

Favoritism or Animosity? Examining How SNS Network Homogeneity Influences Vote Choice via Affective Mechanisms

Rachel L. Neo

The School of Communication, The Ohio State University, Columbus, OH, USA

Abstract

Although online social networks are not exclusively homogeneous, partisans from similar political backgrounds do tend to cohere together. Interactions with these politically like-minded others could potentially reinforce their political identities and promote affective polarization between members of opposing political parties by increasing positive affect toward in-party members and negative affect toward out-party members. Such affective schisms potentially influence voting behavior—a key outcome variable that has long-term implications for policy making and governance. Using panel data collected during the 2012 U.S. Presidential Election, this study shows that politically homogeneous online social networks promote positive feelings toward the in-group candidate but not negative affect toward the out-party. These positive feelings increase the likelihood of voting for the in-group candidate in the 2012 U.S. Presidential Election. However, the indirect effect of online social network homogeneity on voting behavior via positive feeling is not significant. This indirect effect becomes significant when partisanship strength is accounted for, and it is particularly pronounced among weak partisans.

Homogeneous networks on social media platforms could potentially exacerbate affective polarization—characterized by hostility felt by partisans toward members of opposing political parties and favoritism expressed toward in-party members—by enhancing positive feelings toward in-party political candidates and negative feelings toward out-party political candidates. Ultimately, such emotions are likely to have implications for citizen's vote choice come Election Day. Furthermore, there is evidence to suggest that the effects of

social media network homogeneity on vote choice via affective mechanisms might vary by partisanship strength.

On social media platforms, users have great control over who they interact with via social media, and at least some choose to construct networks of like-minded partisans with whom they discuss politics or obtain political information from (Aiello et al., 2012; Conover et al., 2011). Such exposure to individuals from similar political backgrounds and congenial political views could potentially insulate partisans from criticisms of in-party political candidates, reduce tolerance toward opposing viewpoints (Mutz, 2002; Sunstein, 2001), and breed hostile feelings toward the out-party (Iyengar, Sood, & Lelkes, 2012). It is thus imperative that we examine the extent to which social media platforms contribute to affective polarization and to gauge the potential political consequences of such affective polarization. Using panel data collected during the 2012 U.S. Presidential election, this study tests whether the homogeneity of social networking site (SNS) users' social networks influenced their affective assessments of the candidate. This study draws upon the Theory of Affect Transfer, which posits that affective assessments are conferred onto object evaluations, to examine whether these effects in turn influence vote choice and whether this relationship varies depending on partisanship levels.

Network Homogeneity and Affective Polarization

Network homogeneity is a term used to describe social networks composed largely of individuals who share similar demographic characteristics, opinions, or taste preferences (Huckfeldt & Sprague, 1987). In the political context, network homogeneity refers to the extent to which a person's social network consists of others who come from politically similar backgrounds (Mutz, 2002). Research suggests that politically homogeneous social networks arise because people have the tendency to gravitate toward politically like-minded others and construct networks that consist of known others who share their political views (Aiello et al., 2012; Conover et al., 2011). Although politically homogeneous social networks are vital conduits through which people can be mobilized to take some form of political action (Mutz, 2002), scholars have also warned that politically homogeneous social networks limit exposure to diverse viewpoints and lead to reduced tolerance for opposing views (Mutz, 2002; Stroud, 2010).

There are various factors promoting homogeneous social networks in offline and online contexts (Aiello et al., 2012; Conover et al., 2011). Although not all social networks are homogeneous (Brundidge, 2010; Colleoni, Rozza, & Arvidsson, 2014; Kim, 2011; Lee, Choi, Kim, & Kim, 2014), politically homogeneous networks do occur and could potentially have serious consequences.

Homogeneous social networks serve as filters through which people obtain political information or learn about their peers' feelings toward presidential candidates (Baek, Jeong, & Rhee, 2015; Huckfeldt & Sprague, 1987; Huckfeldt, Mendez, & Osborn, 2004). In particular, politically homogeneous networks on social media platforms have the potential to promote affective polarization between political parties. Affective polarization arises when people who identify with a particular in-group engage in self-categorization and attempt to differentiate themselves from out-group members by displaying positive feelings toward in-party members and negative feelings toward out-party members (Iyengar et al., 2012). Research has shown that homogeneous social networks are conducive to the adoption of innovations and political views (Baek et al., 2015; Centola, 2010). Within politically homogeneous networks, the political identities of partisans will be reinforced through feelings of interconnectedness and social interactions with fellow in-party members (Stroud, 2010). Such identity reinforcement within politically homogeneous social networks might exacerbate inter-group categorization processes that are characterized by the desire to differentiate oneself from the out-party (Iyengar et al., 2012). In the political context, this means that individuals within politically homogeneous networks might be more predisposed to developing hostility toward out-party candidates and favoritism toward in-party candidates.

Positive Affect

Studies have suggested that affective polarization can be driven by positive feelings toward in-group members (Brewer, 1999; Wilson & Miller, 1961).

People are likely to have "safe" political conversations with others from similar political backgrounds (Eveland & Shah, 2003), in which the virtues of in-group members are likely to be extolled (Brewer, 1999). The autonomy and control accorded by online platforms such as SNSs can potentially exacerbate network homogeneity by promoting the formation of political echo chambers in which people choose to surround themselves with others who share their views and feelings toward presidential candidates (Aiello et al., 2012; Conover et al., 2011).

People surrounded by like-minded others are continuously reminded of the differences between their political in-party and the out-party (Iyengar et al., 2012; Mutz, 2002). When in-group members attempt to differentiate themselves from out-group members, they engage in positive distinctiveness by making social comparisons that cast their in-group members in a favorable light (Turner, 1975). Thus, being surrounded by politically like-minded others increases the likelihood of being exposed to messages extolling the virtues of fellow in-party political candidates and reinforces group norms portraying in-party candidates in a positive light. People are likely to regard these positive messages about in-group members from their own kind as being high in

credibility and will readily accept these messages as accurate descriptions of their in-party presidential candidate. Such biased processing of positive messages about one's in-party candidate from other like-minded individuals obtained via their SNS news feed will cause people to develop positive affective responses toward the in-party presidential candidate. I hypothesize that:

H1: SNS network homogeneity will promote positive affect toward the in-party presidential candidate.

Negative Affect

Although positive affect might be influential, negative affect also matters. Research also suggests that network homogeneity can breed negative feelings toward out-group members. Trend analyses comparing affective evaluations of political in-party and out-party members in the United States over the past four decades have shown that both Democrats and Republicans have held increasingly negative feelings toward the opposed party (Iyengar et al., 2012). Negative political attack ads and partisan-based cable news channels have been identified as factors contributing to hostile feelings toward out-party members (Iyengar et al., 2012) because attack ads and partisan-based cable news channels such as Fox News and MSNBC denigrate political out-party members and foster feelings of ill-will toward political out-party members (Iyengar et al., 2012).

SNSs serve as platforms that enable these negative attack ads and video clips from partisan-based news channels to be disseminated in efficient and cost-effective ways (Klotz, 2010). In addition to striving for "positive distinctiveness" by playing up the positive qualities of in-group members, people also attempt to differentiate themselves from the out-group by practicing out-group discrimination and exhibiting feelings of animosity toward out-group members (Brewer, 1999). It is thus plausible that partisans will use social media to share attack ads and clips from partisan-based news channels to tear down the out-party. Partisans ensconced within politically homogeneous online social networks might be more likely to be exposed to vitriolic media content disseminated by others who share their political background. Exposure to such vitriolic messages about out-party candidates from like-minded others might make group norms regarding negative evaluations about out-party candidates more salient and cause them to develop negative feelings toward out-party presidential candidates.

Thus, it is possible for social media platforms to exacerbate the formation of politically homogeneous echo chambers that not only foster feelings of goodwill toward in-party candidates but also cause individuals to build up animosity toward out-party political candidates. I hypothesize that:

H2: SNS network homogeneity promotes negative affect toward the out-party presidential candidate.

From Affect to Voting Behavior

Affective responses toward presidential candidates have tangible, real-world effects on political behaviors. However, few studies have explicitly examined whether affective polarization influences the likelihood of people voting for their in-group presidential candidate. Drawing on the Theory of Affect Transfer, this study sets out to examine whether positive feelings toward in-party presidential candidates and negative feelings toward out-party candidates promote voting for the in-party candidate.

Affective polarization has negative implications for a wide range of political behaviors. For example, affective polarization engenders an electorate that is more close-minded and less likely to seek compromises on controversial political issues (Iyengar et al., 2012), cynical of the political processes, and uncivil toward party elites and ordinary party members from the opposing camp (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013). More importantly, such affective polarization could have important implications for voting behavior. Voting behavior is one of the most extensively studied outcome variables in the field of political science. The act of casting a vote is an overt representation of a person's candidate or issue preferences and has far-reaching implications for policy making and governance in democratic countries (Bartels, 2000).

The Theory of Affect Transfer posits that positive and negative affective reactions to presidential candidates are conferred onto evaluations of these candidates (Brader, 2006; Ladd & Lenz, 2008). If people feel enthusiastic about a presidential candidate, it stands to reason that they will have positive evaluations toward said presidential candidate often. Conversely, if people feel anxious about the out-party presidential candidate, they would logically have negative evaluations of these candidates. (LeDoux, 1995; Zajonc, 1998).

Consequently, people are more likely to vote for their in-party presidential candidate the more positive their affective response toward the candidate (Ladd & Lenz, 2008). Furthermore, if they feel negatively about the out-party presidential candidate, they might be more likely to eschew the out-party presidential candidate in favor of their in-party presidential candidate (Brader, 2006; Ladd & Lenz, 2008). I hypothesize that both positive affect toward one's in-party candidate and negative affect toward the out-party candidate will predict a higher likelihood of voting for the in-party presidential candidate.

H3: Positive affect toward the in-party presidential candidate will predict a higher likelihood of voting for that candidate.

H4: Negative affect toward the out-party candidate will predict a higher likelihood of voting for the in-party presidential candidate.

Connecting the Dots: Of Network Homogeneity, Affect, and Voting Behavior

As noted previously, partisans within politically homogeneous networks are likely to be reminded of their political identities and experience higher levels of group cohesiveness with fellow in-party members (Stroud, 2010). This leads them to have affective evaluations that are in line with group norms by forming positive feelings toward in-party members and negative feelings toward out-party members. In turn, these strong feelings might make partisans more likely to vote for their in-party presidential candidate. Taken together, I hypothesize that SNS network homogeneity will indirectly influence the likelihood of voting for one's in-party candidate via affective mechanisms.

H5: SNS network homogeneity will make voting for the in-party presidential candidate more likely via having positive affect toward that candidate.

H6: SNS network homogeneity will make voting for the in-party candidate more likely via having negative affect toward the out-party presidential candidate.

The Moderating Role of Partisanship Strength

Partisanship strength is likely to be an important moderator of the relationships that network homogeneity has with affect and voting behavior. It seems intuitive to assume that strong partisans will adhere strongly to party norms and are thus more susceptible to normative influences within politically homogeneous social networks than weak partisans. However, research indicates that strong partisans might be more inclined to make affective and behavioral decisions about political candidates by relying on deep-seated values, whereas weak partisans depend more on consensus cues gleaned from politically homogeneous online social networks.

According to Tajfel and Turner (2004), people rely on consensus cues from their in-group to form affective evaluations of in- versus out-group members. Cues that are regarded as prototypically representative of in-group norms are likely to serve as subjectively valid consensus heuristics that ultimately influence evaluations of people (Van Knippenberg, 2001). The effects of these consensus heuristics might be more pronounced among weak partisans, as they lack political awareness and tend to face difficulties understanding and interpreting media content independently (Zaller, 1992). Because weak partisans lack political awareness, they are more likely to rely on endorsements from in-party political figures when forming opinions about government policies (Kam, 2005). This suggests that weak partisans will have difficulties interpreting media content for themselves and are likely to rely on their peers' feelings about party candidates when forming judgments about in- and out-party presidential candidates. Furthermore, weak partisans

are also more likely to engage in superficial processing of political information (Bennett, 1998). People who engage in superficial processing tend to use cues that are representative of their in-group's opinions when making decisions (Van Knippenberg, 2001). This further suggests that weak partisans will rely on consensus cues indicating their in-party peers' feelings toward political candidates when forming feelings toward in- and out-party presidential candidates.

Conversely, strong partisans attach a great deal of emotional significance to their political identity and might rely on the political values espoused by their respective political parties as cognitive schema to form affective evaluations of in- and out-party presidential candidates (Huckfeldt, Levine, Morgan, & Sprague, 1999; Iyengar et al., 2012; Tajfel & Turner, 2004). This suggests that strong partisans will be more confident of their feelings toward in- and out-party presidential candidates than weak partisans and will perceive less of a need to rely on normative information cues from an online social network of individuals to form affective evaluations and make voting decisions. The following hypotheses are proposed:

H7a: Network homogeneity will promote more positive feelings toward in-party candidates among weak partisans than among strong partisans.

H7b: Network homogeneity will promote more negative feelings toward the out-party presidential candidate among weak partisans than among strong partisans.

H8a: Network homogeneity will have a stronger indirect effect on voting behavior via positive affect toward the in-party presidential candidate among weak partisans than among strong partisans.

H8b: Network homogeneity will have a stronger indirect effect on voting behavior via negative affect toward the out-party presidential candidate among weak partisans than among strong partisans.

Research also suggests that the relationship between affective variables and likelihood of voting for one's in-party candidate—the second link in the indirect path—will be moderated by partisanship strength. Citizens are still able to participate in the political process despite having no political knowledge or paying little attention to political news, and they rely on emotions when making important political decisions (Marcus, 2000). In general, people who lack political knowledge or do not pay heed to political news tend to have weak partisan leanings (Carpini & Keeter, 1993; Tolbert, McNeal, & Smith, 2003). Partisans who identify weakly with the party of their choice are probably less likely than strong partisans to possess a coherent and cognitively accessible mental schema of partisanship to guide their voting decisions (Huckfeldt et al., 1999). Instead, it is plausible for weak partisans to use affective responses as heuristics to guide their voting decisions (Marcus, 2000). As such, strong political partisans might be less likely to rely on affective responses toward in- versus

out-party candidates to make voting decisions than weak partisans. Thus, I hypothesize that any indirect effect of SNS network homogeneity on voting behavior via having positive affect toward the in-party candidate and negative affect toward the out-party candidate will be most pronounced among weak partisans.

H₉: The relationship between positive affect toward the in-party presidential candidate and vote choice will be stronger among weak partisans than among strong partisans.

H₁₀: The relationship between negative affect toward the out-party presidential candidate and vote choice will be stronger among weak partisans than among strong partisans.

Methods

The hypotheses in this study were tested with data from a three-wave panel survey that was conducted during the 2012 U.S. Presidential Election by GfK Research (formerly Knowledge Networks). This three-wave panel study design allows for the direction of causality to be established by allowing me to gauge whether SNS network homogeneity at Wave 1 predicts affective polarization in Wave 2, and, in turn, whether affective polarization in Wave 2 predicts voting behavior in Wave 3 among the same individuals. The survey sample was selected from a panel constructed using probability-based sampling via random-digit dialing and address-based sample techniques, and was designed to be nationally representative of the U.S. population. The baseline survey was conducted from July 14 to August 7, 2012, with 1,004 respondents; of whom, 581 used social media. Wave 2 ran from September 7 to October 3 with 782 returning participants (a 77.9% retention rate); of whom, 438 were social media users. Finally, Wave 3 ran from November 8 (two days after the 2012 U.S. Presidential Election) to November 20 with a final count of 652 (83.4% retention from Wave 2, 64.9% from baseline); of whom, 371 were social media users. However, considering this paper's focus on how SNS network homogeneity influences affective responses and vote choice, only descriptive statistics and demographics of social media users are reported in this section of the paper.

Demographics of the social media users were first obtained in the baseline survey. The average age of these social media users was 45.3 years ($SD = 15.9$); 50.7% were males; 63.5% had obtained at least high school diplomas (with 15.5% having a bachelor's degree or higher). In terms of race, 75% were white, 7.7% were black, 9.8% were Hispanic, and 4.3% were from other types of racial backgrounds. With regard to party affiliation, 44.3% were Democrat or Democrat-leaning, 34.5% were Republican or Republican-leaning, and 16.6% were Independents. In terms of political ideology, 29.7% identified as liberals, 38.3% were conservatives, and 32% were moderates.

Measures

SNS network homogeneity. Network homogeneity has been conceptualized in many different ways. Some scholars have conceptualized network homogeneity as the extent to which respondents are surrounded by others who agree with their political views (Mutz, 2002). Other studies have examined the extent to which respondents were surrounded by people from similar demographic backgrounds (McLeod, Sotirovic, & Holbert, 1998).

This study's aim is to examine whether the extent to which individuals were surrounded by in-party members predicted affective responses toward *in-group* versus *out-group* presidential candidates and voting behavior. While perceptions often differ from reality, individuals often act on their *perceptions* of group norms (Gerber & Rogers, 2009; Rimal & Real, 2003). In previous studies, network homogeneity has typically been treated as a single-itemed, homogeneous construct (McLeod et al., 1998; Mutz, 2002). As such, one item from the baseline survey, "Thinking about your online social networks, such as Facebook and Twitter, what *political party* do you think that your friends and/or the people you follow support?" with 1 = all or almost all support the same political party to 5 = none or almost none support the same political party, was used to measure SNS network homogeneity. This item was reverse-coded such that higher values indicate greater levels of network homogeneity ($M = 2.96$, $SD = 1.16$).

Positive affect toward the in-party presidential candidate. Previous research examining affective discrepancies in the political context has largely relied on net-difference scores from feeling thermometers (Garrett et al, 2014; Iyengar et al., 2012; Marcus, 2000). These net difference scores from feeling thermometers have been described as "valence accounts that fail to adequately account for emotional response" (Marcus, 2000: p. 237), and as such, scholars have stressed the need to use more sophisticated measures of affect in future research studies (Marcus, 2000). This study improves upon previous measures of affect by using measures that explicitly tap into positive and negative emotions: enthusiasm (positive affect) and anxiety (negative affect) (Marcus & MacKuen, 1993), as well as panel data conducted during the 2012 election cycle, to predict voting behavior.

Four items from Wave 2—two for each candidate—were used to gauge positive affect toward the presidential candidates. These items asked, "When you think about Barack Obama [Mitt Romney], to what extent do you feel enthusiastic?" and "When you think about Barack Obama [Mitt Romney], to what extent do you feel hopeful?" These items correspond to two types of affective responses, enthusiasm and hope, which are widely regarded by scholars as important positive affective responses (Marcus, Neuman, & MacKuen, 2000). Although some scholars have argued that enthusiasm and hope are distinct measures of affect, this study adopts a valenced approach

when examining how affect mediates the relationship between SNS network homogeneity and vote choice. As such, these two measures of affect were combined together to form a measure of negative affect. They were measured on five-point scales anchored by 1 (A lot) and 5 (Not at all) and were reverse-coded such that higher values indicate greater levels of enthusiasm or hope.

The items measuring enthusiasm and hope about Barack Obama were positively correlated, $r(445) = 0.90$, $p < .001$, and were summed to form a two-item index tapping positive affective responses to the candidate among social media users ($M = 2.52$, $SD = 1.38$). Similarly, the items measuring enthusiasm and hope toward Mitt Romney were positively correlated, $r(445) = 0.88$, $p < .001$, and were also summed to form a two-item index of positive affective toward Mitt Romney among social media users in general ($M = 2.33$, $SD = 1.35$).

Finally, I used measures of affective responses toward presidential candidates that corresponded with partisans' party identifications to construct an index gauging positive affect toward in-party presidential candidates. Responses regarding Democrats' positive affect toward Barack Obama and Republicans' positive affective responses about Mitt Romney were computed to form an index of positive affect toward one's in-party presidential candidate ($M = 3.46$, $SD = 1.14$).

Negative affect toward the out-party presidential candidate. Four items from Wave 2, "When you think about Barack Obama [Mitt Romney], to what extent do you feel anxious?" and "When you think about Barack Obama [Mitt Romney], to what extent do you feel angry?" were used to gauge negative affect toward these presidential candidates. These items were measured on five-point scales anchored by 1 (A lot) and 5 (Not at all) and reverse-coded such that higher values indicate greater levels of anxiety or anger. As with the items gauging positive affect, anxiety and anger are widely regarded by scholars as two uniquely important types of negative affective responses (Marcus et al., 2000).

As with the measure of positive affect, the negative affect measure were also combined. The items measuring anxiety and anger about Barack Obama were positively correlated, $r(445) = 0.68$, $p < .001$, and were summed up to form a two-item index tapping into negative affective responses about Barack Obama among social media users in general ($M = 2.73$, $SD = 1.32$). Also, the items measuring anxiety and anger toward Mitt Romney were also positively correlated, $r(445) = 0.54$, $p < .001$, and were also summed up to form another two-item index gauging negative affective responses about Mitt Romney among social media users in general ($M = 2.61$, $SD = 1.24$).

Responses regarding Democrats' negative affect toward Mitt Romney and Republicans' negative affective responses about Barack Obama were computed to form an index of negative affect toward the out-party presidential candidate ($M = 3.44$, $SD = 1.25$).

Voting for the in-party presidential candidate. One item, asked in Wave 3 immediately after the election, was used to gauge which presidential candidate social media users in general voted for: “Who did you vote for?” (1 = Barack Obama, the Democrat; 2 = Mitt Romney, the Republican; and 3 = Other). Although self-reported measures of voting are prone to response bias, leading to over-reports of voting levels (Ansolahehere & Hersh, 2012), analyses of self-reported voting behavior versus validated voting measures have suggested that similar factors predict voting behavior across these two different measures (Berent, Krosnick, & Lupia, 2011; Katosh & Traugott, 1981).

A measure examining whether partisans actually voted for their in-party presidential candidate was computed such that Democrats who voted for Obama and Republicans who voted for Romney were coded as “1” = Voted for in-party presidential candidate. Democrats who did not vote for Obama and Republicans who did not vote for Romney were coded as “0” = Did not vote for in-party presidential candidate. In total, 90.6% of Republican and Democrat social media users said they voted for their in-party presidential candidate, whereas 9.4% said that they did not vote for their in-party presidential candidate.

Partisanship strength. In this study, strong partisans are regarded as individuals who identify strongly as Republicans or Democrats. Conversely, weak partisans are individuals who report being Democrats or Republicans but who do not identify strongly with their political party or Independents who lean toward being either Democrats or Republicans. A single item was used to gauge party affiliation in Wave 1, “Generally speaking, when it comes to political parties in the United States, how would you best describe yourself?” on a seven-point scale (1 = Strong Democrat to 7 = Strong Republican). Among social media users, 15.7% were strong Democrats, 12.0% were “not very strong” Democrats, 16.6% were Independents who leaned toward the Democrat party, 10.1% were Independents who leaned toward the Republican party, 12.2% were “not very strong” Republicans, 12.2% reported being strong Republicans, 16.6% reported being Independents who leaned toward neither the Republican nor Democrat party, and 4.7% reported having some other political affiliation.

A dichotomous variable measuring partisanship strength was created from the party affiliation item by coding strong Democrats or strong Republicans (27.9%); 1 = high. Weak partisans (including Democrat and Republican-leaning Independents) were coded 0 (low). Independents who identified as neither Democrats nor Republicans and those who identified with a party that was neither the Democrat nor the Republican party were omitted from the analysis.

Control variables. Finally, a standard set of control variables were included in the analyses. These include political interest, political knowledge,

mainstream media use, education level, usage of offline news media, frequency of SNS political activity, and party affiliation (0 = Republican, 1 = Democrat). More specifically, political interest ($M = 2.71$, $SD = 0.92$) was measured on a four-point scale with 1 = Very interested to 4 = No interest at all, with this item reverse-coded such that higher values indicated greater political interest. Political knowledge was measured using an index composed of four dichotomous: 0 = No/1 = Yes items, ($M = 2.22$, $SD = 1.35$; $KR-20 = 0.67$).

Also, five-point scales were used to measure responses on the mainstream media, offline news use, and SNS news use items, with 1 = Never to 5 = Every day or almost every day, and responses were reverse-coded. Mainstream media use ($M = 1.60$, $SD = 0.83$; $r(581) = 0.43$, $p < .001$) was assessed using an index of two items gauging the extent to which respondents obtained news from nonpartisan major and online news organizations. Offline news media use was measured using an index of five items measuring the extent to which people obtained news from radio, print newspaper, television, magazine, and political talk radio ($M = 2.38$, $SD = 0.91$; Cronbach's $\alpha = 0.76$). Frequency of SNS political activity was measured using an index of six items asking respondents to gauge the extent to which they used SNSs to read, share, and post information about the presidential campaign, as well as watch videos about the presidential campaign ($M = 1.58$, $SD = 0.82$; Cronbach's $\alpha = 0.93$).

Results

A series of regression analyses were run using Hayes' (2013) PROCESS macro to test the hypotheses. PROCESS allows researchers to simultaneously test both conditional and conditional indirect-effects hypotheses. There are several distinct advantages of using PROCESS. First, it uses bootstrap confidence intervals to test for indirect and conditional indirect effects. This approach has higher levels of statistical power than Baron and Kenny's (1986) causal steps approach. Second, it can also detect statistically significant indirect effects even if the total is nonsignificant, in contrast to Baron and Kenny's (1986) approach.

I first specified a model in PROCESS testing direct effects and simple mediation hypotheses. The data supported H_1 , which posited that SNS network homogeneity in Wave 1 will predict positive affect toward the in-party presidential candidates in Wave 2. This was tested using ordinary least square (OLS) regression analyses in PROCESS, $B = .14$, $SE = .06$, $t(248) = 2.37$, $p < .05$. H_3 , which predicted that positive affect toward the in-party presidential candidates in Wave 2, would increase the likelihood of voting for one's in-party presidential candidate in Wave 3, was also supported. This was tested using logistic regression analyses, $B = 2.15$, $SE = .51$, $z = 4.24$, $p < .001$.

However, H5, which posited that SNS network homogeneity would have an indirect effect on voting behavior via positive affect toward the in-party candidate, was not supported. This was tested using 10,000 bootstrapped confidence intervals in PROCESS (indirect effect coefficient: 0.31; 95% CI = $-.07$ to $.75$). On the one hand, SNS network homogeneity at Wave 1 predicts positive affect toward the in-party candidate in Wave 2. Such positive affect in Wave 2 increases the likelihood of voting for the in-party candidate in Wave 3. On the other hand, there is not enough evidence that SNS network homogeneity at Wave 1 indirectly increases the likelihood of voting for the in-party candidate in Wave 3.

H2, which predicted that perceived SNS network homogeneity in Wave 1 would have an effect on negative affect toward the out-party presidential candidate in Wave 2, was not supported. Also, H4, which predicted that negative affect toward the out-party presidential candidate in Wave 2 would have a direct effect on the likelihood of voting for one's in-party presidential candidate in Wave 3, proved untenable. H2 and H4 were tested using OLS regression analyses in PROCESS. Furthermore, H6, which postulated that perceived SNS network homogeneity in Wave 1 would have an indirect effect on the likelihood of voting for one's in-party presidential candidate in Wave 3 via negative affect toward the out-party presidential candidate in Wave 2, was not supported. This was tested using bootstrapped confidence intervals in PROCESS. Negative affect toward the out-party presidential candidate did not mediate the relationship between online social network homogeneity and voting behavior. [Figure 1](#) and [Supplementary Table A1](#) (in the online appendix) provide visual and statistical summaries of both direct and indirect effect hypotheses tested in this study before testing partisanship strength as a moderator.

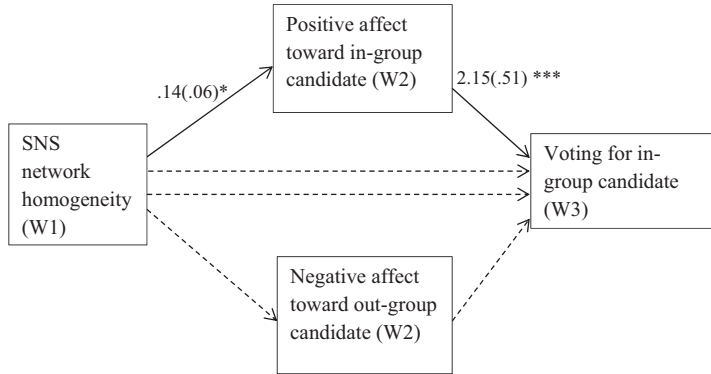
Next, a model was specified in PROCESS to test the conditional and conditional indirect-effects hypotheses with partisanship strength specified as a moderator of the relationships that SNS network homogeneity had with the affective variables and vote choice.

In this model, OLS regression analyses showed support for H7a, which posited that partisanship strength would moderate the relationship between perceived SNS network homogeneity at Wave 1 and positive affect toward the in-party presidential candidate in Wave 2, $B = -.38$, $SE = .12$, $t(248) = -3.11$, $p < .01$. More specifically, perceived SNS network homogeneity in Wave 1 predicted positive affect toward the in-party presidential candidate in Wave 2 among weak partisans, $B = .29$, $SE = .08$, $t(248) = 3.81$, $p < .001$, but not among strong partisans.

Furthermore, 10,000 bootstrapped confidence intervals in PROCESS showed that the overall indirect effect of SNS network homogeneity on voting for one's in-party presidential candidate via positive affect depended on partisanship strength (moderated mediation coefficient = -0.62 ;

Figure 1

*Summary of direct and indirect effect hypotheses tested in this study. Solid lines denote relationships that are statistically significant, and dotted lines represent nonsignificant relationships. At all stages of the analyses, political interest, political knowledge, mainstream media use, education level, usage of offline news media, frequency of SNS political activity, and party affiliation served as control variables. Numbers in parentheses are standard errors. * $p < .05$, *** $p < .001$. Total R^2 with positive affect as intervening variable = .26, $p < .001$; total R^2 with negative affect as intervening variable = .16, $p < .001$; Nagelkerke R^2 with vote choice as the dependent variable = .61*



95% CI = -1.25 to $-.02$). Specifically, bootstrapped confidence intervals in PROCESS showed support for H8a, which posited that SNS network homogeneity at Wave 1 would have a significant conditional indirect effect on vote choice at Wave 3 via positive affect toward in-party presidential candidates in Wave 2 among weak partisans but not among strong partisans (conditional indirect coefficient among weak partisans = 0.62 ; 95% CI = $.11$, to 1.28). Weak partisans who were surrounded mostly by others from the same political party within their SNS networks were more likely than strong partisans to develop positive feelings toward the in-party presidential candidate in Wave 2, and such positive feelings in turn lead to them voting for their in-party presidential candidate in Wave 3. In sum, SNS network homogeneity had an indirect effect on the likelihood of voting for one's in-party candidate via positive affect toward the in-party candidate among weak partisans but not among strong partisans.

However, OLS regression analyses showed that H7b, which posited that partisanship strength would moderate the relationship between perceived SNS network homogeneity in Wave 1 and negative affect toward the out-party presidential candidate in Wave 2, was not supported. Also, bootstrapped confidence intervals failed to show support for H8b, which predicted a conditional indirect effect of perceived SNS network homogeneity in Wave 1 on voting for one's in-party presidential candidate in Wave 3 via negative affect toward

out-group presidential candidates in Wave 2 among weak partisans. Logistic regression analyses failed to show support for H₉, which posited that partisanship strength would moderate the relationship between negative affect toward the out-party presidential candidate in Wave 2 and voting for one's in-party presidential candidate in Wave 3. Also, logistic regression analyses failed to show support for H₁₀, which posited that partisanship strength would moderate the relationship between positive affect toward the in-party candidate in Wave 2 and voting for one's in-party presidential candidate in Wave 3. In sum, partisanship strength did not moderate the hypothesized relationship between SNS network homogeneity and negative affect toward the out-party presidential candidate. There was also no moderating effect of partisanship strength on the direct relationships hypothesized between the affective variables and voting behavior. [Supplementary Table A2](#) in the online appendix provides complete statistical summaries of both conditional direct and indirect effect hypotheses tested in this study after accounting for partisanship strength.

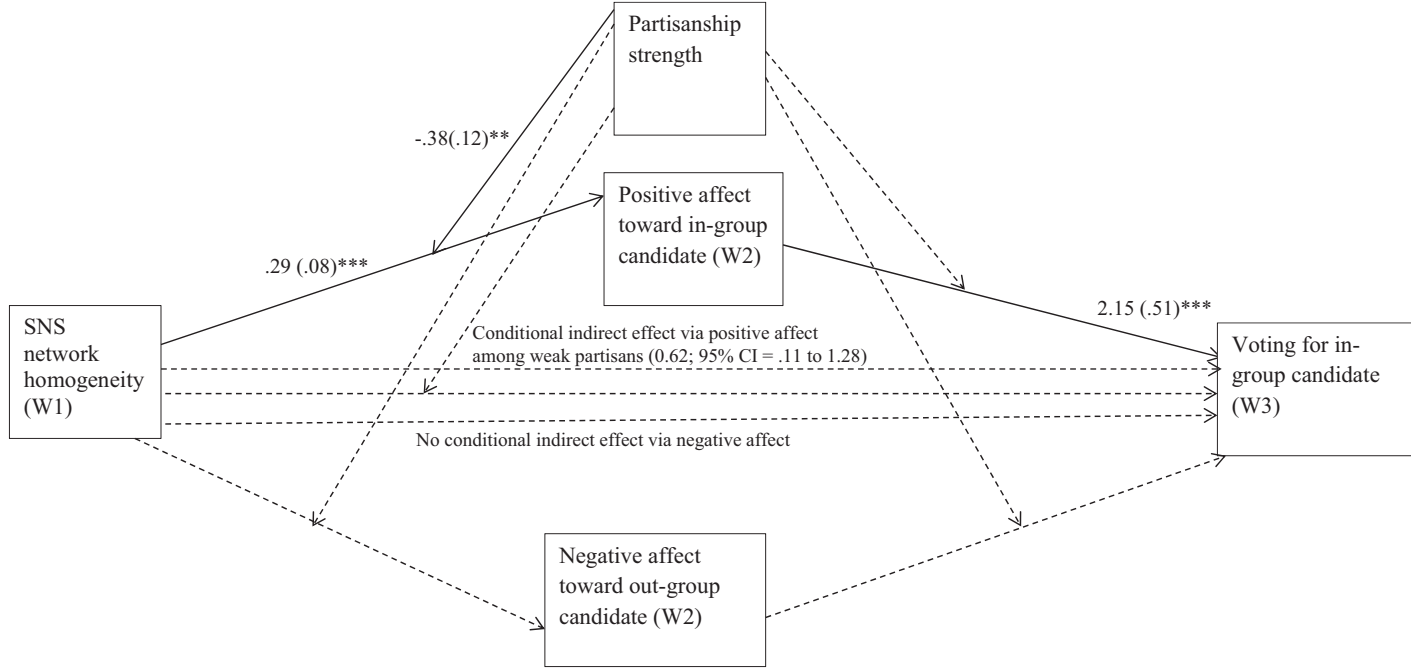
This is a complicated set of results, offering mixed support for initial hypotheses. Before turning to their substantive significance, it may be useful to review [Figure 2](#), which provides a visual summary of conditional direct and conditional indirect-effects hypotheses that were tested in this study. [Figure 2](#) indicates that SNS network homogeneity had a significant indirect effect on voting for one's in-party presidential candidate during the 2012 Election via positive affect toward in-party presidential candidates among weak partisans. However, none of these conditional direct or indirect paths attained statistical significance among strong partisans. Furthermore, [Figure 2](#) also shows that none of the hypothesized conditional direct or indirect paths among SNS network homogeneity, negative affect toward the out-party presidential candidate, and voting for one's in-party presidential candidate were statistically significant.

Discussion

SNS network homogeneity promoted positive feelings toward one's in-party presidential candidate. Positive feelings toward one's in-party presidential candidate increased the likelihood of voting for the in-party candidate in the 2012 U.S. Presidential Election. Despite these significant direct effects observed above, SNS network homogeneity did not have an indirect effect on the likelihood of voting for the in-party candidate via positive affect. However, this nonsignificant indirect effect became significant when partisanship strength was accounted for. Specifically, the significant conditional indirect effect of SNS network homogeneity on the likelihood of voting for the in-party candidate via positive affect was particularly strong among weak

Figure 2

Summary of conditional direct and indirect effects among variables. Solid lines denote relationships that are statistically significant, and dotted lines represent nonsignificant relationships. At all stages of the analyses, political interest, political knowledge, mainstream media use, education level, usage of offline news media, frequency of SNS political activity, and party affiliation served as control variables. Numbers in parentheses indicate standard errors. * $p < .05$, ** $p < .01$, *** $p < .001$. Total R^2 with positive affect as intervening variable = .29, $p < .001$; total R^2 with negative affect as intervening variable = .17, $p < .001$; Nagelkerke R^2 with vote choice as the dependent variable = .61



partisans. By contrast, network homogeneity did not have any direct effects on negative affect toward the out-party presidential candidate, nor did negative feelings toward the out-party candidate significantly influence actually voting for one's in-party presidential candidate. Also, partisanship strength was not a significant moderator of the relationship between network homogeneity and negative affect as well as the relationship between network homogeneity and vote choice. In addition, partisanship strength was not a significant moderator of the hypothesized relationships that the affective variables had with vote choice.

Taken together, these findings lend support to Brewer's (1999) assertions that affective polarization is driven by positive affect toward in-group members. They also are consistent with previous research that has shown how affective schisms arise from factors predicting positive feelings toward in-group members more than those predicting negative feelings toward out-group members (Brewer, 1999). Factors such as network homogeneity that give rise to positive feelings toward one's in-party candidate do not necessarily predict negative feelings toward the out-party candidate. In short, these findings suggest that positive affect toward the in-party candidate, and not negative out-group affect, is an underlying mechanism that explains how SNS network homogeneity influences political behavior.

Furthermore, these findings show that affective schisms in terms of candidate evaluations can have tangible effects on voting behavior. Consistent with previous research, positive affect emerged as a stronger predictor of voting behavior than negative affective evaluations of out-party presidential candidates (Marcus & Mackuen, 1993). Voting for a presidential candidate is not the same as voting against a presidential candidate. Although having positive feelings toward one's in-party presidential candidate increases the chances of individuals voting for one's in-party presidential candidate, negative affect toward out-party presidential candidates does not necessarily translate into eschewing the out-party presidential candidate in favor of the in-party presidential candidate.

Although partisanship strength did not directly moderate the effect of SNS network homogeneity on voting behavior, SNS network homogeneity had an indirect effect on voting behavior via positive affect toward one's in-party presidential candidate among weak partisans. In other words, SNS network homogeneity led to higher levels of positive affect toward one's in-party presidential candidate, and these positive feelings toward one's in-group candidate in turn were more likely to compel these weakly partisan individuals to actually vote for their in-party presidential candidate. It appears that weak partisans are more likely to draw on heuristics from their online social networks that signal in-party prototypicality when deciding whether to vote for their in-party presidential candidate. As such, this indirect path of SNS network homogeneity and partisanship strength on voting behavior via positive affect toward in-party

presidential candidates underscores the importance of using affective variables as underlying intervening mechanisms to explain how the interplay of SNS network homogeneity and partisanship strength influences voting behavior.

These findings have important practical implications. Weakly partisan individuals comprise the bulk of the electorate (Layman & Carsey, 2002), and the number of social media users is growing (Rainie, Smith, Schlozman, Brady, & Verba, 2012). In this context, campaign practitioners may seek to gain strategic advantage by eliciting positive feelings toward in-party presidential candidates among weak partisans. This could be accomplished, for example, by seeding messages about the merits of one's in-party presidential candidate through networks of individuals who happen to share similar political backgrounds as these weak partisans and are connected to these weak partisans on social media platforms.

In contrast with previous studies (Ladd & Lenz, 2008; Marcus & Mackuen, 1993), there was no significant interaction between partisanship strength and affective variables on voting behavior. However, these differences may be attributed to the fact that these studies measured negative affective responses to in-party presidential candidates and positive affective responses to out-party presidential candidates (Ladd & Lenz, 2008; Marcus & Mackuen, 1993), whereas this study gauged negative responses to out-party candidates and positive affect toward in-party presidential candidates. People tend to rely less on partisanship when they experience feelings toward presidential candidates that are incongruent with their partisan values (Ladd & Lenz, 2008), for example, by having negative responses toward their in-party presidential candidate. This study gauged affective responses that were arguably consonant with one's partisanship. This could account for why partisanship strength did not moderate the relationship between affective responses and voting behavior.

There are a number of limitations to acknowledge. First, this study measured SNS network homogeneity with a single self-report item. Single-item measures may not always be valid measures of constructs (Viswanathan, 2005), but there is some evidence that they can be adequate for homogenous constructs (Loo, 2002; Wanous, Reichers, Hudy, 1997). For example, network homogeneity has typically been treated as a single-itemed, homogeneous construct in previous studies (McLeod et al., 1998; Mutz, 2002). Different types of social media may exhibit somewhat different levels of homogeneity, but the single item used here effectively demonstrates an aggregate effect. The fact that the measure was self-reported is also only a minor concern. Research studies on social influence have shown that while perceptions often differ from reality, perceived norms are powerful motivators of attitude or behavior adoption (Gerber & Rogers, 2009; Rimal & Real, 2003).

A further concern is the fact that network homogeneity was only measured in Wave 1. As such, it was not possible to gauge whether SNS network

homogeneity changed as the 2012 Election approached. Despite this weakness, the longitudinal design is still preferable to the more common cross-sectional design because it affords a stronger test of the influence of network homogeneity over time.

The use of a two-item measure of negative affect is also a limitation. The correlation between anxiety and anger, the two items measuring negative affect, was only moderately strong. This could explain the nonsignificant relationships that negative affect toward the out-party candidate had with SNS network homogeneity and voting behavior. Nonetheless, anxiety and anger are widely regarded as emotions that constitute negative affect (Valentino, Brader, Groenendyk, Gregorowicz, & Hutchings, 2011), and as such, the combined measure of anxiety and anger is still a valid measure of negatively valenced affect.

Finally, this study was conducted during a single election, meaning that it is not possible to vary incumbency. Perhaps Obama's incumbency accounts for the patterns observed here. Despite these limitations, this secondary data analysis casts new light on an important phenomenon, offering unique evidence that online social network homogeneity may influence voting behavior via emotional response to the candidates.

Future studies can examine other potential mediators or moderators of the relationship between SNS network homogeneity and affective variables such as biased elaboration of news obtained from in-party news sources via SNSs. Given that offline social networks also play a crucial role in shaping peoples' political attitudes and behaviors (Mutz, 2002), future studies also should examine whether offline social network homogeneity amplifies the effects of SNS network homogeneity on voting behavior. Also, future research can improve upon existing measures of SNS network homogeneity by using scales with multiple items to measure this construct or by gauging the effects of various dimensions of SNS network homogeneity (e.g., network homogeneity in terms of political affiliation vs. homogeneity in terms of political opinions) on political behaviors. Moreover, survey research can be complemented by network analytical tools to gauge how SNS network homogeneity patterns influence political behaviors. Finally, future research should examine other variables that might moderate the effects of affective mechanisms on vote choice, such as selective attention to partisan news media outlets.

In conclusion, although previous literature has suggested that both positive feelings toward in-group members and negative feelings toward out-group members are potential mechanisms through which network homogeneity influences vote choice, this study's findings provide substantial empirical evidence that in-party favoritism, and not out-party animosity, is the key factor compelling people in homogeneous online social networks to vote for their in-group political candidate in the 2012 U.S. Presidential Election. Homogeneous online

social networks appear to foster higher levels of solidarity among in-party members, causing them to be more likely to develop positive feelings toward in-party presidential candidates that in turn increase the likelihood of voting for one's in-party candidate. Furthermore, the effects of these homogeneous online social networks appear to be more pronounced among weak partisans. Among weak partisans, the opinions of in-party members within politically homogeneous online social networks are likely to serve as consensus heuristic cues that guide the formation of positive feelings toward in-party presidential candidates and indirectly increase certainty of voting via positive feelings toward in-party presidential candidates. As social media outlets continue to play increasingly prominent roles in the political process (Rainie et al., 2012), the processes identified in this study are likely to become instrumental in explaining how characteristics of online social networks influence affective and behavioral outcomes.

Supplementary Data

Supplementary Data are available at IJPOR online.

Acknowledgement

Some of this material is based on work funded by the U.S. National Science Foundation under Grant No. IIS-1149599. Any opinions, findings, and conclusions reflected in the material are those of the author and do not necessarily reflect the views of the National Science Foundation (NSF).

The author wishes to thank Dr. Kelly Garrett and Dr. Andrew Hayes for their invaluable feedback and suggestions on how to improve this manuscript.

References

- Aiello, L. M., Barrat, A., Schifanella, R., Cattuto, C., Markines, B., & Menczer, F. (2012). Prediction and homophily in social media. *ACM Transactions on the Web*, 6, 1–33. doi:10.1145/2180861.2180866.
- Anderson, A. A., Brossard, D., Scheufele, D. A., Xenos, M. A., & Ladwig, P. (2013). Crude comments and concern: Online incivility's effect on risk perceptions of emerging technologies. *Journal of Computer-Mediated Communication*, 19, 373–387. doi: 10.1111/jcc4.12009
- Ansolabehere, S., & Hersh, E. (2012). Validation: What big data reveal about survey misreporting and the real electorate. *Political Analysis*, 20, 437–459. doi: 10.1093/pan/mpso23
- Back, Y. M., Jeong, I., & Rhee, J. W. (2015). Political homophily on social network sites and users' poll skepticism. *Asian Journal of Communication*, 25, 271–287. doi: 10.1080/01292986.2014.955861

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182. doi: 10.1037/0022-3514.51.6.1173
- Bartels, L. M. (2000). Partisanship and voting behavior, 1952–1996. *American Journal of Political Science*, 44, 35–50.
- Bennett, S. E. (1998). Young Americans' indifference to media coverage of public affairs. *PS: Political Science and Politics*, 31, 535–541. doi: <http://dx.doi.org/10.2307/420613>
- Berent, M. K., Krosnick, J. A., & Lupia, A. (2011). *The quality of government records and over-estimation of registration and turnout in surveys: lessons from the 2008 ANES panel study's registration and turnout validation exercises*. Retrieved from <http://cite.seerx.ist.psu.edu/viewdoc/download?doi=10.1.1.188.5659&rep=rep1&type=pdf>.
- Brader, T. (2006). Affective intelligence and beyond: Next steps in research on emotion in politics. *Political Communication Report*, 16, 1–6.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love and outgroup hate? *Journal of Social Issues*, 55, 429–444. doi: 10.1111/0022-4537.00126
- Brundidge, J. (2010). Encountering “difference” in the contemporary public sphere: The contribution of the Internet to the heterogeneity of political discussion networks. *Journal of Communication*, 60, 680–700. doi: 10.1111/j.1460-2466.2010.01509.x
- Carpini, M. X. D., & Keeter, S. (1993). Measuring political knowledge: Putting first things first. *American Journal of Political Science*, 37, 1179–1206.
- Centola, D. (2010). The spread of behavior in an online social network experiment. *Science*, 329, 1194–1197. doi: 10.1126/science.1185231
- Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in twitter using big data. *Journal of Communication*, 64, 317–332. doi: 10.1111/jcom.12084
- Conover, M. D., Ratkiewicz, J., Francisco, M., Goncalves, B., Flammini, A., & Menczer, F. (2011). *Political polarization on Twitter*. Paper presented at the Fifth International AAAI Conference on Weblogs and Social Media, Menlo Park, CA.
- Eveland, W. P., & Shah, D. V. (2003). The impact of individual and interpersonal factors on perceived news media bias. *Political Psychology*, 24, 101–117. doi: 10.1111/0162-895X.00318
- Garrett, R. K., Gvirsman, S. D., Johnson, B. K., Tsifti, Y., Neo, R., & Dal, A. (2014). Implications of pro- and counterattitudinal information exposure for affective polarization. *Human Communication Research*, 40, 309–332. doi: 10.1111/hcre.12028
- Gerber, A. S., & Rogers, T. (2009). Descriptive social norms and motivation to vote: everybody's voting and so should you. *The Journal of Politics*, 71, 178–191. doi: <http://dx.doi.org/10.1017/S0022381608090117>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: a regression-based approach*. New York: Guilford Press.
- Huckfeldt, R., Levine, J., Morgan, W., & Sprague, J. (1999). Accessibility and the political utility of partisan and ideological orientations. *American Journal of Political Science*, 43, 888–911.

- Huckfeldt, R., Mendez, J. M., & Osborn, T. (2004). Disagreement, ambivalence, and engagement. *Political Psychology*, 25, 65–95. doi:10.1111/j.1467-9221.2004.00357.x.
- Huckfeldt, R., & Sprague, J. (1987). Networks in context: The social flow of political information. *The American Political Science Review*, 81, 1197–1216.
- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, 76, 405–431. doi:10.1093/poq/nfs038
- Kam, C. D. (2005). Who toes the party line? Cues, values, and individual differences. *Political Behavior*, 27, 163–182. doi: 10.1007/s11109-005-1764-y
- Katosh, J. P., & Traugott, M. W. (1981). The consequences of validated and self-reported voting measures. *Public Opinion Quarterly*, 45, 519–535. doi: 10.1086/268685
- Kim, Y. (2011). The contribution of social network sites to exposure to political difference: The relationships among SNSs, online political messaging, and exposure to cross-cutting perspectives. *Computers in Human Behavior*, 27, 971–977. doi:10.1016/j.chb.2010.12.001
- Klotz, R. J. (2010). The sidetracked 2008 YouTube senate campaign. *Journal of Information Technology and Politics*, 7, 110–123. doi: 10.1080/19331681003748917
- Ladd, J. M., & Lenz, G. S. (2008). Reassessing the role of anxiety in vote choice. *Political Psychology*, 29, 275–296. doi: 10.1111/j.1467-9221.2008.00626.x
- Layman, G. C., & Carsey, T. M. (2002). Party polarization and “conflict extension” in the American electorate. *American Journal of Political Science*, 46, 786–802.
- LeDoux, J. (1995). Emotion: Clues from the brain. *Annual Review of Psychology*, 46, 209–235. doi: 10.1146/annurev.ps.46.020195.001233
- Lee, J. K., Choi, J., Kim, C., & Kim, Y. (2014). Social media, network heterogeneity, and opinion polarization. *Journal of Communication*, 64, 702–722. doi: 10.1111/jcom.12077
- Loo, R. (2002). A caveat on using single-item versus multiple-item scales. *Journal of Managerial Psychology*, 17, 68–75. doi: 10.1108/02683940210415933
- Marcus, G. E. (2000). Emotions in politics. *Annual Review of Political Science*, 3, 221–250. doi: 10.1146/annurev.polisci.3.1.221
- Marcus, G. E., & MacKuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87, 672–685.
- Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment*. Chicago, IL: University of Chicago Press.
- McLeod, J. M., Sotirovic, M., & Holbert, R. L. (1998). Values as sociotropic judgments influencing communication patterns. *Communication Research*, 25, 453–485. doi: 10.1177/009365098025005001
- Mutz, D. C. (2002). The consequences of cross-cutting networks for political participation. *American Journal of Political Science*, 46, 838–855.
- Rainie, L., Smith, A., Schlozman, K. L., Brady, H., & Verba, S. (2012). *Social media and political engagement*. Retrieved from http://pewinternet.org/~media//Files/Reports/-2012/PIP_SocialMediaAndPoliticalEngagement_PDF.pdf.
- Rimal, R. N., & Real, K. (2003). Understanding the influence of perceived norms on behaviors. *Communication Theory*, 13, 184–203. doi: 10.1177/0093650205275385

- Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, 60, 556–576. doi: 10.1111/j.1460-2466.2010.01497.x
- Sunstein, C. R. (2001). *Republic.com*. Princeton, NJ: Princeton University Press.
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. Sidanius & J. T. Jost (Eds.), *Political psychology: Key readings* (pp. 276–293). New York: Psychology Press.
- Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5, 5–34. doi: 10.1002/ejsp.2420050102
- Tolbert, C. J., McNeal, R. S., & Smith, D. A. (2003). Enhancing civic engagement: The effect of direct democracy on political participation and knowledge. *State Politics and Policy Quarterly*, 3, 23–41. doi: 10.1177/153244000300300102
- Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election night's alright for fighting: The role of emotions in political participation. *The Journal of Politics*, 73, 156–170. doi: 10.1017/S0022381610000939
- Van Knippenberg, D. (2001). Group norms, prototypicality, and persuasion. In D. J. Terry & M. A. Hogg (Eds.), *Attitudes, behavior, and social context: The role of group norms and membership* (pp. 157–171). Mahwah, NJ: Lawrence Erlbaum Associates.
- Viswanathan, M. (2005). *Measurement error and research design*. Thousand Oaks, CA: Sage.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247–252
- Wilson, W., & Miller, N. (1961). Shifts in evaluations of participants following intergroup competition. *The Journal of Abnormal and Social Psychology*, 63, 428–431. doi: 10.1037/h0043621
- Zajonc, R. B. (1998). Emotions. In D. T. Gilbert, S. T. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th eds.). New York: McGraw-Hill.
- Zaller, J. (1992). *The nature and origin of mass opinion*. New York: Cambridge University Press.

Biographical Note

Rachel L. Neo is a doctoral candidate at The Ohio State University's School of Communication. Her research interests lie in the areas of social media, political communication, and public opinion.