and scholarly conversations about political polarization in the American public.

Literature review

Affective polarization

Affective polarization refers to the steady growth of mutual dislike between partisans, and prior research shows that it is on the rise (e.g., Iyengar et al., 2012). Arguably, these negative feelings reached a boiling point during the 2016 Presidential Election, which was characterized by contentiousness, divisiveness, and incivility (Groshek & Koc-Michalska, 2017). Evidence suggests that these negative feelings are generally bad for American democracy – affective polarization is associated with intergroup prejudice (Lelkes & Westwood, 2017), the avoidance of non-likeminded others (Strickler, 2017), and polarized election campaigns (Hansen & Kosiara-Pedersen, 2017). Thus, affective polarization poses perhaps the biggest and most important challenge facing contemporary American democracy, and understanding its psychological and sociological underpinnings is an important line of social scientific inquiry.

Defined as the difference in emotional responses to opposing candidates or parties (Garrett et al., 2014; Hmielowski et al., 2015; Lau et al., 2017; Tsftati & Nir, 2017), affective polarization is thought to arise from social identity processes that manifest in either partisan identity or political ideology, or both. While most research has focused on partisan identity as the primary causal factor (Hetherington et al., 2016; Iyengar et al., 2012; Iyengar & Westwood, 2015; Miller & Conover, 2015), other studies show evidence that political ideology is also strongly related (Devine, 2015; Rogowski & Sutherland, 2016; Webster & Abramowitz, 2017). Either way, affective polarization is thought to manifest from psychological attachment to social groups, stemming from identification with a political party or an imagined group of like-minded others (Devine, 2015; Iyengar et al., 2012).

News use and affective polarization

Research has shown a combination of three reasons why news use leads to affective polarization in the United States: the use of partisan media (Bennett & Iyengar, 2008; Iyengar & Hahn, 2009; Lau et al., 2017; Levendusky, 2013; Stroud, 2010), negative coverage of political candidates (Iyengar et al., 2012), and media coverage of public polarization (Iyengar et al., 2012; Lelkes et al., 2017; Levendusky, 2013).

With the increased availability of partisan media, many news consumers now actively choose the media that reinforces their attitudes and beliefs (Levendusky & Malhotra, 2016). Generally, research shows that conservatives choose to consume information from Fox News and liberals tend to choose either CNN or NPR (Bennett & Iyengar, 2008; Iyengar & Hahn, 2009), and evidence suggests that selective exposure to partisan media contributes to affective polarization (Garrett et al., 2014; Hmielowski et al., 2015; Lau et al., 2017; Levendusky, 2013; Tsftati & Nir, 2017; Warner, 2017).

Negative coverage of candidates in news media has also been shown to increase affective polarization. Lelkes (2016) argues that “the tendency of the media to recycle the candidates' negative messages only confirms partisans' suspicions about those on the other side” (Lelkes, 2016, p. 427). Iyengar et al. (2012) found that negative advertising in political campaigns and overall exposure to

campaign advertising led to higher levels of affective polarization (see also, Lau et al., 2017). They further theorized that voters in so-called “battleground states” are more polarized based on the sheer amount of campaigning in those states by both parties. Likewise, Hansen and Kosiara-Pedersen (2017) found that negative coverage generated by competitive political campaigns contributes to affective polarization.

Fiorina and Abrams (2008) noted that the media and various politicians began pushing a narrative of deep polarization between the two sides of the ideological spectrum in the early 1990s, and the chasm has grown with the explosion of online news organizations and partisan websites (Baum & Groeling, 2008). Research shows that media coverage of this partisan divide can also lead to affective polarization (Levendusky & Malhotra, 2016).

Based on the fact that prior literature has found these three prominent elements of news media – the use of partisan media, negative coverage of political candidates, and media coverage of public polarization – to be associated with affective polarization, we hypothesize the following:

H1: News use will be positively associated with affective polarization.

News use and political knowledge

Research demonstrates people tend to learn about politics through news use (Dimitrova et al., 2014; Lasorsa, 2009), because political information obtained from news media outlets raises awareness of political candidates and groups in relation to a wide array of political issues (Valentino et al., 2004). The positive association between news use and political knowledge can be explained by the logic of the cognitive mediation model that explains how greater attention to news beyond simple exposure contributes to understanding of political phenomena (Eveland, 2001, 2002; Eveland et al., 2003). Elaboration is derived from connections between various bits of news consumption (Shah et al., 2004), and it promotes learning and knowledge acquisition (Cowan, 1993; Craik & Tulving, 1975). Specifically, the cognitive mediation model suggests that news use promotes the political learning process (Eveland, 2001, 2002; Eveland et al., 2003) by engaging users in a process of cognitive elaboration that helps them connect information to what they already know about politics, integrating new information into pre-existing cognitive schemata (Liu & Eveland, 2005). Based on these prior findings, the following hypothesis is proposed:

H2: News use will be positively associated with political knowledge.

Political knowledge and affective polarization

While prior research has linked political knowledge and attitude polarization (e.g., Fiorina & Abrams, 2008), research has not yet investigated the relationship between political knowledge and affective polarization. People with higher levels of political knowledge tend to (a) have concrete political beliefs (Hutchens et al., 2016), (b) think of their political positions as relatively more intractable (Hindman, 2012; Kaufhold et al., 2010), (c) maintain cognitive consistency (Festinger, 1957; Kuang & Wilson, 2016; Maurer & Holbach, 2016), and (d) have higher levels of internal political efficacy (Jung et al., 2011).

Thus, politically knowledgeable individuals tend to be more cognitively involved with politics, and this cognitive involvement tends to “spill over” into political affect, as well (Iyengar et al., 2012; Perse, 1990; Shoemaker et al., 1989). That is, politically knowledgeable individuals also tend to be more affectively involved with politics, such that they tend to feel greater affective attachment to their political views. It follows that these individuals are more likely to draw on existing knowledge

about politics when they make affective assessments of political out-groups (Iyengar et al., 2012; Rogowski & Sutherland, 2016). Therefore, we predict that political knowledge will be positively associated with affective polarization, such that more knowledgeable individuals will rate their political in-group more favorably and out-groups less favorably. Based on these ideas, we propose the following hypothesis:

H3: Political knowledge will be positively associated with affective polarization.

Mediation mechanism: News use, political knowledge, affective polarization

Expanding upon these hypotheses and building on prior research, we also expect to find that political knowledge will positively mediate the relationship between political news use and affective polarization. Prior research has established that (a) people learn from the news (Eveland et al., 2003; Moeller & de Vreese, 2015) and (b) news use contributes to affective polarization (Iyengar et al., 2012; Lelkes et al., 2017; Levendusky, 2013). Therefore, we propose that one of the reasons news use contributes to affective polarization is that *cognitive involvement with elections will spill over into emotional responses to rival political characters or groups*. Or, put another way, we argue that if people learn from news media, they are increasingly learning to be polarized because news content is increasingly partisan, negative, and focused on narratives of public polarization (see Iyengar et al., 2012; Levendusky & Malhotra, 2016). People learn by using partisan media and by internalizing negative cues about politics from news coverage (Iyengar et al., 2012; Levendusky, 2013; Stroud, 2010). Attention to partisan channels contributes to the development of strong preferences about a political party or an imagined group of like-minded others as they learn about the negative aspects of the other side (Devine, 2015; Iyengar et al., 2012). That is, information from slanted media tends to affirm pre-existing political views (Garrett et al., 2014), while increasing negative feelings toward the opposing political leaders (Webster & Abramowitz, 2017). By contrast, exposure to new perspectives of political information generate individuals' political ambivalence about political candidates (Huckfeldt et al., 2004). Based on this prior research, we propose the following mediation hypothesis:

H4: Political knowledge will mediate the relationship between news use and affective polarization.

Method

Sample and data

This study relies on nationally representative survey data from the 2016 American National Election Studies (ANES) survey (<http://www.electionstudies.org/>). The ANES collected pre-election data from September 7 through November 7 2016, and post-election data from November 8 through 9 January 2017. The ANES employed a dual-mode data collection methodology: (a) a face-to-face component ($n = 1,181$) and (b) an internet component ($n = 3,090$). The total number of respondents was 4,271. Using the American Association for Public Opinion Research (AAPOR) formula, the pre-election response rate is 50% for the face-to-face component and 44% for the internet in, and 90% of the for face-to-face and 84% of the for internet component for the post-election data. The ratio of responses collected between the two survey modes (Internet vs. face-to-face component) is about 3:1. For the purposes of this study, responses collected for the pre-election period will be termed Time 1 data, and those from the post-election data will be termed Time 2 data. Missing and incorrect responses of target variables are omitted listwise.

Measures

Affective polarization

Affective polarization is operationalized as perceptual attitudes toward political candidates and groups (Fiorina & Abrams, 2008; Garrett et al., 2014; Lau et al., 2017; Tsfaty & Nir, 2017). To assess affective polarization at pre- and post-election, feeling thermometers were employed that asked the extent to which survey respondents favor presidential candidates. Ratings between 51 degrees and 100 degrees indicate a favorable attitude toward a political leader, ratings between 0 degrees and 49 degrees mean an unfavorable attitude, and 50 degrees means neither favorable nor unfavorable. In order to generate the index of affective polarization measure, the value of feeling toward Republican candidates was subtracted from the value of Democratic candidates. The resulting variable was folded to generate the affective polarization toward presidential candidate (Republican – Democrat candidates; $M = 55.89$) and groups (Conservatives – Liberals; $M = 32.55$).

Political knowledge

To assess political knowledge, items asking about political actors were employed (Eveland, 2002; Eveland & Thomson, 2006). The questions asked respondents to identify each of the following political leaders at post-election (Time 2): the US Vice-President, the US Speaker of the House, the Chancellor of Germany, the President of Russia, and the US Supreme Court Chief Justice. If a question was incorrectly answered or not answered, it was not counted as correct. Participants' responses were recoded to form dichotomous measures (*Correct* = 1 and *Incorrect* or *Don't know* = 0), and these scores were added together to generate a single variable of political knowledge ($M = .46$, $SD = .34$).

News use

Because a single indicator is ambiguous regarding reliability and can create issues with measurement error, we employed two questions on news attention and news exposure to generate a variable called “news use”. This combination of news attention and news exposure is the most promising measure of news use (Eveland et al., 2009). In the ANES data (Time 1), news attention was measured as degree of attention to news on any media on a 5-point scale (recoded as 1 = *None at all*, 5 = *A great deal*), and news exposure was assessed by asking respondents to indicate days in a week that they watch/listen to/read news on any media (1 day to 7 days). A multiplied score between news attention and news exposure is used to create an index of news use ($M = 20.27$; $SD = 10.49$).

In addition to general news use, we measured partisan media use. At Time 1, The respondents were asked about whether they have watched or used various media programs and websites (1 = Yes, 0 = No). Items include indicators of the use of television programs, radio programs, and websites that are explicitly conservative or liberal. Conservative media include (1) the Sean Hannity show, (2) the Kelly File (3) Greta Van Susteren, (4) The O'Reilly Factor, and (5) Fox News.com. Liberal media include (1) All in with Chris Hayes, (2) Anderson Cooper 360, (3) Hardball with Chris Matthews, (4) The Rachel Maddow Show, (5) Erin Burnett Out Front, (6) CNN en Español, and (7) CNN.com. Using these items, we generated two additive partisan media variables: conservative media ($M = .29$, $SD = .45$) and liberal media ($M = .26$, $SD = .44$).

Control variables

In the statistical analysis, we controlled socio-demographic characteristics and political orientations, referring to prior control variables used in the literature, as follows (Garrett et al., 2014; Lau et al., 2017; Tsfaty & Nir, 2017; De Vreese & Boomgaarden, 2006):

Socio-demographic characteristics include age over 17 years old ($M = 49.57$, $SD = 50.00$), gender (*Male* = 2,039 [47.7%], *Female* = 2,232 [52.3%]), highest level of education (13 = Bachelor's degree, $M = 11.64$), socio-economic class (recoded as *Lower class* = 0, *Upper class* = 5; $M = .56$, $SD = .92$), and race/ethnicity (recoded as *White* = 1,233 [28.9%], *Others* = 3,038 (71.1%)).

Political variables include three variables. Strength of political ideology is measured with a single 7-point scale (*Extremely Liberal* = 1, *Extremely Conservative* = 7; $M = 2.72$, $SD = 1.56$). Internal political efficacy combines two items measured on 5 point scales (1 = *Strongly Disagree*, 5 = *Strongly Agree*: “politics/government is too complicated to understand (reverse coded), and “I am good at understanding” political issues” ($M = 3.15$, $SD = .82$, $r = .31$ $p < .01$). Finally, (c) political interest is measured with a single 4-point scale (1 = *Not at all Interested*, 4 = *Very Interested*; $M = 2.40$, $SD = .69$).

Statistical analysis

To test the proposed hypotheses and research question, the analysis employed the Hayes’ PROCESS macro (2013). PROCESS uses bootstrapping methodology in the ordinary least squares (OLS) regression framework. Recent studies on political communication research have employed this statistical tool to test mediated relationships (e.g., Lecheler et al., 2015; MacKinnon et al., 2004). The model tests the direct and indirect relationships between news use (Time 1), political knowledge (Time 2), and affective polarization (Time 2), while controlling for affective polarization at Time 1. Thus, the mediation models are autoregressive, accounting for the influence of pre-election affective polarization. For the mediation relationship, we set the number of bootstrap samples for the bias-corrected bootstrap confidence interval as 5000, and the level of confidence for all confidence intervals is 95%.

Results

Before conducting the PROCESS analysis, correlations between news use, political knowledge, and affective polarization about candidates and groups were assessed. Table 1 presents the correlations. Pre-election news use is positively correlated with post-election political knowledge ($r = .30$, $p < .01$). News use (pre-election) is positively correlated with both affective polarization toward candidates ($r = .25$, $p < .01$) and groups ($r = .26$, $p < .01$). Political knowledge at post-election is positively associated with post-election affective polarization about candidates ($r = .16$, $p < .01$) and groups ($r = .28$, $p < .01$). Unsurprisingly, post-election affective polarization about candidates is positively correlated with the polarization of groups ($r = .41$, $p < .01$). These correlations indicate a positive pattern of relationships among the key variables in all of the analysis.

As presented in Table 2, the results showed that as pre-election news use is positively related to post-election knowledge (Time 2) ($\beta = .15$, $p < .001$) and both affective polarization about political groups ($\beta = .08$, $p < .05$) and candidates ($\beta = .14$, $p < .001$), indicating that news use contributes both to political learning and polarization over time. These results support H1 and H2.

In support of H3, post-election political knowledge is positively related to post-election affective polarization about political groups and candidates (both $\beta = .07$, $p < .05$), indicating that after the election, more knowledgeable individuals were also more affectively polarized, even when controlling for the influence of pre-election levels of affective polarization.

Table 1. Correlations between news use, political knowledge, and affective polarization.

| | News Use (T1) | Political Knowledge (T2) | Affective Polarization (Candidates) (T2) | Affective Polarization (Groups) (T2) |
|--|---------------|--------------------------|--|--------------------------------------|
| News use (T1) | 1 | - | - | - |
| Political Knowledge (T2) | .30** | 1 | - | - |
| Affective Polarization (Candidates) (T2) | .25** | .16** | 1 | - |
| Affective Polarization (Groups) (T2) | .26** | .28** | .41** | 1 |

** $p < .01$; T1 = pre-election and T2 = post-election.

Table 2. Ordinary least squares regression models of political knowledge and affective polarization.

| | Political Knowledge (T2) | Affective Polarization (Groups) (T2) | Affective Polarization (Candidates) (T2) |
|---------------------------|--------------------------|--------------------------------------|--|
| Age (older = higher) | .04 | −.00 | .08** |
| Gender (female = 1) | −.06 | .03 | .17*** |
| Ethnicity (White = 1) | .13*** | .04 | −.03 |
| Education | .03 | −.04 | .02 |
| Socio-economic class | .04 [#] | −.01 | −.02 |
| Strength of ideology (T1) | −.10*** | −.26*** | −.10*** |
| Political interest (T1) | .15*** | .16*** | .15*** |
| Political efficacy (T1) | .18*** | .07* | .03 |
| Political knowledge (T1) | .15*** | .02 | −.05 [#] |
| Political knowledge (T2) | − | .07* | .07* |
| News use (T1) | .15*** | .08* | .14*** |
| R ² | .27*** | .19*** | .14*** |

N = 3,048 for political knowledge and 3,056 for presidential candidates. *** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$. T1 = pre-election and T2 = post-election.

Table 3 shows the results from the mediation tests conducted with the PROCESS macro. The results support H4, and show an indirect relationship between pre-election news use and post-election affective polarization about groups via post-election political knowledge ($b = .03$, $SD = .01$, bootstrapped $CI = [.00, .06]$). Results also show a positive mediating role of post-election political knowledge between pre-election news use and post-election affective polarization about candidates ($b = .03$, $SD = .02$, bootstrapped $CI = [.00, .07]$). Thus, people who used the news during the election cycle learned from that news content, which in turn contributed to polarizing their affective evaluations of political groups and the political candidates.¹ In other words, respondents learned to be polarized through the news.

Additional regression models test the conditional relationships between news use and affective polarization, moderated by partisan news use. As shown in Table 4, results show a positive interaction between news use and conservative media use on affective polarization about groups news use ($\beta = .10$, $p < .001$), whereas the interaction term with liberal media is negative ($\beta = −.09$, $p < .001$). These results show that the polarizing influence of news content primarily comes from partisan media.

Discussion

This study finds that, even when controlling for prior levels of affective polarization, pre-election news use is significantly and positively associated with post-election political knowledge and affective

Table 3. The direct and indirect relationships between news use and affective polarization.

| | Effect | Boot SE | Boot LLCI | Boot ULCI |
|---|--------|---------|-----------|-----------|
| News use (T1) → Political knowledge (T2) → Affective polarization (groups) (T2) | .03 | .01 | .00 | .06 |
| News use (T1) → Political knowledge (T2) → Affective polarization (candidates) (T2) | .03 | .02 | .00 | .07 |

Estimates were calculated using the PROCESS macro (model 4) developed by Hayes (2013). Sample size: 1,212 for political groups and 1,215 for presidential candidates. Confidence intervals (95%) are based on the bootstrapping of 5,000 samples. Age, gender, race, socio-economic class, strength of political ideology, and interest in politics, political efficacy were controlled in the mediation tests. T1 = pre-election and T2 = post-election. LLCI = lower-limit confidence interval and ULCI = upper-limit confidence interval. SE = standard error.

¹We also tested mediation using the R package, *mediation*. The results are substantively similar to those generated by PROCESS, indicating positive mediation of political knowledge on affective polarization about both groups ($B = .89$, $LLCI = .51$, $ULCI = .96$, $p < .05$; $n = 1,212$) and candidates ($B = .89$, $LLCI = .54$, $ULCI = .94$, $p < .05$; $n = 1,215$).

Table 4. The conditional relationships between news use and affective polarization.

| | Affective Polarization (Groups) (T2) | Affective Polarization (Candidates) (T2) |
|---|--------------------------------------|--|
| Age | .01 | .11*** |
| Gender (1 = female) | .03 | .16*** |
| Ethnicity (White = 1) | .03 | -.04 |
| Education | -.03 | .02 |
| Socio-economic class | .00 | -.01 |
| Strength of ideology (T1) | -.24*** | -.10*** |
| Political interest (T1) | .20*** | .20 |
| Political efficacy (T1) | .08 | .05 |
| Political knowledge (T1) | .03 | .05 |
| News use (T1) × Conservative media (T1) | .10*** | .03 |
| News use (T1) × Liberal media (T1) | -.09** | -.03 |
| Political knowledge (T2) | .08** | .08** |
| R ² | .20*** | .12.7*** |

N = 3,059. Cell entries are standardized co efficients from ordinary least squares (OLS) regression models. *** $p < .001$, ** $p < .01$, * $p < .05$. T1 = pre-election and T2 = post-election.

polarization. Additionally, post-election knowledge and affective polarization are themselves positively related. Finally, and most importantly, results show a significant and positive indirect relationship between pre-election news use and post-election affective polarization via post-election political knowledge. That is, political knowledge mediates the relationship between news use and affective polarization.

These results point toward a single, overall conclusion: That more knowledgeable Americans are more likely to become affectively polarized when they use the news during election season. Consistent with prior research, our findings indicate that cognitive involvement with elections can be linked to emotional reactions to political candidates and groups (Webster & Abramowitz, 2017). Specifically, our findings support the idea that politically knowledgeable individuals tend to have a negative orientation toward out-party group members and candidates (Druckman & Levendusky, 2019; Hetherington & Rudolph, 2015). This conclusion represents a substantial theoretical contribution to research on affective polarization, which has become a hot topic in political communication and political science in the last five to six years. This growing literature has investigated the roles of political ideology and partisan identity (Devine, 2015; Hetherington et al., 2016; Iyengar et al., 2012; Iyengar & Westwood, 2015; Miller & Conover, 2015; Rogowski & Sutherland, 2016; Webster & Abramowitz, 2017), as well as the influence of selective exposure to partisan news media (e.g., Garrett et al., 2014; Hmielowski et al., 2015). But to this point, research has not examined the role of political learning in the affective polarization process. Leveraging an over-time research design, the current study fills this gap in the literature by testing the role of post-election knowledge in mediating the influence of pre-election news use on affective polarization, all while controlling for pre-election levels of polarization. This study therefore contributes to our understanding of *how* news media use contributes to political polarization: Because news media content itself is increasingly partisan, negative, and focused on public conflict (Hmielowski et al., 2015; Levendusky, 2013; Levendusky & Malhotra, 2016), people learn to dislike the other side by paying attention to this content. Thus, and perhaps unsurprisingly, immersion in a politically polarized news media environment teaches people to be polarized in terms of their evaluations of out-party candidates.

By extension, this conclusion is related to several discussion points that are important for ongoing scholarly conversations about political engagement and news media literacy. First, a large body of literature suggests that engagement with news media is generally a good thing for American democracy (e.g., Gil de Zúñiga et al., 2012). Engagement with the news has been empirically linked with political and civic engagement (e.g., Gil McLeod et al., 1999; Shah et al., 2005; Gil de Zúñiga et al., 2010), social capital (e.g., Shah, 1998; Shah et al., 2001), and most importantly for our purposes, to political knowledge (e.g., Eveland, 2001, 2002; Eveland et al., 2003). While we do not

argue against these democratic benefits of news engagement – indeed, evidence suggests that its democratic outcomes are largely positive – the results of the current study do point toward potentially negative aspects of news engagement. If people learn to be politically polarized through the news, then simply promoting political learning via news use is not sufficient to combat the rising tide of polarization in the United States. Indeed, learning through the news appears to contribute to the problem rather than alleviating it, which suggests that a different kind of learning is necessary in order to reduce polarization. According to this line of thinking, there are other mechanisms that may explain the positive relationship between political knowledge and affective polarization. For instance, knowledge gaps also could be closely associated socio-economics, especially in the context of an election.

We suggest that media literacy education could provide such an alternative pathway to reducing polarization in the American public. News media literacy education “focuses on developing critical thinking and analysis skills to become a more mindful media consumer” (Tully & Vraga, 2017, p. 2), which implies that media literate consumers are more aware of their own cognitive and affective responses to news content. Perhaps for this reason, news media literacy has been found to reduce perceived media bias (Vraga et al., 2009) and increase tolerance for oppositional views (Tully & Vraga, 2017). Because both perceived media bias and political tolerance have been linked to political behavior (e.g., Rojas, 2010; Tsfati & Dvir-Gvirsman, 2017), news media literacy could potentially alter the ways in which individuals engage with politics more broadly. Feasibly, one positive byproduct of news media literacy could be the reduction of affective polarization: If individuals are more aware of their emotional responses to news content, perhaps they will not internalize negative feelings about oppositional candidates, parties, and partisans. Thus, news media literacy education could provide a valuable supplement to basic civic education by altering what and how people learn through the news in a way that could potentially temper their negative affective evaluations of the other side.

The conclusions of the current study are limited in several ways. First, the study presents time-ordered relationships by relying on the ANES time series data. However, the results cannot be used to make causal inferences because the analysis cannot rule out all potential alternative explanations for the observed results. Testing causal mechanisms is a fundamental goal of social science (Imai et al., 2011), and there are multiple options generating evidence that might support causal theories. One way is to test the reverse causal order among the proposed variables and compare the results to the theorized causal order. We conducted data analyses to compare mediation effect size using the *mediation* package in R (Imai et al., 2011). According to the mediation analysis (95% confidence intervals and 5,000 bootstrapped iterations), the average causal mediation effect (ACME) of the proposed path model (news use → political knowledge → affective polarization) is 1.76 for political groups and 3.00 for candidates. Meanwhile, the ACMEs of the reverse causal order are .99 (groups) and .14 (candidates). Thus, the estimates of mediated effects generally support our theory. However, it is also true that the reverse causal order received some empirical support, which means that there is the possibility of a reciprocal relationship between the proposed variables. Along this line of thought, future research could investigate these relationships using an experimental approach in order to establish causality. Second, more robust measures of key variables could be developed. While the ANES survey includes sufficient measures of these variables, some measures are less than ideal. For instance, the political knowledge questions did not employ the widely recommended five-item knowledge index (party control of the House, veto override percent, party ideological location, judicial review, and identifying the Vice President; see Delli Carpini & Keeter, 1993). Additionally, this study measured general political knowledge, and therefore the study is limited in that it didn't measure more specific forms of knowledge derived from negative identity cues in media content. That said, our measures are roughly indicative of political learning, more broadly. Future research could test the effect of partisan political knowledge on affective polarization. Finally, the survey relied on self-reported responses, which means responses could be biased by social desirability or the

overestimation of news use. Future research should replicate these findings using field observations rather than self-reported observations.

Despite these limitations, this study outlines and tests the core logic behind the idea that people learn to be affectively polarized through news use. Replying on the cognitive mediation model, this study finds positive relationships among news use, political knowledge, and affective polarization over time, while also controlling for prior levels of affective polarization. These findings highlight and reinforce the now-common claims that affective polarization is on the rise in the United States and that it is fueled by news media. Moreover, it tests a potential mechanism for these claims – people learn to be polarized by using the news during election season.

Highlights

- News use is positively associated with political knowledge and affective polarization.
- Political knowledge is positively related to affective polarization.
- Political knowledge mediates the relationship between news use and affective polarization.

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