# Second Screening and Political Persuasion on Social Media

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SECOND SCREENING

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*This article seeks to explain political persuasion in relation to second screening—people's use of a second screen (i.e., smartphone/laptop) while watching television to access further information or discuss TV programs. Employing a two-wave-panel survey in the United States, results show this emergent practice makes people more open to changing their political opinions, particularly among those who habitually use social media for news or frequently interact with others in social media contexts.*

Participatory online media afford people greater ability to engage in emergent communicative practices that increasingly help to shape public narratives about political events. Some have argued that this newfound ability gives news audiences more power relative to elite social institutions than they had in the past (Benkler, 2006). That is, individuals have become less dependent on political parties, interest groups, and news media organizations as sources of political information, because they are free to rely on information from other citizens. In this vein, some scholars point toward "second screening" as a communication practice that alters the relationship between news media organizations and their audiences (Anstead & O'Loughlin, 2011; Chadwick, Dennis, & Smith, 2016).

More than two-thirds of U.S. adults own a smartphone (68%), and nearly half (45%) own a tablet computer (Pew, 2015). These devices are often used while

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watching television, connecting audiences through social media and other online participatory media (Anstead & O'Loughlin, 2011; Doughty, Rowland, & Lawson, 2011). This "hybrid media" environment offers an entirely different type of media experience, one that embeds citizens in broader public conversations that unfold in real time and involve not only news media, but also other citizens and the content they create (Doughty et al., 2011; Vaccari, Chadwick, & O'Loughlin, 2015). In these environments, citizens are exposed not just to the information they see on television, but also to elite and social opinion cues on social media (Bode, 2015; Bond et al., 2012; Turcotte, York, Irving, Scholl, & Pingree, 2015). The confluence of these various kinds of political messages connects the opinions and commentary of everyday social media users with the elite political discourse that occurs among political actors and news organizations, and, moreover, this kind of communication environment makes it more likely that people will be influenced by other users' opinions about political and social issues (Turcotte et al., 2015).

If, in these hybrid media environments, people can be more engaged with public conversations about politics—conversations that are characterized by a mixture of news, user-generated content, and social opinion cues—the question arises about whether hybrid media environments make people more open to being persuaded by the information and opinions they encounter in these contexts. We argue that second screening practices make people more likely to use social media content to form and/or change opinions about the political news or events they see on television. To test this argument, we employ a two-wave panel survey of adults in the United States, assessing the relationship between second screening and self-reported openness to political persuasion on social media. Additionally, we assess political dispositions and communication habits that might moderate this relationship, including political efficacy, social media news use, online and offline political talk, and social interaction on social media. Overall, this study contributes to the scholarly conversation about emergent communication practices and the influence of elite institutions versus ordinary citizens.

## Second Screening

Also dubbed dual screening (Vaccari et al., 2015), second screening is an emergent communicative behavior facilitated by online media. It is characterized by "a process in which individuals watching television use an additional electronic device, or 'screen' to access the Internet or social networking sites to obtain more information about the program or event they are watching or to discuss it in real time" (Gil de Zúñiga, García-Perdomo, & McGregor, 2015, p. 795). Thus, the concept of second screening is comprised of two complementary and related dimensions—information seeking and discussion. These dimensions represent background motivations for engaging in second screening, and

they occur in tandem in response to real time news events or programs (Wohn & Na, 2011).

Some scholars have claimed that second screening redefines the nature of audiences, giving them greater ability to shape public narratives alongside journalistic organizations and political elites (Gillespie & O'Loughlin, 2015). These types of audience contributions are often critical of mass media content (D'heer & Verdegem, 2015; Pond, 2016) and frequently make use of humor, irony, and "memes"—re-appropriations of mass media content typically used for critical commentary (Freelon & Karpf, 2015). These observations have led other scholars to argue that second screening gives news audiences more power relative to news media organizations, politicians, and political parties (Anstead & O'Loughlin, 2011, 2015; Chadwick et al., 2016). Others note, however, that second screeners often constitute a vocal minority (Bentivegna & Marchetti, 2015), and that political content is a minor topic compared to entertainment (Marchetti & Ceccobelli, 2015). Furthermore, the content to which second screeners respond is typically driven by mainstream news organizations, especially on television (Kim, Lee, & Park, 2015; Vergeer & Franses, 2015). Given these conflicting perspectives, a third group of scholars has described second screening as characterized by a complex interplay between media industries and audiences (Moe, Poell, & van Dijck, 2016; Wilson, 2016).

Research shows that second screening for news and information generally promotes political engagement via online media. For example, second screening is positively related to online political participation (Fitzgerald & Clarke, 2012; Gil de Zúñiga et al., 2015; Vaccari et al., 2015). Additionally, second screening provides alternative spaces for political discussion (D'heer & Courtois, 2016; D'heer & Verdegem, 2014; Iannelli & Giglietto, 2015) and promotes online content creation (Freelon & Karpf, 2015; Giglietto & Selva, 2014). Thus, second screening provides new ways for people to engage with media content and potentially draws them into political conversations or other forms of online political participation.

## Motivations for Second Screening for News and Public Affairs Content

People use media to fulfill particular needs (Katz & Blumler, 1974; Papacharissi & Rubin, 2000), and second screening practices reflect, in part, a motivation to seek out additional information while watching a televised event (Gil de Zúñiga et al., 2015). The motivations for second screening behavior are, to some extent, rooted in a need for orientation. When people are uncertain about how to interpret the events they see on television, they need to orient themselves with public conversations about the event (Matthes, 2006; Weaver, 1980), and the act of engaging in those public conversations in real time (Gil de Zúñiga et al., 2015; Wohn & Na, 2011) helps people process the information they see on television (Shah et al., 2007a).

This is particularly the case during live news events, where people often turn to social media for event-related information. Second screening a news event gives the audience access to both self-curated news feeds and social opinion cues (Jahng & Littau, 2016; Turcotte et al., 2015). These networks operate alongside traditional media outlets as an addition information source, especially when uncertainty is high. That is, information seeking needs are higher during live news events, as individuals have not yet had time to form an opinion. For example, people rely on social networks for news during times of crisis, extreme weather events, and political debates (Hawthorne, Houston, & McKinney, 2013; Hermida, 2010; Houston et al., 2015).

## Second Screening and Political Persuasion

Psychological uncertainty, as well as the subsequent need for orientation, may make people more open to persuasion (Sorrentino, Bobocel, Gitta, Olson, & Hewitt, 1988). However, the process of opinion formation is also mediated by communication practices. Research has shown that media use *arising from* orientation needs makes individuals more likely to respond to media cues, which can have an influence on the perception of issue importance (McCombs & Shaw, 1972), candidate evaluation (Golan & Wanta, 2001), and event contextualization (McLeod & Detenber, 1999). Therefore, it is communication, rather than need for orientation, that enables the process of opinion formation or change.

This process occurs because, as people engage with public conversations on social media, they reflect on what they already know and think about the subject at hand. Research shows that this kind of engagement with news media and political discussion promotes cognitive elaboration and reflection (Cho et al., 2009; Shah et al., 2007a), which mediates the influence of communication on observable implications of opinion formation, including political participation (Cho et al., 2009; McLeod, Scheufele, & Moy, 1999; Shah et al., 2007a), civic engagement (Shah, Cho, Eveland, & Kwak, 2005; Shah et al., 2007a), and political consumerism (Shah et al., 2007b). Thus, the political persuasion process on social media closely resembles parallel processes in non-hybrid media environments.

But there are at least two reasons second screening practices may be even more influential than non-hybrid media use in terms of opinion formation and change. First, second screening affords users the ability to engage in communicative processes in real time (Gil de Zúñiga et al., 2015; Wohn & Na, 2011), which means that news content and social opinion on social media will likely be the first information that second screeners encounter. Research shows that people generally favor the first information they receive about a topic, a cognitive bias called anchoring (Herriges & Shogren, 1996; Jacowitz & Kahneman, 1995). These first impressions tend to weigh more heavily in people's minds when forming opinions (Jacowitz & Kahneman, 1995).

Second, second screening—which primarily occurs on social media platforms such as Twitter (Anstead & O'Loughlin, 2011; Doughty et al., 2011; Freelon &

Karpf, 2015; Giulietto & Selva, 2014; Pond, 2016)—allows people to get information not only from television, but also from social media, which expose people to user-generated content and social opinion cues alongside mainstream news content (Bode, 2015; Bond et al., 2012; Turcotte et al., 2015) that non-second screeners are not exposed to. These social cues provide direct evidence of social opinion (Schulz & Roessler, 2012; Spartz, Su, Griffin, Brossard, & Dunwoody, 2015; Thelwall, 2007), which people may take to be representative of public opinion, even if they are not (Lerman, Yan, & Wu, 2015). Online social cues are more likely to be taken as exemplars of public opinion (see, e.g., Zillmann, 2002), encouraging users to extrapolate from these cues to public opinion, at large (Thelwall, 2007). Therefore, exposure to these cues generally makes people more likely to be influenced by other users' opinions (Turcotte et al., 2015), because the perception of public opinion can affect people's own decision-making and evaluative processes (Gunther & Storey, 2003; Noelle-Neumann, 1993). Given that second screening (a) allows people to engage with public conversations in real time, and (b) exposes users to social opinion cues alongside news and public affairs content, we hypothesize that second screening makes individuals particularly likely to form or change political opinions.

> $H_1$: Second screening will be positively related to political persuasion on social media.

## Moderating Factors

Although there may be overall effects of second screening for news and public affairs content on political persuasion, literature suggests several factors that may influence this relationship. Given that our prediction regarding the main relationship relies, in part, on participants' attention to social cues, factors that influence whether people are able to interpret these cues, as well as the importance they place on them, could moderate the relationship between second screening and openness to persuasion. The current study explores internal political efficacy, social media for news, overall political discussion, and social and connective uses of social media as possible moderators.

Internal political efficacy is the confidence in one's ability to understand and participate in politics (Niemi, Craig, & Mattei, 1991). Theory suggests that when faced with a task, people tend to do what they believe they can succeed at (Bandura, 1982; Pingree, 2011). While most literature on internal political efficacy has focused on its influence on behavioral outcomes, such as participation (Kenski & Stroud, 2006), others have noted an epistemic dimension to the efficacy concept (Pingree, 2011). In other words, internal self-efficacy also refers to people's belief in their ability to understand political events and form opinions about them. Because openness to political persuasion in social media contexts depends, to some extent, on understanding the social opinion cues embedded in social media content, the better an individual is able to understand and interpret these cues, the more likely they are to be open to using them when forming an opinion. Therefore, we expect that

internal political efficacy will moderate the relationship between second screening and self-reported persuasion.

> H$_2$: The positive relationship between second screening and political persuasion on social media will be stronger among those who are high in political efficacy than among those who are not.

Social media news use should also influence people's ability to understand the social media content they encounter when second screening. Not all second screeners engage with political or public affairs content. In fact, the most commonly reported motivations for social media use include social and connective motivations (Pew, 2014; Quan-Haase & Young, 2010). Additionally, many people might supplement their television news viewing with games, idle chat, or other entertainment (Doughty, Rowland, & Lawson, 2012; Freelon & Karpf, 2015) rather than additional news.

Those who frequently use the news are more likely to respond to elite political cues in the traditional mass media (Zaller, 1992). In other words, when the valence of elite messaging in media changes, people who habitually pay more attention to the news are more likely to pick up on those changes and alter their political attitudes accordingly (Zaller, 1992). Thus, habitual news users are the most suscep-tible to the influence of elite media cues. There are good reasons to believe this trend may extend to the influence of social opinion cues in social media environments. In these environments, which are largely self-constructed and socially curated (Hermida, Fletcher, Korell, & Logan, 2012), news content frequently comes along with social endorsements of that content (Messing & Westwood, 2012; Turcotte et al., 2015). Prior research has shown that these social endorsements make people more likely to emphasize the social affiliation of the poster rather than the partisan-ship of the news source (Messing & Westwood, 2012). In other words, when it comes to using news on social media, people tend to pay close attention to social opinion cues, which can influence both exposure and interpretation of the content. Therefore, people who habitually engage with news content on social media should be more likely to use these social cues to form political opinions during a live event. Thus, we hypothesize that social media news use will also moderate the relationship between second screening and self-reported persuasion.

> H$_3$: The positive relationship between second screening and political persuasion on social media will be stronger among those who frequently use social media for news than among those who do not.

The ability and willingness to comprehend the political content in social media environments are not the only factors that should influence people's opinion forma-tion while second screening. The importance people place on socially curated information and opinion also helps shape how open people are to using social media content when forming an opinion about ongoing events and issues.

One indication that people place high importance on socially derived information is whether they frequently engage in online and offline political talk. Research shows that political talk contributes to political learning (Eveland, 2004), helps people develop and maintain social identities (Walsh, 2004), and helps people form attitudes through deliberative processes (Fishkin, 1991; Gastil & Dillard, 1999). While there are important differences between people who talk politics online and offline (Stromer-Galley, 2002), they share some relevant characteristics. Specifically, evidence suggests that people who engage in political talk, both online and offline, enjoy encountering new information and opinion provided by others in conversation (Hill & Hughes, 1998; Stromer-Galley, 2003). In general, then, both online and offline political talk act as indicators that people place high importance on the ideas and opinions of others, which makes them more likely to rely on those conversations when forming an opinion (Levitan & Verhulst, 2016). Therefore, people who frequently engage in political talk, regardless of the setting, should be more open to the influence of others while second screening. Accordingly, we expect that online and offline political talk will moderate the relationship between second screening and self-reported political persuasion.

H4: The positive relationship between second screening and political persuasion on social media will be stronger among those who frequently engage in online and offline political discussion than among those who do not.

Research shows that social influence can be just as important as new information when it comes to forming or changing political preferences (Druckman & Lupia, 2000; Huckfeldt & Sprague, 1987). For example, one study found that knowledge of others' opinions within a social network influences political attitudes even without discussing the issue (Levitan & Verhulst, 2016), a finding that builds on classic research showing that the makeup of opinion within a network can influence vote preferences (Huckfeldt & Sprague, 1987).

Social media afford users increased ability to interact with friends, family members, and acquaintances (Ellison & boyd, 2013; Quan-Haase & Young, 2010; Van Dijck, 2013). Arguably, this means that people also have greater ability to monitor their social environments to determine what opinions are socially desirable (Schultz & Roessler, 2012). The more people interact with others on social media, the more likely they are to engage in this kind of social opinion surveillance and to use social opinion as a reference point when forming their own views about an ongoing event. Therefore, we expect that social interaction on social media environments will also moderate the relationship between second screening and self-reported persuasion.

H5: The positive relationship between second screening and political persuasion on social media will be stronger among those who frequently use social media to interact with others than among those who do not.

# Methods

## Sample and Data

This study uses data from an online, two-wave panel survey conducted in the United States by Nielsen, a professional media polling organization. Using a stratified quota sampling method, survey respondents were selected from a pool of over 200,000 people who registered to participate in an online panel. Nielsen uses a quota based on gender, age, education, and income to ensure the sample closely resembles the demographic distribution reported by the U.S. Census. Wave 1 of the survey (N = 2,060) was collected in December 2013, with a response rate (RR3) of 34.6% (AAPOR, 2011), indicating a relatively high level of survey participation for online panels (see Bosnjak, Das, & Lynn, 2015). The second wave was conducted in March 2014 (N = 1,024) and had a very high retention rate (57%, see Watson & Wooden, 2006). The sample is diverse, and it is comparable with both the U.S. population and surveys that use random sampling strategies (see Pew, 2014) in terms of age (M = 52.7, SD = 14.7), education (Min. = 1, Max. = 8, M = 3.61, SD = 1.44, Mdn = some college), income (range of scale 1–8, M = 4.46, SD = 1.44, Mdn = $50,000–$59,000), sex (49.9% female), and race (78% white). However, there were a few differences of note. The sample is slightly older, more educated, and includes fewer Hispanics compared with the U.S. Census.

## Measures

*Political Persuasion on Social Media.* The measure of political persuasion on social media, which is based on prior research (Diehl, Weeks, & Gil de Zúñiga, 2015; Weeks, Ardèvol-Abreu, & Gil de Zúñiga, 2015), relies on respondents' self-reports of their openness to using social media content to form or change an opinion. While these previous studies used three items to measure this construct, they included measures of elite influence on social media. Because the goal of the current research is to isolate the role of peer-to-peer influence, we used the two questionnaire items that most closely reflect this concept and excluded the item measuring elite influence. In both survey waves (1 = Never, 10 = Very Frequently), questionnaire items asked respondents how often they (a) change their minds about political issues because of information or interactions on social media and (b) how often they reconsider their political views because of information or interactions on social media. These items form reliable measures and were averaged to create the final variable (Wave 1 Spearman Brown coefficient = .96, M = 1.97, SD = 1.82; Wave 2 Spearman Brown coefficient = .97, M = 1.97, SD = 1.87).

*Second Screening.* The second screening variable was also based on prior research (Gil de Zúñiga et al., 2015), and was measured in Wave 1 with three

items (1 = *Never*, 10 = *Very Frequently*) asking respondents (a) how often they second screen during political speeches or debates, (b) how often they second screen during the news, and (c) how often they second screen during election coverage. These items were averaged to create the final variable (Cronbach's alpha = .92, *M* = 2.55, *SD* = 2.39).

*Social Media News Use.* Social media news use (see, e.g., Gil de Zúñiga, Jung, Valenzuela, 2012, Lee & Ma, 2012; Park, Kee, & Valenzuela, 2009) was measured with four Wave 1 survey items (1 = *Never*, 10 = *Very Frequently*) asking respondents how often they (a) use Facebook for getting news, (b) use Twitter for getting news, (c) use social media to stay informed about current events and public affairs, and (d) use social media to get news about current events from mainstream media (e.g., CNN or ABC). These items were averaged to create the final variable (Cronbach's alpha = .82, *M* = 2.67, *SD* = 2.06).

*Social Media Interaction.* Building on previous research (Lee & Ma, 2012; Park et al., 2009), the analysis also controls for individuals' interactivity on social media. Social media interaction was measured with three survey items (1 = *Never*, 10 = *Very Frequently*) using similar scales that asked respondents how often they use social media to (a) stay in touch with family and friends, (b) meet new people who share interests, and (c) contact people they wouldn't meet otherwise. These items were averaged (Cronbach's alpha = .75, *M* = 3.57, *SD* = 2.32).

*Frequency of Social Media Use.* Analyses also control for overall frequency of social media use on the recommendation of previous literature (Quan-Haase & Young, 2010). Social media use was measured with a single survey item asking respondents how often they use social media on a typical day (1 = *Never*, 10 = *Very Frequently*, *M* = 4.15, *SD* = 3.00).

*Traditional News Use.* Prior research has linked traditional news use with persuasion (Feldman, 2011), and therefore it was controlled. It was measured with 10 survey items that asked respondents how often (1 = *Never*, 10 = *Very Frequently*) they (a) get news from network TV news (e.g., ABC, CBS, NBC), (b) get news from local television news (local affiliate station), (c) get news from fake news programs (e.g., *Daily Show, Colbert Report*), (d) get news from national newspapers (e.g., *New York Times, Washington Post, USA Today*), (e) get news from local newspapers (e.g., *Oregonian, Houston Chronicle, Miami Herald*), (f) get news from cable news (e.g., CNN, Fox News, MSNBC), (g) get news from radio news (e.g., NPR, talk shows), (h) use print for news, (i) use television for news, and (j) use radio for news. These items were averaged to create the final variable (Cronbach's alpha = .76, *M* = 5.00, *SD* = 1.73).

*Online News Use.* Prior research has also linked online news use with persuasion (Feldman, 2011), and therefore it was also controlled. It was measured with four survey items using similar scales that asked respondents how often they (a) get news

from online news sites (e.g., Gawker, Politico, Buzzfeed), (b) use a computer Web browser (laptop or desktop) for news, (c) use a tablet app or browser (iPad, 7 inches or larger) for news, and (d) use a smartphone app or browser (handheld mobile device smaller than 7 inches) for news. These items were averaged (Cronbach's alpha = .67, $M$ = 3.72, $SD$ = 1.94).

*Political Talk Network Size.*   Characteristics of political discussion networks could influence media-related behavior (Eveland & Hivey, 2009), and political attitude ambivalence (Huckfeldt, Mendez, & Osborn, 2004). Therefore, several dimensions of respondent's offline and online discussion networks were measured. To measure political talk network size, two survey items asked respondents (a) about how many people would you say have you talked to face-to-face or over the phone about politics or public affairs and (b) about how many people would you say you have talked to via the Internet, including e-mail, chat rooms, social networking sites, and micro-blogging sites. These items were added together in an index, and a log transformation was applied to reduce skew (Min = 0, Max = 6.31, $M$ = 1.22, $SD$ = 1.23).

*Political Talk Frequency*. Based on the recommendations of prior research (Eveland & Hivey, 2009), political talk frequency was measured by nine survey items that asked respondents how frequently (1 = *Never*, 10 = *Very Frequently*) they talk about politics or public affairs online and offline with (a) spouse or partner, (b) family relatives, (c) friends, (d) acquaintances, (e) strangers, (f) neighbors they know well, (g) neighbors they do not know well, (h) coworkers they know well, and (i) coworkers they do not know well. These items were averaged (Cronbach's alpha = .87, $M$ = 3.28, $SD$ = 1.74).

*Political Talk Heterogeneity*.   Also based on the recommendations of prior research (Mutz, 2006), analyses control for political talk heterogeneity. It was measured with four items on similar scales asking respondents how frequently they talk about politics or public affairs online and offline with (a) people who disagree with them, (b) people whose political views are different from theirs, (c) people from a different race or ethnicity, and (d) people from a different social class. These items, which form a reliable scale (Cronbach's alpha = .94), were averaged ($M$ = 3.60, $SD$ = 2.46).

*Political Interest.* Consistent with prior literature (e.g., Shah et al., 2007a), the analyses control for political orientations. Political interest was measured with two items (1 = *Not at All*, 10 = *A Great Deal*) asking respondents (a) how interested they are in information about what's going on in politics or public affairs and (b) how closely they pay attention to information about what's going on in politics or public affairs (Spearman Brown coefficient = .96, $M$ = 6.67, $SD$ = 2.70).

*Internal Political Efficacy*.  Political efficacy (Niemi et al., 1991) was measured with three items (1 = *Strongly Disagree*, 10 = *Strongly Agree*) asking respondents the extent to which they agree with the following statements: (a) people like me can

influence government, (b) I consider myself well qualified to participate in politics, and (c) I have a good understanding of important political issues facing our country. These items were averaged (Cronbach's alpha = .78, $M = 5.17$, $SD = 2.24$).

*Ideological Extremity.*  Finally, ideological extremity (see, e.g., Garrett & Stroud, 2014) was measured with two items (1 = *Liberal*, 11 = *Conservative*) asking respondents to place themselves on the political spectrum on (a) social issues and (b) economic issues. These items were folded and then averaged (Spearman Brown coefficient = .86, $M = 3.23$, $SD = 1.72$).

*Demographics.*  Analyses also control for demographic variables including age, gender, education, income, and race. The average respondent is 52.64 years old, has completed some college ($M = 3.61$, $SD = 1.43$), and makes between $25,000 and $50,000 per year ($M = 4.47$, $SD = 1.43$). About half (49.9%) of respondents identify as female, and 21.5% identity as a racial minority.

## Results

The first hypothesis predicts that second screening will be positively related to political persuasion on social media. First, the cross-sectional relationship between these variables was assessed using ordinary least squares (OLS) regression, and results are reported in Table 1. In the cross-sectional framework, second screening is positively related to self-reported persuasion ($\beta = .069$, $p < .05$), and the variable explains an additional .3% of the variance in the outcome on top of the influence of demographics, political orientations, communication antecedents, and other social media behaviors. Notably, social media use ($\beta = -.116$, $p < .001$), social media news use ($\beta = .353$, $p < .001$), and social media interaction ($\beta = .274$, $p < .001$) are significantly related to the outcome. In all, the cross-sectional model explains 42.8% of the variance in political persuasion on social media, and suggests that individuals who second screen are also more likely to be open to political persuasion in social media contexts.

Next, the over-time relationship was assessed with an autoregressive panel model that estimates the effect of second screening at Time 1 on self-reported political persuasion at Time 2 while controlling for self-reported political persuasion at Time 1. Results are reported in Table 2. Just as in the cross-sectional analysis, second screening at Time 1 is positively related to self-reported persuasion at Time 2 ($\beta = .060$, $p < .05$) and explains an additional .3% of the variance in the outcome—even when controlling for the aforementioned variables and the autoregressive term, which itself is strongly related to the outcome ($\beta = .474$, $p < .001$). Notably, social media news is also positively related to self-reported persuasion ($\beta = .162$, $p < .001$). The full model explains 48.1% of the variance in self-reported persuasion at Time 2 and suggests that individuals who second screen are more likely to be open to persuasion in social media contexts *at a later point in time*. Taken together, the

**Table 1**
**The Cross-Sectional Relationship between Second Screening and Political Persuasion on Social Media**

| Variable | Political persuasion on social media | | | | |
|---|---|---|---|---|---|
| | $\beta$ | | | | |
| Age | -.052[#] | -.053[#] | -.050[#] | -.062* | -.054[#] |
| Gender (1 = Female) | -.030 | -.028 | -.029 | -.023 | -.029 |
| Education | .009 | .012 | .010 | .018 | .014 |
| Income | -.029 | -.024 | -.027 | -.021 | -.026 |
| Race (1 = Minority) | -.006 | -.007 | -.003 | -.006 | -.007 |
| $R^2$ Change | | | 4.7% | | |
| Political interest | -.027 | -.025 | -.025 | -.005 | -.023 |
| Internal political efficacy | .068* | -.037 | .066* | .059[#] | .066* |
| Strength of ideology | -.055* | -.056* | -.056* | -.055* | -.057* |
| $R^2$ Change | | | 6.6% | | |
| Political talk network size | -.011 | -.010 | -.007 | .008 | -.003 |
| Political talk frequency | .191*** | .172*** | .179*** | .014 | .177*** |
| Political talk heterogeneity | .055 | .061 | .057 | .052 | .050 |
| Traditional news use | -.057[#] | -.060* | -.061* | -.057[#] | -.062* |
| Online news use | -.002 | -.004 | -.001 | -.013 | -.008 |
| $R^2$ Change | | | 13.7% | | |
| Social media use | -.116** | -.114** | -.108** | -.108** | -.097* |
| Social media news use | .353*** | .350*** | .259*** | .336*** | .332*** |
| Social media interaction | .274*** | .270*** | .281*** | .267*** | .158*** |
| $R^2$ Change | | | 17.5% | | |
| Second screening | .069* | -.197** | -.023 | -.211*** | -.126* |
| $R^2$ Change | | | .3% | | |
| Second screening by: | | | | | |
| Political efficacy | — | .293*** | — | — | — |
| Social media news use | — | — | .170* | — | — |
| Political talk frequency | — | — | — | .449*** | — |
| Social media interaction | — | — | — | — | .277*** |
| $R^2$ Change | — | 1.1% | .4% | 2.0% | .9% |
| Total $R^2$ | 42.8% | 43.9% | 43.2% | 44.8% | 43.7% |

*Note*. Cell entries are standardized beta coefficients ($\beta$) from a ordinary least squares (OLS) regression models. [#]$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

cross-sectional and autoregressive models strongly support $H_1$: Second screening is positively related to political persuasion on social media at a single time point and also over time.

**Table 2**
**The Over-Time, Autoregressive Relationship between Second Screening and**
**Political Persuasion on Social Media**

| Variable | Political persuasion on social media$_{T2}$ | | | | |
|---|---|---|---|---|---|
| | $\beta$ | | | | |
| Age | -.043 | -.044 | -.042 | -.044 | -.044 |
| Gender (1 = Female) | .011 | .011 | .011 | .011 | .011 |
| Education | .005 | .006 | .006 | .005 | .007 |
| Income | -.063* | -.061* | -.061* | -.062* | -.061* |
| Race (1 = Minority) | .058* | .057* | .060* | .058* | .057* |
| $R^2$ Change | | | 4.5% | | |
| Political interest $_{T1}$ | -.027 | -.026 | -.024 | -.025 | -.025 |
| Internal political efficacy $_{T1}$ | .062# | .021 | .060# | .062# | .062# |
| Strength of ideology $_{T1}$ | .003 | .002 | .002 | .003 | .002 |
| $R^2$ Change | | | 6.8% | | |
| Political talk network Size $_{T1}$ | .098** | .098** | .102*** | .100** | .101*** |
| Political talk frequency $_{T1}$ | -.016 | -.021 | -.028 | -.028 | -.021 |
| Political talk heterogeneity $_{T1}$ | .058 | .060 | .060 | .057 | .056 |
| Traditional news use $_{T1}$ | -.001 | -.002 | -.005 | -.001 | -.004 |
| Online news use $_{T1}$ | -.012 | -.013 | -.012 | -.013 | -.015 |
| $R^2$ Change | 10.6% | | | | |
| Social media use $_{T1}$ | -.043 | -.043 | -.036 | -.043 | -.035 |
| Social media news use $_{T1}$ | .162*** | .164*** | .067 | .162*** | .155*** |
| Social media interaction $_{T1}$ | .058 | .058 | .067# | .058 | .007 |
| $R^2$ Change | | | 12.7% | | |
| Political persuasion on social media$_{T1}$ | .474*** | .467*** | .467*** | .472*** | .466*** |
| $R^2$ Change | | | 13.2% | | |
| Second screening $_{T1}$ | .060* | -.046 | -.035 | .041 | -.029 |
| $R^2$ Change | | | .3% | | |
| Second screening by: | | | | | |
|   Political efficacy $_{T1}$ | — | .117# | — | — | — |
|   Social media news use $_{T1}$ | — | — | .176** | — | — |
|   Political talk frequency $_{T1}$ | — | — | — | .031 | — |
|   Social media interaction $_{T1}$ | — | — | — | — | .128* |
| $R^2$ Change | | .1% | .4% | .0% | .2% |
| Total $R^2$ | 48.1% | 48.2% | 48.5% | 48.1% | 48.3% |

*Note.* Cell entries are standardized beta coefficients ($\beta$) from a ordinary least squares (OLS) regression models. #$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

The hypothesized moderated relationships were tested in both the cross-sectional (Table 1) and autoregressive (Table 2) frameworks. These moderated relationships are illustrated in Figures 1 (cross-sectional) and 2 (autoregressive), which plot the effect size for the relationship between second screening and self-reported persuasion at each level of the moderators using the Johnson-Neyman technique.

Figure 1

Cross-Sectional Conditional Effects of Second Screening on Political Persuasion on Social Media as a Function of Internal Political Efficacy (Top Left), Social Media News Use (Top Right), Political Talk Frequency (Bottom Left), and Social Media Interaction (Bottom Right)
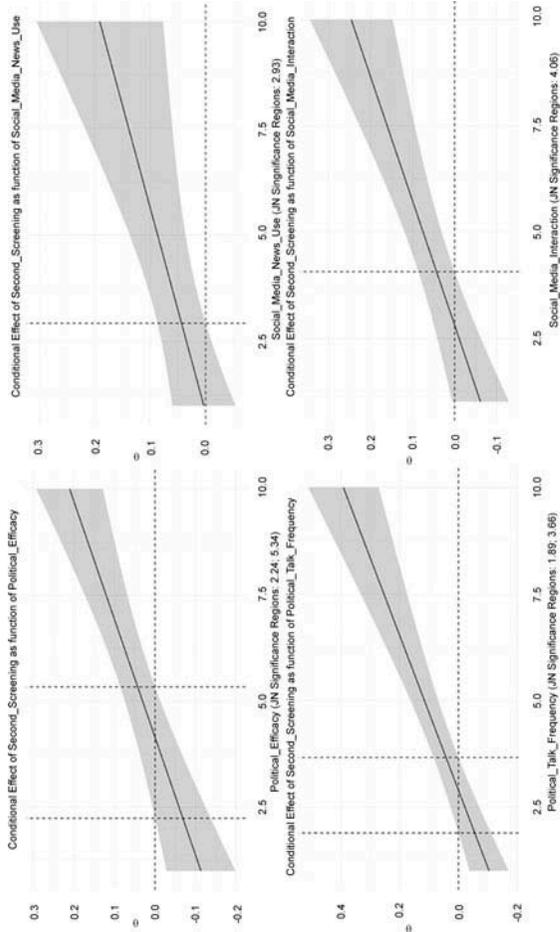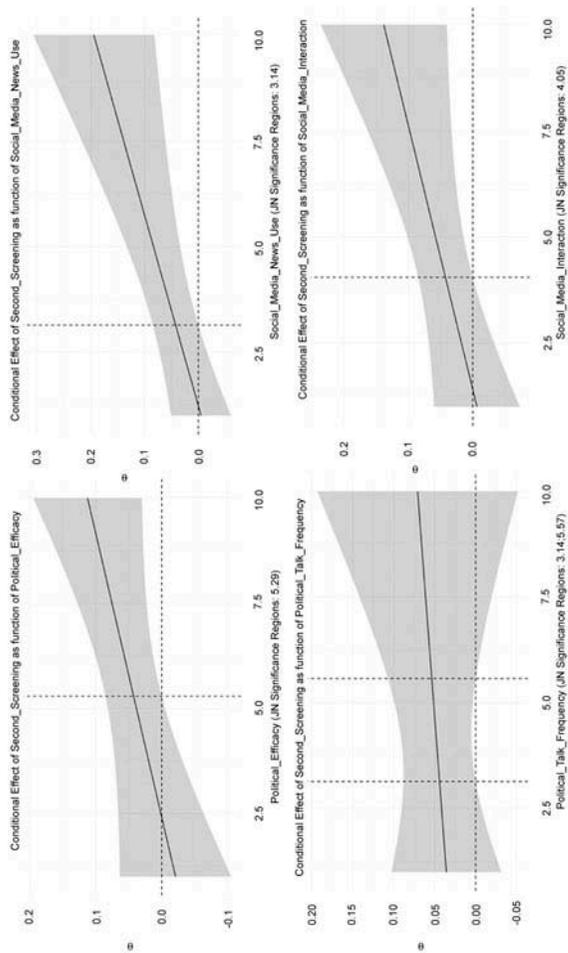
**Figure 2**

**Over-Time, Autoregressive Conditional Effects of Second Screening on Political Persuasion on Social Media as a Function of Internal Political Efficacy (Top Left), Social Media News Use (Top Right), Political Talk Frequency (Bottom Left), and Social Media Interaction (Bottom Right).**

Among the four moderators, social media news use (cross-sectional $\beta$ = .170, $p < .05$; autoregressive $\beta$ = .176, $p < .01$) and social media interaction (cross-sectional $\beta$ = .277, $p < .001$; autoregressive $\beta$ = .128, $p < .05$) exert a significant influence on the relationship between second screening and self-reported persuasion in both analytic frameworks. Both at a single point in time and also over time, the relationship between second screening and self-reported persuasion is stronger among individuals who frequently use social media (a) for news or (b) to interact with others. These results strongly support H$_3$ (social media news use) and H$_5$ (social media interaction).

Results are mixed for the other two moderators, political efficacy and political talk frequency. Both interactions are significant in the cross-sectional analysis (for political efficacy, $\beta$ = .293, $p < .001$; for political talk frequency, $\beta$ = .449, $p < .001$), but neither reaches acceptable levels of significance in the autoregressive framework. Taken together, these results ultimately lead to a rejection of H$_2$ (political efficacy) and H$_4$ (political talk frequency).

## Discussion

Participatory media technologies have altered the dynamics of influence between elite media organizations and ordinary citizens (Benkler, 2006), and some have argued that second screening practices making use of these technologies have contributed to this shift (Chadwick et al., 2016). As the adoption of mobile devices proliferates (Pew, 2015), the typical American's media experience has become increasing characterized by hybridity—they are not only exposed to information they see on television, but they can engage and interact with, even co-create, additional political content on social media (Doughty et al., 2011; Vacarri et al., 2015). These hybrid media practices provide more pathways for citizens to engage in public conversations about the events they see unfold in real time on television (Gil de Zúñiga et al., 2015). But in these hybrid media environments, the question arises whether second screening practices make it more likely that people will use social media content—news, user-generated content, and social opinion cues—to form or change their opinions about political events, actors, institutions, and issues.

This study provides evidence that they do. Results show a positive relationship between second screening and self-reported political persuasion on social media in both the cross-sectional and autoregressive frameworks. Theoretically, there are good reasons to believe that the hybrid media experience is even more influential than the traditional media environment in terms of making people open to political persuasion. First, social media content is typically the first information second screeners are exposed to outside of television programming because it enables real time engagement with public conversations (Gil de Zúñiga et al., 2015; Wohn & Na, 2011). People tend to favor these initial considerations more heavily when forming opinions or making decisions (Herriges & Shogren, 1996; Jacowitz & Kahneman, 1995). Second, because second screening occurs primarily on social media (Anstead & O'Loughlin, 2011; Doughty et al., 2011; Freelon & Karpf, 2015; Giglietto & Selva,

2014; Pond, 2016), people are exposed to social opinion cues alongside news and public affairs content (Bode, 2015; Bond et al., 2012; Turcotte et al., 2015). These social cues provide direct evidence of the opinion climate within social networks (Schulz & Roessler, 2012; Spartz, Su, Griffin, Brossard, & Dunwoody, 2015; Thelwall, 2007), and people may rely on this evidence when forming their own opinions. This mix of news and social opinion therefore makes people more open to the influence of other people's opinions, news recommendations, or conversations that they encounter in social media environments (Messing & Westwood, 2012; Turcotte et al., 2015).

Results show that people who frequently use social media for news are more likely to be open to persuasion in social media contexts than those who do not. In general, people who habitually pay attention to news are more likely to respond to political cues embedded in media content (Zaller, 1992). But there are key differences when it comes to news on social media, where news content comes alongside social opinion cues—often in the form of content endorsements (Messing & Westwood, 2012). Because social media users self-construct these socially curated news networks, people may be more likely to pay attention to social opinion cues (Hermida et al., 2012; Messing & Westwood, 2012; Turcotte et al., 2015), making them more open to using these cues when interpreting or processing political or public affairs content.

Results also show that people who frequently interact with others in social media contexts are more open to political persuasion on social media while second screening. And while social influence has always been important when it comes to preference change (Druckman & Lupia, 2000; Huckfeldt & Sprague, 1987), social media afford people greater ability to monitor their social networks for opinion cues (Schultz & Roessler, 2012). The more people interact with others on social media, the more they are immersed in a socially opinionated environment, and this immersion arguably increases the likelihood that people will be socially influenced (Levitan & Verhulst, 2016).

Taken together, these results suggest that second screening may be a "weapon of the strong" (Schlozman, Verba, & Brady, 2010). In other words, the people who already pay attention to the news and interact with others in social media contexts are the most likely to use those opinion cues when forming their own opinions. Thus, while second screening can be seen as a new pathway to political engagement (Gil de Zúñiga et al., 2015), the effects of that engagement occur most acutely among those who are already highly involved or engaged with political content on social media to begin with. Therefore, it could be argued that second screening potentially increases the engagement gap between those who are highly involved and those who are not, as the highly involved have yet another way to stay up to date with public conversations about political events as they unfold.

These results have implications for broader scholarly conversations about the political autonomy of individuals and groups relative to elite social institutions, including media organizations, politicians, parties, and interest groups. Some have argued that participatory media, in general, make people more independent from

these institutions as sources of information and opinion (Benkler, 2006), while others have specifically suggested that second screening practices give audiences more power relative to media organizations (Anstead & O'Loughlin, 2011, 2015; Chadwick et al., 2016). The results of this study imply that, while second screening practices may give audience members the ability to shape public narratives about political events (Gillespie & O'Loughlin, 2015), often in critical fashion (D'heer & Verdegem, 2015; Freelon & Karpf, 2015; Pond, 2016), these practices also make people more dependent on other social media users when forming and/or changing political opinions. Therefore, while second screeners are not completely dependent on elite media organizations for information, the practice makes them more open to other sources of political influence, for good or for bad (Bode, 2015; Bond et al., 2012; Turcotte et al., 2015). Furthermore, elite news media organizations continue to play a major role in the persuasion process in social media environments because mainstream media content ostensibly provides the starting point for public conversations (Gil de Zuniga et al., 2012; Gil de Zuniga, Molyneux, & Zheng, 2014). Thus, the evidence presented in this study points toward a "middle way": Second screening practices contribute to a complex interplay between media organizations and their audiences (Moe et al., 2016; Wilson, 2016), in which the people take an increasingly prominent role in shaping public narratives without necessarily diminishing the influence of elite news media.

Several limitations are important to consider when interpreting the results of the study. First, although the panel data used in this study establishes causal order between second screening and self-reported political persuasion, it cannot account for every potential alternative explanation for persuasion. In the future, experimental research is necessary to establish a causal relationship between second screening practices and persuasion. Second, this research studies adults of all ages, but young people may be especially likely to engage in second screening practices. Future research should focus on studying young adult populations. Third, this study has not measured opinion change, per se, but rather the openness to use social media content to form or change opinions. Future research should develop a method for directly observing political opinions and change over time. Another limitation relates to our measures of second screening. While our measures are based on previous research (Gil de Zuniga et al., 2015), the measures represent general second-screening behaviors rather than specifically focusing on second screening for discussion versus information seeking. Future research should address this limitation by examining second screening for various reasons. Our second screening measures are also limited in that they did not measure political versus non-political second screening. Future research could focus on this distinction by developing items that specifically tap second screening for political versus entertainment purposes. The news use measures are also limited in important ways. While these measures were also based on previous research (Feldman, 2011), the news use measures capture both the frequency of using news as well as the breadth of media to which people are exposed. Therefore, we cannot tell if the relationships involving news use are driven by frequency of exposure or breadth of exposure. Future research should test the

difference between these important dimensions of news use. Finally, this study is unable to directly observe the content of second screening activities, and future research could focus on describing and characterizing it with a content analysis of the information and discussions people encounter when they second screen.

Despite these limitations, this study shows evidence that second screening makes people more likely to use social media content when forming or changing political opinions. The findings show that individuals who "double up" on media during a political news event are more open to persuasion on social media. Furthermore, findings show that this persuasion process is more likely to occur among those who already use social media for news or social interaction. These findings have broad implications for scholarly conversations about the nature of hybrid media experiences and the modern public sphere. Specifically, second screening practices may give individuals greater influence in shaping public narratives about important political issues, but in the process of doing so, they themselves become more open to political influence.

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