

The communicative processes of attempted political persuasion in social media environments

Social media environments

The mediating roles of cognitive elaboration and political orientations

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Abstract

Purpose – The purpose of this paper is to investigate the process by which social media news use leads individuals to engage in attempted political persuasion, examining the mediating roles of cognitive elaboration, political knowledge, political efficacy and political interest.

Design/methodology/approach – The study relies on a nationally representative two-wave online survey collected before the 2016 US Presidential Election. Serial mediation is tested using the PROCESS macro.

Findings – The study finds significant indirect effects of social media news use on political persuasion via cognitive elaboration, political knowledge, political efficacy and political interest.

Research limitations/implications – Causal inferences should be made with caution. While the measurement of cognitive elaboration is based on prior literature, it is a complex mental process that could be measured more directly in future research.

Social implications – The findings imply that social media news use contributes to a potentially discursive environment in which cross-cutting views may drive argumentation. Thus, the study sheds light on how social media contribute to persuasive political conversation.

Originality/value – The study applies the O-S-R-O-R model to political persuasion and highlights the processes of reflection, understanding and elaboration that convert news use into attempted persuasion.

Keywords Political knowledge, Cognitive elaboration, The O-S-R-O-R model, Political efficacy, Political interest, Political persuasion social media

Paper type Research paper

1. Introduction

Social media have become important venues for attempted political persuasion (Thorson, 2014), where news consumption and political expression often overlap and intermingle (Weeks *et al.*, 2015). So much so, in fact, that research into attempted persuasion on social media is a burgeoning area of inquiry. For example, prior studies have highlighted the role of political content creation (Ardévol-Abreu *et al.*, 2017), second screening (Barnidge *et al.*, 2017), discussion, (Gil de Zúñiga *et al.*, 2018) and social interaction (Diehl *et al.*, 2016). However, the literature has not, to this point, investigated the role of cross-cutting exposure on political persuasion.

Theoretically, cross-cutting exposure (Mutz, 2002) is a necessary condition for attempted persuasion. After all, if two people agree with one another, then one would not need to try to persuade the other. Also key to this theory is the notion of cognitive elaboration (Eveland, 2002;



Shah *et al.*, 2007), or the process of integrating new information through critical thinking and reflection. Through this process, individuals may understand cross-cutting ideas so that they can attempt to counter-argue in favor of their own point of view. Therefore, examining the role that cross-cutting exposure and cognitive elaboration play in the process of attempted persuasion is important to develop theory about this growing phenomenon.

This study fills that gap in the literature by testing whether cognitive elaboration about cross-cutting views mediates the influence of social media news use on attempted political persuasion. The study theorizes that elaboration on political difference increases political efficacy, interest and knowledge, which, in turn, influence persuasion processes. To do so, the study analyzes data from a nationally representative two-wave online survey collected before the 2016 US Presidential Election. The paper tests serial mediation processes that occurs over time in order to illuminate how social media news use leads to attempted political persuasion. Results of this study are discussed in light of scholarly conversations about the role of social media in pluralistic societies.

2. Literature review

2.1 Theoretical framework: the O-S-R-O-R model

The process of political persuasion is grounded in the logic of the O-S-R-O-R model: Orientations (O_1), Stimuli (S), Reasoning (R_1), Orientations (O_2) and Responses (R_2), which is an expansion of the older O-S-O-R model (McLeod *et al.*, 1999). The first “O” in the model connotes an individual’s fundamental, motivational or cognitive orientations that influence behavior. The “S” stands for “stimulus” and refers to the specific environmental factors that influence specific behaviors. The second “O” stands for “reorientation” and symbolizes those motivational or cognitive factors that change in response to the stimulus. Finally, the “R” represents behavioral “responses.” Thus, the model seeks to explain behavior as a systematic pathway from environmental stimuli, where individual differences both precede and intervene in the process.

More recently, scholars have expanded to O-S-O-R model to include “reasoning” processes. Thus, the additional “R” in the O-S-R-O-R model stands for cognitive reasoning that encompasses “both interpersonal and intrapersonal ways of thinking” (Shah *et al.*, 2007, p. 698) and result in reorientations. Therefore, these reasoning processes can be viewed as a theoretical mechanism through which reorientation, and subsequently behavioral change, occurs.

The model has often been applied to the study of news media, which acts an environmental stimulus (e.g. McLeod *et al.*, 1999; Shah *et al.*, 2005, 2007). These studies typically examine behavioral outcomes such as political participation, and treat variables such as political interest or efficacy as intervening reorientations affected by news consumption. The noteworthy point in the O-S-R-O-R model is that individuals often reflect on news content, recalling previously held beliefs and incorporating new information into existing cognitive schemas (Shah *et al.*, 2007). This process of reflection and cognitive elaboration results in reorientation and, subsequently, behavioral change. Specifically, prior research shows that news-driven processes of cognitive elaboration and reasoning enhance political learning, builds political efficacy and develops political interest. Moreover, all of these political orientations are significant predictors of political engagement, more broadly (Cho *et al.*, 2009; Eveland, 2001; Eveland and Thomson, 2006; Shah *et al.*, 2007). Given the context of social media, where content consumption and production occur in the same spaces, these political orientations may be linked to attempted political persuasion.

2.2 Social media and cognitive elaboration about cross-cutting views

Social media news users generally encounter a variety of perspectives from news and commentary in social media environments (Barnidge, 2015; Kim and Kim, 2017), in part because these platforms have encouraged a diversification of news sources (Gottfried and Shearer, 2016; Matsa and Shearer, 2018). Technological features such as hashtags, links,

sharing and commenting on social media platforms brings news users into contact with a relatively broad range of political views (Kim, 2011). This kind of diverse exposure is important, because prior research suggests that those who encounter heterogeneous political views in social media are more likely to engage in political discussion and civic/political participation (Kim and Chen, 2015; Kim *et al.*, 2013). However, the literature has not systematically investigated the cognitive and perceptual effects resulting from exposure to cross-cutting views in social media platforms.

Neither is it clear from the prior literature that cognitive elaboration necessarily results from social media news exposure. Offline news use tends to promote cognitive elaboration, which is key to political learning (Eveland, 2001). Elaboration processes mediate the relationship between news exposure and knowledge gain (Eveland, 2001; Eveland and Thomson, 2006; Shah *et al.*, 2007). And yet it is unclear whether this process unfolds differently for social media news, where people are more likely to encounter cross-cutting views (Barnidge, 2017).

Because of these facets of news on social media news, users may require greater cognitive effort to evaluate the reliability of news content and the validity of oppositional views, perhaps by seeking further political information (Hughes and Palen, 2009; Kim, 2011). Potentially, those who encounter cross-cutting political viewpoints may try to understand different perspectives in order to develop their political arguments with supportive logic and evidence (Weeks *et al.*, 2015). Therefore, using social media news is likely to expose people to cross-cutting information and prompt cognitive elaboration about that information:

H1. Social media news use will be positively related to cognitive elaboration about cross-cutting views.

Elaborating about cross-cutting views generates cognitive benefits, including political knowledge, efficacy and interest (Cho *et al.*, 2009; Shah *et al.*, 2007). These political orientations are important foundations for broader political engagement (Eveland and Hively, 2009; Shah *et al.*, 2005). Prior research shows that the more news individuals consume, the more likely they are to be knowledgeable about politics (Goh, 2015; Kenski and Stroud, 2006). Moreover, elaboration about news is associated with political learning (Eveland, 2002; Eveland and Scheufele, 2000; Liu and Eveland, 2005; Perse, 1990). Generally, processing cross-cutting views requires relatively more cognitive effort to evaluate and integrate these views into pre-existing schema (Anderson *et al.*, 1991; Eveland, 2002). This stronger cognitive exertion may, in turn, lead to more political knowledge (Eveland, 2002).

Cognitive elaboration can also build political efficacy, which is defined as “the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change” (Campbell *et al.*, 1954, p. 187). Prior research shows that cognitive elaboration about cross-cutting views is linked to political efficacy (Cho *et al.*, 2009; Jung *et al.*, 2011). One reason for this may be because cognitive efforts to understand political information enhance people’s levels of self-awareness about their existing views as well as others’ rationales (Mutz, 2002, 2006).

Political interest is another potential benefit of elaboration about cross-cutting views. Prior research stresses the role of cognitive elaboration in linking news use and political interest (Cho *et al.*, 2009; Shah *et al.*, 2007). Because elaboration entails a process of relating new information to what people already know, it theoretically builds political interest through cognitive engagement with it (see Cho and Choy, 2011; Lasorsa, 2003).

In sum, the theoretical logic of the O-S-R-O-R model and prior empirical findings suggest that individuals who elaborate about cross-cutting views in social media news will have higher levels of political knowledge, efficacy and interest. Therefore, we offer the following predictions:

H2. Cognitive elaboration about cross-cutting views will be positively associated with (a) political knowledge, (b) political efficacy and (c) political interest.

2.3 Mediation

The principal logic of the O-S-R-O-R model underscores the indirect relationship between news use and political engagement (see Figure 1), which is mediated via elaboration/reasoning processes and subsequent response orientations including knowledge, efficacy and interest (Cho *et al.*, 2009; Jung *et al.*, 2011; Shah *et al.*, 2007). The key point in the model is that the influence of news use on political behavior is indirect because individual differences in information processing matter. The way in which a given individual processes and discusses new information facilitates the effects of news on behavior.

Prior research supports the idea that cognitive elaboration, political efficacy, political interest and political knowledge act as mediators between news use and political behavior. For example, the news consumption indirectly influences individuals' civic and political participation via political interest (Lasorsa, 2009; Strömbäck *et al.*, 2012), knowledge about politics (Eveland *et al.*, 2005a, b; Kenski and Stroud, 2006) and political efficacy (Cho *et al.*, 2009; Eveland, 2001; Eveland and Thomson, 2006; Hoffman and Thomson, 2009; Park, 2015; Shah *et al.*, 2007; Velasquez and LaRose, 2015). This logic can be applied in the context of political persuasion. For example, persuading acquaintances, friends and family members during a heated campaign requires cognitive effort to understand diverse political views, which would be positively related to one's political knowledge, efficacy, and interest. Based on prior studies and the theoretical predictions of the O-S-R-O-R model (Cho and McLeod, 2007; Cho *et al.*, 2009; McLeod *et al.*, 1999; Shah *et al.*, 2007), the following mediation hypotheses are posited:

- H3.* Social media news use will be indirectly related with political persuasion via (a) cognitive elaboration about cross-cutting views, (b) political knowledge, (c) political efficacy and (c) political interest.

3. Method

3.1 Sample and data

The data for testing the proposed hypotheses were collected from a two-wave nationwide panel study with adults in the USA during the run-up to the 2016 US Presidential Election. The first survey wave was conducted between September 27 and October 13, 2016, and the

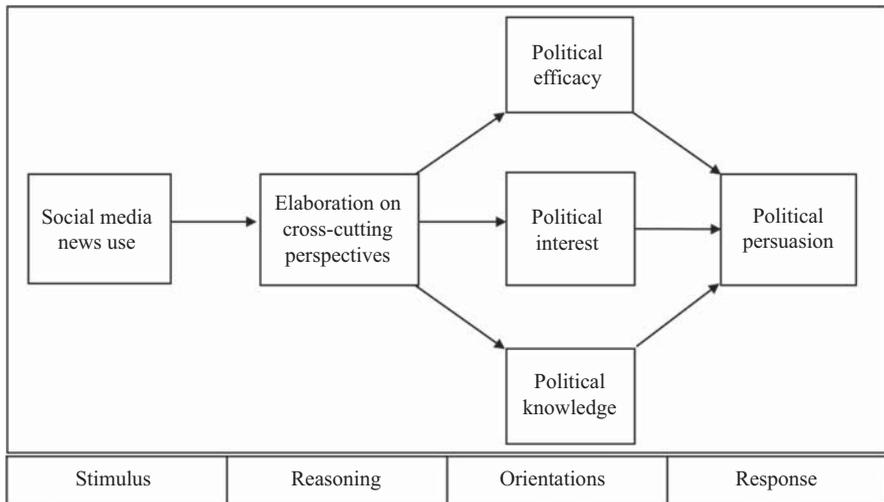


Figure 1.
Theoretical model
outlining relationships
structured by the
O-S-R-O-R model

second wave was administered between October 27 and November 8, 2016 (Election Day). The survey instrument was administered using the online survey program Qualtrics. A stratified quota sampling method was used, with quotas based on US Census parameters for age, gender, ethnicity/race, education and household income. The quota sampling approach helps to establish the national representativeness (see Bode *et al.*, 2014, for more on this sampling strategy). The sample size for the first wave is $N=1,624$, and for the second wave it is $N=637$. The response rate was 15.5 percent for the first wave and the retention rate was 39.7 percent (AAPOR, 2016), which is in line with recent decreases in response rates in surveys more broadly (see Sax *et al.*, 2003). Moreover, the quality of a survey is not associated with response rates when collecting data over a short period (Hutchens *et al.*, 2016).

To assess the representativeness of the survey, we compared sample demographics to the 2015 American Community Survey (ACS) conducted by the US Census Bureau. The current sample closely matches the ACS, although there was a smaller proportion of non-high school graduates in the sample than in the population (Census.gov, 2015; see also Table A1). Age was measured as year of birth ($M=45$, $SD=16.63$). The sample is comprised by a roughly equal percentage of females and males (50.2 percent female and 49.8 percent male). The percentage of Whites reflects the national population (White: 63.5 percent; others: 36.5 percent). The average household income falls between \$50,000 and \$70,999. The mode of educational is “some college, no four-year degree.”

3.2 Measures

Table I shows question wording for all survey items, along with reliability and descriptive statistics for all variables.

3.2.1 Attempted political persuasion. The attempted political persuasion variable is based on Thorson’s (2014) measure (see also, Weeks *et al.*, 2015). It averages two survey items (Cronbach’s $\alpha=0.93$) measured on five-point scales (1 = strongly disagree, 5 = strongly agree), and it has a mean of 2.14 ($SD=1.23$).

3.2.2 Political efficacy. Similarly, we drew on prior research for our measures of political efficacy (Jung *et al.*, 2011; Kenski and Stroud, 2006; Niemi *et al.*, 1991). The variable averages three survey items (Cronbach’s $\alpha=0.63$) measured on five-point scales (1 = strongly disagree, 5 = strongly agree), and it has a mean of 2.87 ($SD=0.80$).

3.2.3 Political interest. The measure of political interest was also based on prior research (e.g. Hollander, 2014). A single survey item was used (1 = strongly disagree, 5 = strongly agree), and the item has a mean of 3.81 ($SD=1.15$).

3.2.4 Political knowledge. The political knowledge variable was derived from prior research (Delli Carpini and Keeter, 1996). This study focusses on campaign-related knowledge during the 2016 US Presidential Election, and it therefore uses an additive knowledge-measurement index involving eight fact-based multiple-choice questions about parties/politicians in the second wave of the survey. Responses were recoded so that correct answers = 1 and incorrect (and do not know) answers = 0. The eight responses were then averaged ($M=0.22$, $SD=0.30$).

3.2.5 Elaboration on cross-cutting views. The variable for elaboration on cross-cutting views is derived from prior studies on cognitive elaboration (Eveland and Thomson, 2006; Eveland, 2004; Velasquez and LaRose, 2015). Three items measured on five-point scales (1 = strongly disagree, 5 = strongly agree) were averaged (Cronbach’s $\alpha=0.90$). The variable has a mean of 2.97 ($SD=0.96$).

3.2.6 Social media news use. The social media news use variable is derived from prior studies (Glynn *et al.*, 2012; Lee and Ma, 2012). Eight survey items measured on five-point scales (1 = never, 5 = always) were averaged (Cronbach’s $\alpha=0.93$) to create the final variable, which has a mean of 2.81 ($SD=1.05$).

Variables	Questionnaire	Descriptive stats and reliability
Political persuasion	Please indicate how often during the past 3 months you have engaged in the following activities <u>OFFLINE</u> (where 1 is never and 5 is very often): (1) Tried to persuade others to vote for a specific candidate (2) Tried to persuade my friends or acquaintances about political causes	$M = 2.14$ $SD = 1.23$ $\alpha = 0.93$
Political efficacy	How strongly do you agree or disagree with the following statements (where 1 is strongly disagree and 5 is strongly agree): (1) People like me can influence government (2) I consider myself well qualified to participate in politics (3) I don't think public officials care much what people like me think	$M = 2.87$ $SD = 0.80$ $\alpha = 0.64$
Political knowledge	(1) Which candidate or candidates support increasing federal taxes? (2) Which candidate or candidates support building additional nuclear power plants in the USA? (3) Which candidate or candidates support making public colleges or universities tuition-free? (4) Which candidate or candidates proposed a 20% tax and larger tariffs on imported goods? (5) Which candidate or candidates think that people on the no-fly list or the terror watch list should be allowed to purchase guns? (6) Which candidate or candidates support same-sex marriage? (7) Which candidate or candidates support sending USA ground troops to fight ISIS? (8) Which candidate or candidates support allowing undocumented immigrants in the USA to become legal residents?	$M = 0.22$ $SD = 0.30$
Political interest	(1) I am interested in the campaign and election going on	$M = 3.81$ $SD = 1.15$
Elaboration on cross-cutting views	Please tell us how strongly you agree or disagree with following statements (where 1 is strongly disagree and 5 is strongly agree): (1) I often think about how the news/posts I encountered on SNSs, particularly ones that I DISAGREE with, relates to other things I know (2) I often find myself thinking about discussions or comments about news on SNSs, particularly ones that I DISAGREE with (3) I often recall news and information about politics I've encountered on SNSs, particularly that I DISAGREE with, when I discuss with others	$M = 2.97$ $SD = 0.96$ $\alpha = 0.90$
Social media news use	Think of social media you use most often to get news and information about politics. On a scale from 1 to 5 (where 1 is never and 5 is always), indicate how often you engage in the following activities: (1) Get news or information about public affairs (2) Read information about campaigns and politics (3) Click on news links to other news sources (4) Post/share news or news headlines from other news sources (5) Post news with my personal thoughts and opinions about stories (6) Respond to other users' news/comments posting using "like" or "share" buttons (7) Promote what others have posted about news or information about politics (8) "Like" or "follow" news organizations	$M = 2.81$ $SD = 1.05$ $\alpha = 0.93$

Table I.
Measurement items employed in the current study

3.2.7 Control variables. Previous studies on social media and political persuasion controlled for (a) demographics (see Table AI), (b) national/local news media usage and (c) political partisanship ideology (Ardévol-Abreu *et al.*, 2017; Diehl *et al.*, 2016). Therefore, we controlled for these sets of variables, as well. Demographic controls include age, gender, ethnicity, education and household income (see Sample and Data section for descriptive statistics).

We also controlled for two types of traditional news use (TV news, radio news programs and newspapers): national news use ($M = 2.54$, $SD = 1.08$) and local news use ($M = 3.27$, $SD = 1.34$). Political partisanship was also controlled, and response options included somewhat conservative (12.3 percent), closer to conservative (13.6 percent), neither conservative nor liberal (25.9 percent), closer to liberal (12.0 percent), somewhat liberal (15.0 percent), to 1 = very liberal (11.9 percent) ($M = 3.88$, $SD = 1.80$).

3.3 Statistical analysis

The PROCESS macro was employed to test both direct and indirect effect relationships (Hayes, 2013; model 6). This statistical tool is used to conduct serial mediation analyses with multiple mediators (Diehl *et al.*, 2016). While other statistical methods such as structural equation modeling are designed to estimate covariance structures among interrelated variables and assess model fit to data (Kline, 2016), these methods rely on older, outdated mediation tests (such as the Sobel test or the “causal paths” method). The PROCESS macro, by contrast, relies on bootstrapping methods that draw a specified number of subsamples from the posterior sample distribution and aggregate estimates across these samples. This method has been shown to provide more efficient and less biased estimates of indirect effects (Hayes, 2009). The PROCESS macro calculates direct effects with ordinary least square regression and tests indirect effects with bootstrap confidence intervals simultaneously. To test the indirect effects, we set the number of bootstrap samples for the bias-corrected bootstrap confidence interval at 5,000 and the confidence level at 95%.

4. Results

Before testing the direct and indirect effects among the variables, zero-order Pearson’s correlation tests were conducted (see Table II). The results show that social media news use is positively correlated with elaboration on cross-cutting views ($r = 0.57$, $p < 0.01$), political efficacy ($r = 0.26$, $p < 0.01$), interest ($r = 0.29$, $p < 0.01$) and political persuasion ($r = 0.40$, $p < 0.01$), but it is negatively correlated with political knowledge ($r = -0.06$, $p < 0.01$). Elaboration on cross-cutting views is positively associated with political efficacy ($r = 0.36$, $p < 0.01$), interest ($r = 0.46$, $p < 0.01$), knowledge ($r = 0.14$, $p < 0.01$) and persuasion ($r = 0.46$, $p < 0.01$). Moreover, political orientations (i.e. political efficacy, interest and knowledge) are positively correlated with political persuasion.

The PROCESS models are a good fit to the data, predicting a relatively high degree of variance in the endogenous variables. For elaboration about cross-cutting views, the $R^2 = 0.33$. For political efficacy, it is $R^2 = 0.22$. For political interest, it is $R^2 = 0.27$. For political knowledge, it is $R^2 = 0.14$. Finally, for political persuasion, the total effects model $R^2 = 0.32$. All R^2 values are significant where $p < 0.001$.

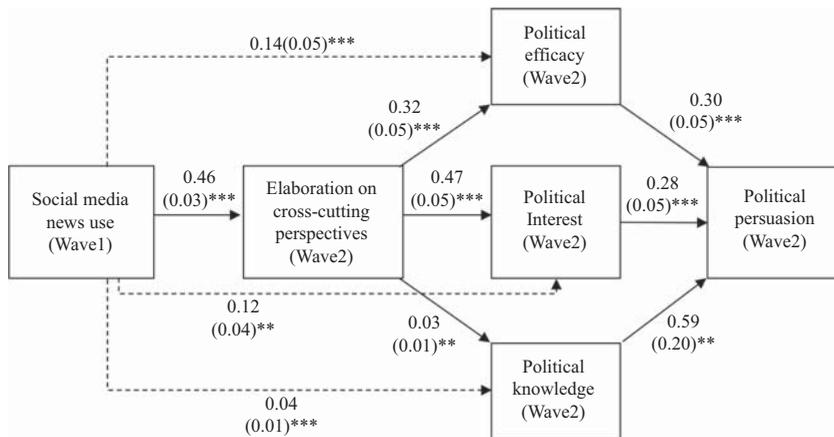
The first hypothesis predicts that social media news use will be positively associated with elaboration on cross-cutting views. As shown in Figure 2, the results show that those who often seek social media news are more likely to elaborate on cross-cutting social media news ($b = 0.46$, $SD = 0.03$, $p < 0.001$), after controlling for demographics, news usage and political partisanship. Thus, $H1$ is supported.

Looking at the relationships between elaboration on cross-cutting views and the political orientations in wave 2, those who elaborate on cross-cutting views tend to have higher levels of political efficacy ($b = 0.32$, $SD = 0.05$, $p < 0.001$), political interest ($b = 0.47$, $SD = 0.05$, $p < 0.001$) and political knowledge ($b = 0.03$, $SD = 0.01$, $p < 0.05$). These results support $H2$. Accordingly, this study shows positive effects, indicating that those who have higher levels of political efficacy ($b = 0.30$, $SD = 0.05$, $p < 0.001$), who are interested in the election ($b = 0.28$, $SD = 0.05$, $p < 0.001$), and who have higher degrees of political knowledge ($b = 0.59$, $SD = 0.20$, $p < 0.05$) are more likely to engage in persuasive discussion with others.

Table II.
Correlations among
all variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Born in year	—												
2 Gender	0.19**	—											
3 Ethnicity	0.22**	0.29**	—										
4 Education	-0.05	-0.04	0.01	—									
5 House income	-0.02	-0.08**	0.01	0.05	—								
6 National news	0.04	-0.08**	0.09**	0.01	0.24**	—							
7 Local news	-0.00	-0.03	0.00	-0.02	0.15**	0.60**	—						
8 Partisanship	-0.09**	-0.12**	-0.13**	0.02	-0.00	-0.10**	-0.02	—					
9 Social media news	0.36**	0.11**	0.15**	0.01	-0.01	0.02	0.03	-0.09**	—				
10 Elaboration	0.25**	0.13**	0.18**	0.03	0.01	0.05	0.10*	-0.11**	0.57**	—			
11 Political efficacy	-0.06	-0.05	-0.01	0.22**	0.05	0.02	0.08*	-0.07	0.26**	0.36**	—		
12 Political interest	-0.04	-0.05	0.04	0.11**	0.02	-0.02	0.07	-0.07	0.29**	0.46**	0.52**	—	
13 Political knowledge	-0.30**	-0.17**	-0.18**	0.10**	0.08**	0.00	0.03	0.04	-0.06*	0.14**	0.34**	0.40**	—
14 Political persuasion	0.09*	0.03	0.10*	0.15**	-0.04	-0.03	0.06	-0.10*	0.40**	0.46**	0.41**	0.42**	0.22**

Notes: All cell entries are two-tailed zero-order Pearson' correlation coefficients. Gender = female recoded as 1; ethnicity = White recoded as 1; partisanship = conservative recoded as 7. * $p < 0.05$; ** $p < 0.01$



Notes: Sample size (Wave 1/Wave 2)=1,624/637. Path entries are unstandardized coefficients from PROCESS models. Values in brackets are SD. Control variables include age, gender, ethnicity, education, household income, national news use, local news use and political partisanship. For elaboration about cross-cutting views, the $R^2=0.33$. For political efficacy, $R^2=0.22$. For political interest, $R^2=0.27$. For political knowledge, $R^2=0.14$. Finally, for political persuasion, the total effects $R^2=0.32$. All R^2 values are significant where $p < 0.001$; ** $p < 0.05$; *** $p < 0.001$

Figure 2. Effect of social media news use on political persuasion through elaboration on cross-cutting views, political efficacy, interest and knowledge

As shown in Table III, the indirect paths between social media news use (W1) and political persuasion (W2) through elaboration and political orientations are statistically significant and positive. Specifically, the results indicate that those who frequently use social media news are more likely to elaborate cross-cutting views, which increases political efficacy ($b = 0.04$, $SD = 0.01$, $LLCI = 0.0267$, $ULCI = 0.0696$), interest ($b = 0.06$, $SD = 0.01$, $LLCI = 0.0370$, $ULCI = 0.0875$), and political knowledge ($b = 0.01$, $SD = 0.00$, $LLCI = 0.0016$, $ULCI = 0.0170$) and also leads them to try to persuade others. Thus, $H3$ is supported.

5. Discussion

Building on the logic of the O-S-R-O-R model, this study focused on the role of cognitive elaboration about cross-cutting views in the processes of news effects on political persuasion. Results provide evidence that use of social media use for news contributes to individuals' cognitive elaboration about various viewpoints. More importantly, the main finding of this

Indirect effect paths	<i>b</i>	SE	95% Bootstrap CI	
			Lower limit	Upper limit
Social media news use → elaboration on cross-cutting perspectives → political efficacy → political persuasion	0.04	0.01	0.0267	0.0696
Social media news use → elaboration on cross-cutting perspectives → political interest → political persuasion	0.06	0.01	0.0370	0.0875
Social media news use → elaboration on cross-cutting perspectives → political knowledge → political persuasion	0.01	0.00	0.0016	0.0170

Notes: Estimates were calculated using the PROCESS macro developed by Hayes (2013; model 6). CI, confidence interval. CIs are based on the bootstrapping of 5,000 samples

Table III. Indirect effects of social media news use on political persuasion, mediated by elaboration on cross-cutting perspectives and political orientations

study is the positive indirect relationship between social media news use and political persuasion, which is mediated through cognitive elaboration about cross-cutting views and resulting political orientations, including political knowledge, efficacy and interest. The findings extend the literature on political persuasion (Ardévol-Abreu *et al.*, 2017; Barnidge *et al.*, 2017; Diehl *et al.*, 2016; Gil de Zúñiga *et al.*, 2018; Weeks *et al.*, 2015) by illuminating the role of cognitive elaboration and political orientations in mediating the effects of social media news use. They also extend the O-S-R-O-R model (Cho and McLeod, 2007; Cho *et al.*, 2009; McLeod *et al.*, 1999; Shah *et al.*, 2007) by highlighting attempted persuasion as a form of political engagement that is influenced by communication mediation processes.

More specifically, the current study contributes to this stream of literature by investigating the cognitive and psychological underpinnings of this process, highlighting the role of cognitive elaboration about cross-cutting views in mediating the effects of social media news use on political orientations, and, subsequently, on political persuasion. Thus, this study extends the scope of the literature on political persuasion by highlighting the importance of elaboration processes. This study also fits within the core logic of the O-S-R-O-R, which suggests that media effects should be indirect and mediated through reasoning and reorientation processes (Cho *et al.*, 2009; Shah *et al.*, 2007). It also extends the model to specifically examine cognitive elaboration about cross-cutting views, which is particularly important in social media environments where communication across lines of difference is relatively common (Barnidge, 2017; Kim, 2011; Kim *et al.*, 2013; Lee *et al.*, 2014). The way social media news users elaborate cross-cutting views may not always result in accurate answers about controversial political issues. However, those who make cognitive efforts to elaborate on different viewpoints could be more likely to develop and apply persuasive arguments that may bridge the gap with the “other side” (Mutz, 2002, 2006).

The findings of this study fit within a growing body of literature on political persuasion on social media. Since its conceptual introduction as an important form of political engagement (Thorson, 2014), researchers have examined a variety of antecedent factors, including content creation and political expression (Ardévol-Abreu *et al.*, 2017; Weeks *et al.*, 2015), social interaction (Diehl *et al.*, 2016), and political discussion and civil discourse (Gil de Zúñiga *et al.*, 2018). To bridge social cleavages among citizens, vehement political debates and discussions are very crucial factors for constructing functional democracy. Given that social media play an essential role for disseminating diverse and heterogeneous political opinions, in particular, how individuals care about others’ political viewpoints would be important matter in developing cognitive abilities to further engage in political conversations, which could activate discussants to effectively attempt political persuasion. Based on the communicative process of attempted political persuasion, we can realize that the degree to which people have willingness to accept and understand different and cross-cutting views of others is crucial for us to review our existing political awareness. In this line of thought, individuals’ self-efforts to enhance the degree level of communication network diversity can be crucial cognitive assets to reduce the degree of the current political polarization and uncivil expressions to those who with different thoughts in the contemporary competition of political environment.

5.1 Implications

The findings have implications for broader scholarly conversations about the role of social media in fostering contentious political discourse, both in the USA and worldwide. While it has become fashionable to criticize social media for creating or contributing to contentious politics, our findings suggest that social media communicative processes can be linked to more constructive, persuasive dialog that seeks to reach across lines of political difference (Brundidge, 2010) to develop a common understanding of shared issues (Bohman, 2003). The findings suggest that social media news use may help social media users build cognitive skills that lead to political engagement in a broad sense, which users may apply to attempted persuasion. In a heated political atmosphere such as the social media environment during the

2016 US Presidential Election, conflict with the other side can undermine the social cohesion necessary to maintain common democratic values in pluralistic societies (Bohman, 2003). However, such concerns might be alleviated given the findings demonstrating that social media use for news facilitates individuals' elaboration on dissimilar perspectives, which in turn leads to political orientations and consequently to persuading other citizens. Political persuasion is a comparatively constructive activity in which people seek out points of agreement that can be used to build a common understanding of shared political issues (Ardèvol-Abreu *et al.*, 2017). Based on the findings of the current study, scholarly conversations might extend research in this area by further focusing on whether and how political persuasion derived from social media news use and elaboration about cross-cutting perspectives would play a role of communicative rationality (Habermas, 1984) in fostering deliberative democracy.

5.2 Limitations

This study is limited in several important ways. First, although the measures of cognitive elaboration used in this study are based on prior research, more sophisticated measurement items for elaboration about cross-cutting views might be required. Elaboration is a complicated mental process of assimilating certain pieces of news/information with one's existing political rationale, and researchers would, ideally, be able to measure this process more directly. Future research could focus on validating the findings of this study using more direct measures of elaboration such as physiological measures, including heart rate, skin conductance response, facial electromyography and so forth (Cacioppo and Tassinary, 1990; Lang, 1990; Lang *et al.*, 1997).

In addition, although the findings of the present study validate the O-S-R-O-R logic, the first orientation was not explicitly proposed in this study, which means we did not empirically measure the first orientation such as intention to seek political information and need for cognition. Future research could examine other antecedent factors that lead to political persuasion on social media. For example, it may be fruitful to explore whether and how sociostructural factors such as community size, economic conditions, political structures and local communication ecologies are also associated with attempted persuasion. Furthermore, it seems worthwhile to examine whether and how network characteristics (e.g. network size and diversity) influence the effects of social media use on political persuasion.

5.3 Conclusions

Despite these limitations, the findings of this study illuminate the role of cognitive elaboration about cross-cutting views in mediating the effects of social media news use on political persuasion. The results point toward a single, overall conclusion: that citizens who make efforts to understand cross-cutting perspectives of the other side tend to obtain cognitive and perceptual benefits, which leads them to logically talk about politics with others in their daily lives. Given that social media environments tend to produce relatively high levels of cross-cutting exposure, these findings provide a relatively positive outlook about the possibility of social media to bridge social divides in a fragmented and contentious era in American politics.

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	The present study (%)	US Census Bureau – American Community Survey (%)
<i>Gender</i>		
Male	49.8	49.2
Female	50.2	50.8
<i>Age</i>		
18–24	11.0	9.8
25–34	17.8	13.6
35–44	17.4	12.7
45–54	19.2	13.4
55–64	16.6	13.4
65 and over	18.0	14.9
<i>Ethnicity/race</i>		
White	63.5	73.1
Black or African American Native	12.6	12.7
American Indian and Alaska Native	0.6	0.8
Asian	5.0	5.4
Native Hawaiian and other Pacific Islander	0.04	0.2
Hispanic	17.2	17.6
<i>Household income</i>		
Less than \$49,999	48.5	46.6
\$50,000–\$99,999	29.4	29.9
\$100,000 or more	22.1	23.5
<i>Education</i>		
Less than high school graduate	3.3	12.9
High school graduate, GED or alternative	25.9	27.6
Some college or associate's degree	29.2	29.0
Bachelor's degree or higher	24.6	30.6

Table A1.
Demographic profiles
of survey and
population estimates

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