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Testing the inadvertency hypothesis: Incidental news exposure and political disagreement across media platforms

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Abstract
The inadvertency hypothesis predicts that people encounter political difference in social media spaces not by design, but rather as a by-product of social media's affordances and cultural logics. The hypothesis implies that incidental news exposure plays a central role in starting conversations from which perceived political disagreement may arise. Relying on a two-wave, online survey collected before and after the 2018 US Midterm Elections (N = 1493), this study builds on prior tests of the inadvertency hypothesis. It also elaborates on the hypothesis by comparing social media platforms. Results are supportive of the inadvertency hypothesis, more so for social networking sites such as Facebook than for other types of social media. Results are discussed in light of the study's contribution to literature on social media and democracy.

Keywords
Cross-cutting exposure, inadvertency hypothesis, incidental exposure, journalism studies, political communication, political disagreement, social media

People encounter high amounts of political disagreement on social media in comparison to other settings (Bakshy et al., 2015; Barnidge, 2017; Hutchens et al., 2019), and explanations based on network size or discussion frequency have proven unsatisfactory. A better explanation is *the inadvertency hypothesis*, which predicts that people encounter political difference in social media spaces not by design, but rather as a by-product of social media affordances and cultural logics (Brundidge, 2010; Stroud and Muddiman, 2012).

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News plays a critical role in this process (Barnidge, 2015; Min and Wohn, 2018; Settle, 2018). Starting public conversations has always been a primary goal of journalism, and, in democratic societies, these conversations should cut across lines of social and political difference (Ananny and Kreiss, 2011). News media are successful at doing so on social media, not because people purposefully seek news, but rather because they are incidentally exposed to news posted by their social contacts. People have only partial control over the content in their news feeds, which means they are more likely to encounter cross-cutting views than if they had full control (Bode, 2016). Thus, incidental news exposure provides one possible explanation for why people encounter political disagreement on social media. This study replicates prior tests of the inadvertency hypothesis (e.g. Lu and Lee, 2019), leveraging a two-wave survey collected before and after the 2018 US Midterm Elections. It also builds on prior research by comparing social media to traditional media, and by comparing social media platforms.

Public conversation as a goal of journalism

One of journalism's goals is to facilitate public discussion, and this goal was the foremost reason that liberal democracies enshrined free press protections in founding documents and/or and norms of governance (Ananny and Kreiss, 2011) – protections that remain a common feature of modern democracies. While there are important differences between liberal and deliberative theories of democracy (Mutz, 2006), they share in common the core idea that a free press should play a leading role in offering ideas for public discussion and debate (Gutmann and Thompson, 1996). These public conversations should cut across social and political lines of difference, such that resulting policies should engage with and reflect the interests of a broad range of people and groups within a given society (Mansbridge, 1999).

In the United States, journalism historically has been successful at facilitating these kinds of conversations (Lazarsfeld et al., 1948). But in today's media environment, the rise of media choice has led to a decline in the purposeful news audience (Prior, 2007). Therefore, there are questions of whether news media still facilitate public conversations that cut across lines of social and political difference.

Political disagreement is an indicator of news media successfully starting cross-cutting public conversations (Gutmann and Thompson, 1996), and it is defined as the expression or perception of political difference resulting from a cross-cutting encounter with an individual or entity in a setting in which it is possible to interact via communication (Barnidge, 2017). Political disagreement is an important concept to both liberal and deliberative theories of democracy (Mansbridge, 1999; Mutz, 2006), as it represents broader discursive processes in the 'marketplace of ideas' or the 'public sphere'.

Two theories help to explain how people perceive political disagreement when exposed to cross-cutting content. First, social judgment theory (Sherif and Hovland, 1961) suggests that individuals will perceive disagreement if an idea falls outside of their 'latitude of acceptance'. Second, social identity theory (Tajfel, 1982) results from in-group/out-group comparisons. Neither theory requires individuals to actively participate in political discussions in order to perceive political disagreement. Rather, disagreement

can also arise from being a spectator of discussions, which is a common phenomenon on social media platforms (Kwon et al., 2014).

Social media and political disagreement

Communication practices on social media facilitate exposure to political disagreement. Social media are web-based platforms that afford users the ability to (1) create a profile, (2) articulate a list of connections, and (3) navigate these connections (boyd and Ellison, 2007). The affordances and cultural logics of these platforms have reshaped news use habits, but they have not created 'filter bubbles' of like-minded content. Although such claims are popular, most research shows that communication on social media is more diverse relative to other communication settings (e.g. Bakshy et al., 2015; Barberá, 2014; Barnidge, 2017; Feezell and Jones, 2017; Hutchens et al., 2019; Kim, 2011; Lee et al., 2014; Min and Wohn, 2018). This diversification occurs *despite* the fact that both algorithms (Pariser, 2011) and users themselves (John and Dvir-Gvirsman, 2015; Yang et al., 2017) filter out unwanted posts.

Social media promote encounters with political disagreement because of their particular affordances and cultural logics. Affordances refer to actual and perceived properties of technological structures that shape the relationship between users and those technologies (Norman, 1988), while cultural logics refer to the norms of platform use, which are constrained but not determined by affordances (Baym, 2010).

Two specific factors, the structure of social connection and social norms of expression, are useful for understanding why people encounter political disagreement on social media. First, exposure to cross-cutting views is more likely where social connection occurs for reasons other than political interest (Huckfeldt et al., 2004; Wojcieszak and Mutz, 2009). That is, cross-cutting views are more likely to 'survive' in social networks that do not preclude them through the structure of social connection. Second, groups and networks can encourage or discourage cross-cutting expression, and the norms of expression in particular settings shape the prevalence of cross-cutting views (Eliasoph, 1998; Walsh, 2004).

Social media are characterized by both non-political social connection and normalized expression. Most social media users connect with others on social media for reasons other than politics (Ellison et al., 2007). Far from creating 'filter bubbles' of like-minded individuals, social media networks maintain overlapping social affiliations. Meanwhile, the cultural logics of social media promote expression, including posting news and commenting on news stories (Hermida et al., 2012; Kümpel et al., 2015). These factors combine to make cross-cutting exposure relatively prevalent on social media.

The inadvertency hypothesis

While these factors – the structure of social connection and social norms of expression – help shed light on the conditions in which exposure to political disagreement is more likely, they are not sufficient explanations for why people encounter political disagreement on social media. Neither do the now-classic discussion variables, such as discussion

network size and discussion frequency, provide sufficient explanations. Prior research shows that political disagreement occurs in networks of varying sizes and at various levels of discussion frequency (Barnidge, 2017; Hutchens et al., 2019; Kim, 2011). Therefore, a more satisfactory explanation is needed.

The *inadvertency hypothesis* proposes that incidental news exposure provides a better explanation. Incidental news exposure refers to unintentional encounters with news or public affairs content (Tewksbury et al., 2001). While it has been considered an important concept in news audience studies since the 1950s (e.g. Downs, 1957), interest in the concept has grown in recent years due to the decline of the 'purposeful' news audience (Prior, 2007). Research shows that incidental news exposure can be a source of news engagement (Karnowski et al., 2017; Kim et al., 2013; Weeks et al., 2017) and political learning (Bode, 2016; Lee and Kim, 2017; Lu and Lee, 2019; Oeldorf-Hirsch, 2018). Thus, incidental news exposure is important in democratic societies because it engages individuals in public conversations who would otherwise be disengaged, leading to optimism that social media may afford opportunities to re-engage (Strömbäck et al., 2013). Feezell (2018) shows in an experiment that incidental exposure to political information on social media increases issue salience, and that this agenda-setting effect is strongest among those with low political interest. Therefore, incidental news exposure on social media has the potential to influence the perceived importance of political issues among the least engaged individuals.

The inadvertency hypothesis provides an explanation for encountering political difference that relies on some of the same factors outlined as conditions for the occurrence of disagreement: (1) imperfect selectivity; (2) weakened social boundaries; and (3) online news as a space for discussion and disagreement. First, while it is true that people prefer to select like-minded news content and interact with like-minded others, they are less than perfect at doing so (Brundidge, 2010). Cable television and some online media give users control over content, but social media give users only partial control (Bode, 2016). While social media users can filter out some undesirable content, their ability to do so is not complete, resulting in imperfect selectivity. Second, online media tend to weaken social boundaries that preclude exposure to disagreement, for example, geographic boundaries, environmental boundaries, and topical boundaries (Stroud and Muddiman, 2012). Therefore, social media expose people to content that originates in different communication environments, diversifying the content overall. Third, sharing news on social media sites or online message boards creates a space for discussion in which people perceive that they disagree with others (Barnidge, 2015; Min and Wohn, 2018; Settle, 2018).

These factors make it more likely that individuals will incidentally encounter news in their social networks. As this news becomes a space for discussion, individuals may come to perceive political disagreement either through social judgment or social identity processes. Thus, the hypothesis suggests that incidental news exposure not only arises from the same structural conditions as political disagreement, it also acts as a catalyst for the kinds of discussions that result in perceived disagreement.

There is one prominent counterhypothesis to consider. Prior (2007) finds that high-choice media environments widen the knowledge gap between those who are interested in news and politics and those who are not. Thus, the widespread adoption of the Internet in the 1990s produced news dropouts who became less engaged with politics. But Prior's

evidence came before the advent of social media, and the rise of these platforms changed the dynamics of incidental news exposure. This shift is reflected in a growing body of research studying incidental exposure on social media (Ahmadi and Wohn, 2018; Bergström and Jervelycke Belfrage, 2018; Boczkowski et al., 2018; Bode, 2016; Fletcher and Nielsen, 2018; Karnowski et al., 2017; Lee and Kim, 2017; Lu and Lee, 2019), which has become important to media diets in a converged media environment where individuals rely on multiple platforms and devices (Antunovic et al., 2018; Ohme et al., 2016).

These ideas suggest that incidental news exposure is common in social media environments because individuals' social choices have connected them to others who post news even if they themselves are not interested in it (Fletcher and Nielsen, 2018; Hermida et al., 2012). While people can avoid news elsewhere online by never visiting a news website or aggregator, people have a difficult time avoiding it in social media environments (Boczkowski et al., 2018). Therefore, the first hypothesis is that social media will afford individuals more opportunities to be incidentally exposed than traditional media.

H1. Respondents will report more incidental exposure via social media than traditional media.

Despite the clear prediction of the inadvertency hypothesis, direct tests of the relationship between incidental news exposure and perceived political disagreement are limited. Those tests that have been conducted are indirect, examining related indicators but not disagreement itself (e.g. Brundidge, 2010; Weeks et al., 2017). Other studies focus on specific platforms such as Facebook (e.g. Lu and Lee, 2019). The current study aims to fill this gap in the literature by testing the relationship between incidental exposure to news and perceived political disagreement over time and for multiple social media platforms at once.

H2. Incidental exposure will be positively related to perceived political disagreement.

The inadvertency hypothesis implies that social media promote perceived political disagreement via incidental news exposure *relative to other media*. A test of this implication involves comparing effect sizes between social and traditional media. The third hypothesis sets up an effect-size comparison with traditional media.

H3. The relationship between incidental exposure in social media and perceived political disagreement will be stronger than the relationship between incidental exposure in traditional media and perceived political disagreement.

Comparing platforms

While social media share important commonalities, there are also important differences among them in terms of their affordances and cultural logics. The structure of social connection and the norms of expression (including posting news) are important in terms of understanding exposure to political disagreement in social media environments. Thus,

one way to conceptually structure cross-platform comparisons is to assess variation in social connection and expression norms.

The extent to which people connect for social reasons rather than for reasons related to personal interests varies between platforms. For example, Facebook and Snapchat require reciprocal connection – that is, both parties have to agree to connect – and reciprocal connection is more likely to reflect pre-existing, offline social relationships (boyd and Ellison, 2007). Twitter or Instagram do not require reciprocity, and therefore (echoing Prior's arguments; 2007) connection is more likely to be based soley on individual interests. Theoretically, one would expect more incidental exposure where connection is based on social relationships and less where it is based on personal interests. The extent to which sharing news is normative also varies across social media platforms. According to Pew Research Center (Gottfried and Shearer, 2017), sharing news is very prevalent on Facebook, in particular, and also on Twitter and YouTube. Sharing news is less common on Instagram and Snapchat. Theoretically, we would expect more incidental exposure on platforms where sharing news is the norm and less where it is not the norm.

If exposure to political disagreement is related to the structures of social connection and the norms of expression, then variation in structures and norms across platforms should lead to differences in both incidental exposure and its relationship with perceived political disagreement. But little research has compared incidental exposure across platforms. Therefore, the following are posed as research questions:

RQ1. Do respondents report differences in incidental exposure across social media platforms?

RQ2. Which social media platforms drive the positive relationship between incidental exposure and perceived political disagreement?

Method

Sample and data

This study relies on a two-wave, online panel survey of adult Internet users who reside in the United States. The first wave was collected between 19 September and 29 September 2018, six weeks before the 2018 US Midterm Elections, and the second wave was collected during the month after the Elections, from 7 November to 5 December 2018. The survey was administered by a private survey firm, Survey Sampling International (SSI)/Research Now (now called Dynata), which randomly selected subjects from an online panel using quotas (based on population parameters from the US Census) for age, gender, race, and census region. The first survey wave had a sample size of N = 1493 and a cooperation rate of 70 percent (American Association of Public Opinion Research (AAPOR), 2016; CR3). The second survey wave had a sample size of N = 576 and a 39 percent retention rate. The first-wave sample is reflective of the population of interest (see Appendix 1), with an average age of 48.39 (standard deviation (SD) = 16.18), 51 percent women, and 77.2 percent White. The average respondent had an associate's or bachelor's degree (M = 4.38, SD = 1.71, where 1 = *Some high school* and 7 = *Post-graduate degree*) and lived in a household that made between US$45,000 and US$75,000 per year (M = 4.84,

SD = 2.14, where 1 = *Less than* US$15,000 and 8 = *More than* US$150,000). A multiple imputation technique (predictive mean matching) was used to impute missing values. Separate imputations were performed for the first and second waves.

Measures: Dependent and independent variables

Political disagreement. The perceived political disagreement variable was based on prior research (Barnidge, 2017). Respondents were first prompted: 'From time to time, people talk with others about government, elections, politics, or the news. In the last 12 months, how often have you encountered or come across political disagreement in [face-to-face settings] about the following topics'. The wording of these questions reflects the theoretical approach to disagreement, which holds that disagreement can arise from both active and passive participation in discussion with cross-cutting ties. Subsequent items asked respondents to report disagreement about (1) politics or elections, (2) news or current events, and (3) public or community issues (1 = *Never*, 7 = *Very Often*). These questions were repeated for mobile messaging apps, social media sites, and online sites not including social media sites or mobile messaging apps. The 12 items (W1: Cronbach's alpha = .96; W2: Cronbach's alpha = .94) were averaged to create the final variable (W1: M = 2.67, SD = 1.69; W2: M = 3.01, SD = 1.73).

Incidental news exposure. The incidental news exposure measures rely on Kim et al.'s (2013) wording ('encounter or come across news'), and they ask about incidental exposure (1 = *Never*, 7 = *Very often*) in television, radio, online message boards (e.g. Reddit or Digg), social networking websites or apps (e.g. Facebook, Google+, MySpace, or LinkedIn), microblogging websites or apps (e.g. Twitter or Tumblr), photosharing websites or apps (e.g. Instagram, Flickr, or Pintrest), videosharing websites or apps (e.g. YouTube, Vimeo, or Periscope), and mobile messaging apps (e.g. Snapchat or What's App). A principal components factors analysis with promax rotation reveals a two-factor solution (where all factors loading $>.70$): social media (six items explain 51.64 percent of variance, eigenvalue = 4.14) and traditional media (two items explain 15.10 percent of variance, eigenvalue = 1.21). These factors are correlated at r = .26. The television and radio items comprise the traditional media variable (Spearman-Brown coefficient = .39). These two items were averaged (M = 4.58, SD = 1.58). The other six items comprise the social media variable (social networking, microblogging, photosharing, videosharing, message boards, and mobile messaging apps). All of these platforms fit boyd and Ellison's (2007) definition of social media: They afford users the ability to (1) create a profile; (2) articulate list of connections; and (3) navigate these connections. The items form a reliable scale (Cronbach's alpha = .90), and they were averaged to create the final variable (M = 2.45, SD = 1.56).

Measures: Control variables

News use. Purposeful news use is important to include as a control variable because prior literature suggests it is related to incidental exposure (Gil de Zúñiga et al., 2012). Therefore, it is included in order to isolate incidental exposure. The variable was constructed

using 18 items, asking respondents how often (1 = *Never*, 7 = *Several times a day*) they use national newspapers (e.g. *USA Today*, the *New York Times, Wall Street Journal*), local or regional newspapers, news magazines (e.g. *Time, Newsweek*), talk radio (e.g. Rush Limbaugh or Paul Finebaum), public radio (e.g. NPR), national news broadcasts (e.g. ABC, CBS, NBC), local news broadcasts, cable news (e.g. Fox News, MSNBC, CNN), online-only news sites or blogs (e.g. Politico, BuzzFeed, HuffPo, DrudgeReport, Breitbart News Network), online sites for news organizations (e.g. nytimes.com, foxnews.com, cnn.com), podcasts (e.g. PodSaveAmerica, RadioLab), online message boards (e.g. Reddit, Digg), blogging websites (e.g. Wordpress, Medium, or Blogger), social networking websites or apps (e.g. Facebook, Google+, MySpace, or LinkedIn), microblogging websites or apps (e.g. Twitter or Tumblr), photosharing websites or apps (e.g. Instagram, Flickr, or Pintrest), videosharing websites or apps (e.g. YouTube, Vimeo, or Periscope), and mobile messaging websites or apps (e.g. Snapchat or WhatsApp). These items were averaged (Cronbach's alpha = .97, M = 2.87, SD = 1.16).

Network size. Prior literature suggests that controlling for network size and talk frequency are critical in order to isolate the relationship between incidental news exposure and political disagreement, because network size is related to both variables. The larger one's social network (and the more one talks politics), the more likely you are to be exposed to news posted by your contacts (Lee and Kim, 2017), and the more likely you are to encounter discussions in which disagreement may occur. This variable is adapted from Eveland and Hively (2009). While they used single item as a summary measure of network size, the current study asked about four categories of discussants. Respondents were prompted with the statement: 'From time to time, people talk with others about government, elections, politics, or the news'. They were then asked how many people with whom they have 'talked about these subjects' in the past 12 months in face-to-face settings, via mobile messaging apps, on social media, and online (not including social media or mobile messaging apps). These four items were summed, and the measure was capped at 200 to reduce skew (Cronbach's alpha = .63, M = 43.42, SD = 156.38). Finally, the variable was logged to further reduce skew (M = 2.34, SD = 1.54, Min. = .00, Max. = 7.74).

Talk frequency. Also based on prior literature (Eveland and Hively, 2009), talk frequency was measured using 16 items that asked respondents how often they talk politics (1 = *Never*, 7 = *Very often*) with family members, friends, other coworkers or classmates, and other acquaintances face-to-face, via mobile messaging apps, on social media, and elsewhere online. The items were averaged (Cronbach's alpha = .97, M = 2.31, SD = 1.45).

Ideological extremity. Political disagreement is conceptualized relative to individual's political ideologies and party identities, and, therefore, both are necessary control variables (Huckfeldt et al., 2004). Based on prior literature (Garrett and Stroud, 2014), political ideology was measured with L-R scales (1 = *Liberal*, 5 = *Neutral*, 11 = *Conservative*) for social issues, economic issues, and general ideology. The average of these three items was taken as the final variable (Cronbach's alpha = .95, M = 6.33, SD = 2.70). The scale

was then folded. Scores of 0 indicate moderate ideology, whereas 5 indicates extreme ideology (M = 2.09, SD = 1.75).

Strength of party ID. Party identity was measured using three survey items borrowed from the American National Election Studies 2016 Election Survey. The first asked respondents, 'Generally speaking, do you usually think of yourself as a Democrat, a Republican, an independent, or what?' Those who identified as Democrat or Republican were then directed to a second question asking them how strong their identity is (Strong or Not that strong). Strong party identifiers were assigned a score of 3 (Republican) or −3 (Democrat), while weak party identifiers were assigned a score of 2 or −2. Those who identified as independents or other were directed to a different follow-up question, which asked 'Even though you don't identify with either major party, do you typically think or yourself as closer to the Democratic Party or to the Republican Party?' Those who identified as party leaners were assigned scores of 1 (Republican) or −1 (Democrat), while those who responded 'Neither' were assigned a score or 0 (Non-partisan). This method resulted in a 7-point scale (−3 = *Strong Democrat*, 0 = *Non-partisan*, 3 = *Strong Republican*), and the variable has a mean close to zero (M = −0.15, SD = 2.20). The variable was then folded so that 0 = *Non-partisan* and 3 = *Strong partisan* (M = 1.92, SD = 1.08).

Political knowledge. Political communication research has stressed the importance of including political orientations such as knowledge, efficacy, and interest, as these often act as intervening variables between communication and subsequent outcomes (Walsh et al., 2004). Therefore, they are important controls that help to isolate the influence of incidental news exposure on political disagreement. Using six fact-based items derived from prior research (Delli Carpini and Keeter, 1996), respondents were asked about political actors, parties, and processes. Correct answers were tallied, with a maximum score of 6 (M = 4.74, SD = 1.52).

Political efficacy. Political efficacy was measured using three items borrowed from prior research (Niemi et al., 1991). Respondents were asked the extent to which they agree or disagree (1 = *Strongly disagree*, 7 = *Strongly agree*) with the following statements: 'People like me can influence what local government does', 'I believe that the national government cares about what people like me think', and 'City government responds to the initiatives of individuals'. These three items were averaged (Cronbach's alpha = .70, M = 3.89, SD = 1.19).

Political interest. Political interest was measured with three items, based on prior literature (Brady et al., 1995), that asked respondents to rate their interest in local or regional politics, national politics, and international politics (1 = *Not at all*, 7 = *Very*). These items were averaged (Cronbach's alpha = .89, M = 4.35, SD = 1.72).

Demographics. Analyses also controlled for age, gender, race, education, and income. See the Sample and Data section for descriptive statistics.

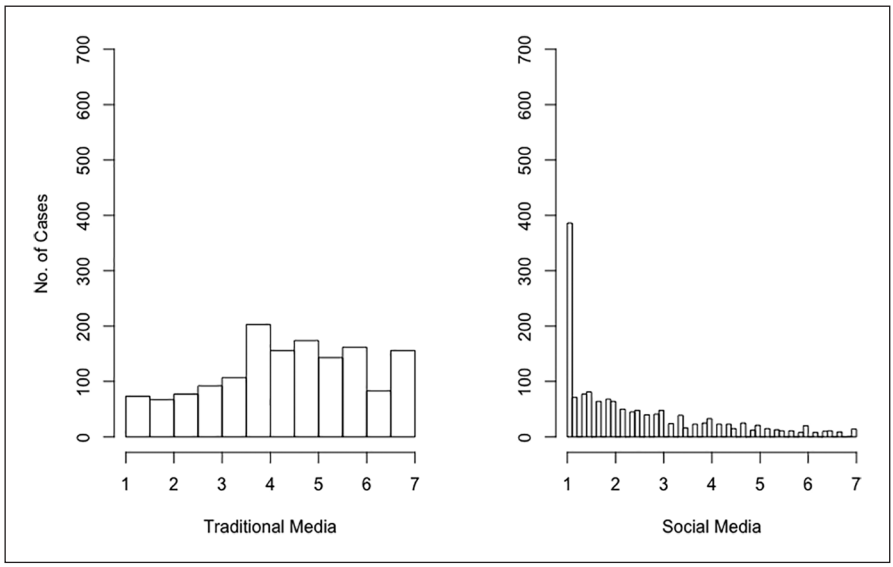

Figure 1. Histograms of incidental news exposure variables. The mean for traditional media (4.58) is higher than the mean for social media (2.45), and this difference is statistically significant: $t(1492) = 43.17$, $p < .001$.

Analysis

First, a paired-samples t-test was used to test for significant differences between incidental exposure in traditional and social media. Second, ordinary least squares (OLS) regression was used to test the relationships between the incidental exposure variables and perceived political disagreement. Cross-sectional and longitudinal models were fit, with the autoregressive term included in the longitudinal model. Third, a paired-samples t-test was used to test for significant differences between incidental exposure among the social media platforms. The alphas were adjusted to account for multiple comparisons. Fourth, additional OLS models were fit to test the influence of each incidental exposure item. Once again, cross-sectional and longitudinal models were fit, with the autoregressive term included in the longitudinal model.

Results

H1 predicted that respondents will report more incidental exposure via social media than via traditional media, and a paired-samples t-test was used to test this hypothesis. The mean for traditional media ($M = 4.58$) is higher than the mean for social media (2.45), and results show that this difference (2.13) is statistically significant ($t(1492) = 43.17$, $p < .001$). The sample distributions are shown in Figure 1. These results contradict H1, as respondents report more incidental exposure via traditional media rather than social media.

Table 1. The cross-sectional and longitudinal relationships between incidental news exposure and perceived political disagreement.

Variable	Perceived political disagreement$_{W1}$	Perceived political disagreement$_{W2}$
	B (SE)	B (SE)
Intercept	−.30 (.21)	.00 (.37)
Incidental exposure		
Traditional Media$_{W1}$	.05 (.02)*	.05 (.04)
Social Media$_{W1}$	.20 (.03)***	.14 (.06)*
News use$_{W1}$	.00 (.04)	.06 (.07)
Network size$_{W1}$	.00 (.00)	.01 (.00)*
Talk frequency$_{W1}$	.69 (.03)***	.28 (.06)***
Ideological extremity$_{W1}$	.02 (.02)	−.01 (.03)
Strength of party ID$_{W1}$	−.05 (.03)	.00 (.05)
Political knowledge$_{W1}$	.11 (.02)***	.06 (.04)
Political efficacy$_{W1}$	−.09 (.03)***	−.05 (.05)
Political interest$_{W1}$	.14 (.02)***	.14 (.04)***
Age	.00 (.00)	.00 (.00)
Gender (1 = woman)	.00 (.07)	.11 (.12)
Education	−.01 (.02)	−.07 (.03)
Income	−.00 (.02)	−.00 (03)
Race (1 = Non-White)	−.22 (.07)**	−.12 (.12)
Perceived political disagreement$_{W1}$		.39 (.04)***
R^2	.60***	.57***
N	1486	569

Cell entries are coefficients (B) and standard errors (SE) from ordinary least squares (OLS) regression models. *$p < .05$; **$p < .01$; ***$p < .001$. W1: Wave 1 variable. W2: Wave 2 variable.

H2 predicted that incidental exposure will be positively related to perceived political disagreement, and H3 predicted that the relationship between incidental exposure on social media and perceived political disagreement would be stronger than the relationship between incidental exposure via traditional media and perceived political disagreement. OLS regression was used to test these hypotheses in both the cross-sectional and longitudinal frameworks. These results are reported in Table 1 and visualized in Figure 2. In the cross-sectional model, incidental news exposure in both traditional media ($B = .05$, standard error (SE) $= .02$, $p < .05$) and social media ($B = .20$, $SE = .03$, $p < .001$) are positively related to perceived political disagreement. However, the social media coefficient is significantly stronger than the traditional media coefficient ($p < .001$). In the autoregressive model, only social media is significantly related ($B = .14$, $SE = .06$, $p < .05$). These results indicate that incidental exposure on social media is related to perceived political disagreement over time, and that the relationship is stronger for social media than it is for traditional media. These results support H2 and H3.

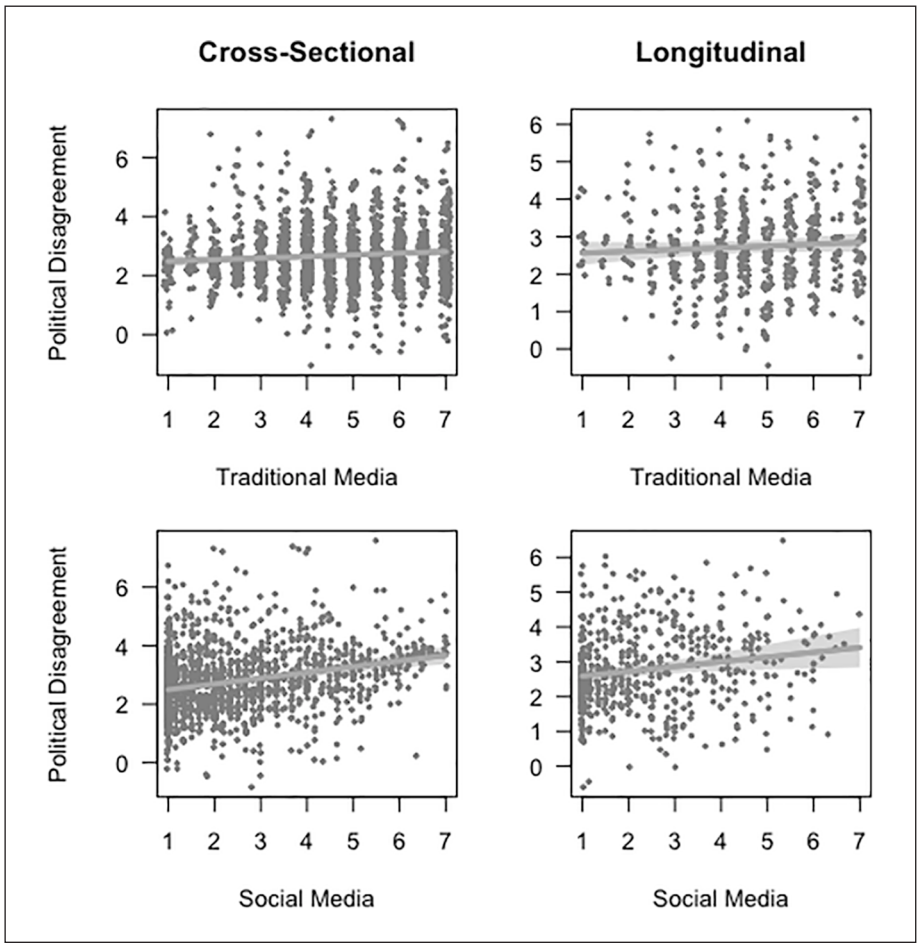

Figure 2. The relationships between incidental exposure variables and perceived political disagreement, as estimated by models in Table 1.

To test RQ1, which asked whether incidental exposure differs across the social media platforms, a series of paired-samples t-tests was performed to establish a rank order among the platforms. The alpha was adjusted to .997 to accommodate multiple comparisons (15 tests). These tests were performed on subsample of social media users (n = 1178). Results are summarized in Table 2. The mean for social networking sites/apps (e.g. Facebook) is the highest by a substantial margin (4.28). The next four means are clustered close together, but there is a clear order among them: videosharing sites/apps (e.g. YouTube; M = 2.80) and online message boards (e.g. Reddit; M = 2.69) are second and third. Microblogging sites/apps (e.g. Twitter) come in fourth place (M = 2.55), followed by photosharing sites/apps (e.g. Instagram; M = 2.39). Finally, mobile messaging apps (e.g. Snapchat) show the lowest mean (M = 2.21).

Table 2. Descriptive statistics and test of mean differences for the social media incidental exposure items among social media users.

	M (SD)	Rank order
Social Networking	4.28 (2.01)	First
Videosharing	2.80 (2.02)	Second
Message board	2.69 (1.97)	Third
Microblogging	2.55 (2.05)	Fourth
Photosharing	2.39 (1.92)	Fifth
Mobile messaging	2.21 (1.89)	Sixth

Rank order determined by a series of paired-samples t-test with adjusted confidence level of .997 (15 comparisons). Analyses conducted on subsample of social media users. N = 1175. Detailed results of these tests are available upon request.

RQ2 asked which specific platforms drive the positive relationship between incidental exposure and perceived political disagreement. To answer this question, the incidental exposure variables are 'decomposed' into their individual items. These analyses are reported in Table 3. In the cross-sectional model, the coefficients for social networking sites/apps (B = .07, SE = .02, $p < .001$) and microblogging sites/apps (B = .05, SE = .02, $p < .05$) are significantly related to the outcome. But only the social networking sites coefficient is significantly related in the longitudinal model (B = .09, SE = .03, $p < .01$). The coefficient for radio is also significantly related (B = .06, SE = .03, $p < .05$). These results show that social networking sites are the biggest driver of perceived political disagreement via incidental news exposure.

Discussion

This study provides a longitudinal test of the inadvertency hypothesis during the 2018 US Midterm Elections, and it elaborates on that hypothesis by comparing social media platforms. First, respondents report more incidental news exposure in traditional media than in social media. Second, incidental exposure via social media platforms is significantly related to perceived political disagreement over time, whereas incidental exposure via traditional media is not. Third, respondents report the most incidental exposure on social networking sites such as Facebook, followed by videosharing sites (e.g. YouTube) and message boards (e.g. Reddit); they report the least on mobile messaging apps (e.g. Snapchat). Finally, the relationship between incidental exposure on social media and perceived political disagreement is driven by social networking sites such as Facebook.

The first hypothesis predicted that respondents would report higher levels of incidental news exposure in social media than in traditional media. Contrary to this hypothesis, respondents reported the opposite. Prior (2007) theorized that the rise in media choice led many people to avoid news altogether. Given a choice, these 'news dropouts' opted for entertainment rather than news. Or, drawing from Bode's (2016) notion of media control, increased media control gave people the ability to avoid the news. But the rise of social media changed this dynamic because they gave people only partial control over content.

Table 3. The cross-sectional and longitudinal relationships between incidental news exposure and perceived political disagreement.

Variable	Perceived political disagreement$_{W1}$	Perceived political disagreement$_{W2}$
	B (SE)	B (SE)
Intercept	−.36 (.22)	−.01 (.37)
Incidental exposure		
Television$_{W1}$	.03 (.02)	−.03 (.03)
Radio$_{W1}$	.02 (.02)	.06 (.03)*
Social networking$_{W1}$	.07 (.02)***	.09 (.03)**
Videosharing$_{W1}$	.04 (.02)	.03 (.04)
Message board$_{W1}$	.01 (.02)	−.05 (.04)
Microblogging$_{W1}$	.05 (.02)*	.03 (.04)
Photosharing$_{W1}$	.01 (.03)	−.05 (.05)
Mobile messaging$_{W1}$	.00 (.03)	.04 (.04)
News use$_{W1}$	.02 (.04)	.10 (.07)
Network size$_{W1}$	.00 (.00)	.01 (.00)*
Talk frequency$_{W1}$	.69 (.03)***	.29 (.06)***
Ideological extremity$_{W1}$	.02 (.02)	−.01 (.03)
Strength of party ID$_{W1}$	−.04 (.03)	.02 (.05)
Political knowledge$_{W1}$	.10 (.02)***	.05 (.04)
Political efficacy$_{W1}$	−.09 (.03)***	−.04 (.05)
Political interest$_{W1}$	.14 (.02)***	.13 (.04)***
Age	.00 (.00)	.00 (.00)
Gender (1 = woman)	−.03 (.07)	.06 (.12)
Education	.00 (.02)	−.07 (.03)*
Income	.00 (.02)	.00 (.03)
Race (1 = Non-White)	−.22 (.07)**	−.10 (.12)
Perceived political disagreement$_{W1}$		.38 (.04)***
R^2	.60***	.58***
N	1486	569

Cell entries are coefficients (B) and standard errors (SE) from ordinary least squares (OLS) regression models. *p < .05; **p < .01; ***p < .001. W1: Wave 1 variable. W2: Wave 2 variable.

Therefore, social media's affordances and cultural logics made it more difficult for people to avoid the news (Bode, 2016). But people are better at avoiding news on social media than they get credit for. One reason for this is that while people may not exercise media choice on social media, they do exercise *social choice*. Social media users have the ability to filter out content they do not want to see by unfriending/unfollowing, hiding, or even blocking other users (John and Dvir-Gvirsman, 2015; Yang et al., 2017). These social choices enable people to avoid the news to a much greater extent than prior research suggests. The findings therefore elaborate upon Bode's (2016) notion of partial control, suggesting that social media users are good at leveraging this control. Future research could examine the role of social filtration in limiting incidental news exposure.

On the other hand, this study does provide strong support for the inadvertency hypothesis (Brundidge, 2010; Stroud and Muddiman, 2012), but it is not the first to do so. Lu and Lee (2019) also found a positive relationship between incidental news exposure and political disagreement on Facebook. This study builds on that work in three ways. It replicates the stringent, longitudinal test of the hypothesis. It also compares social media to traditional media. Finally, it compares the key relationship across social media platforms.

That the study finds support for the inadvertency hypothesis reinforces the idea that it provides a promising working explanation for why people encounter political disagreement on social media (Barnidge, 2017; Feezell and Jones, 2017; Hutchens et al., 2019). Explanations based on classic political discussion variables are not satisfactory because perceived disagreement occurs in social networks of varying sizes and at various levels of discussion activity. But the inadvertency hypothesis provides a better explanation. News posts on social media create a space in which it is possible for perceived disagreement to occur, regardless of active involvement in discussions (Barnidge, 2015; Min and Wohn, 2018; Settle, 2018). But these encounters with disagreement are largely inadvertent; they occur while people are incidentally engaged with news posts. My results support this notion: Incidental news exposure on social media is related to perceived political disagreement, but not incidental exposure in traditional media, where discussion is farther removed from the experience of incidentally encountering the news.

Thus, social media have the right structural and cultural ingredients to re-engage people with news and public affairs. Most (74%) of the respondents in this study reported some incidental exposure on social media. Taken together with Fletcher and Nielsen's (2018) 'conservative' estimate of 58 percent, the two studies suggest that ~6 or 7 in 10 users are incidentally exposed on these platforms. While Fletcher and Nielsen (2018) removed purposeful news users from the incidentally exposure measure, the current study takes the approach of including purposeful news use as a statistical control, which is correlated with incidental exposure. This reveals something interesting: Incidental exposure is more likely to occur in 'news rich' networks than it is in 'news poor' networks.

The correlation is not perfect. Many people report incidental exposure but not purposeful news use, and there is still some room for incidental exposure to re-engage the disinterested. There is also evidence from prior research that this exposure has the strongest effects among the least engaged. Feezell (2018) found that incidental news exposure has an agenda-setting effect that is most prominent among the least interested. Reminiscent of Prior's (2007) news avoiders, these are the individuals who are absent from public conversations.

The study finds that the key relationship exists only for social networking sites such as Facebook, and not for other social media platforms such as photosharing sites (such as Instagram) or mobile messaging apps (such as Snapchat). This finding poses something of a problem for optimistic assertions about the ability of social media to re-engage news avoiders, because younger people are migrating away from Facebook and toward Instagram and Snapchat (Gottfried and Shearer, 2017), where incidental news exposure is less common. It could be that the period between 2006 and 2016 when Facebook dominated the social media scene was anomalous to the broader trends of declines in incidental news exposure. Researchers should monitor these trends as Facebook's popularity wanes among young adults.

This study is limited in several important ways. Causal inferences should be made with caution. Even though this study is based on overtime data, enabling it to establish causal order, it cannot account for all alternative explanations. Future research should focus on testing the relationship between incidental exposure and perceived political disagreement in an experiment. Next, the study relies on self-reported measures of incidental exposure and perceived political disagreement. While these measures are well established in prior literature, self-reports may overestimate the occurrence of a phenomenon. Future research could pair these measures with observational data to assess their external validity. Another limitation is related to measurement error in the news use and incidental news exposure items. It could be that respondents did not recognize the distinction between these two concepts, even though the questions used different wording. Future research could focus on validating these measures across datasets. Finally, degrees of freedom are limited in the autoregressive analysis because of the Wave 2 sample size. Future research should focus on maximizing degrees of freedom.

This study shows some strong evidence about the role of social media in promoting encounters with political disagreement via incidental exposure, in support of the inadvertency hypothesis. Therefore, incidental news exposure provides a good working explanation for why people encounter disagreement on social media, particularly on social networking sites. Thus, social media may re-engage news avoiders in public conversations.

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References

Ahmadi M and Wohn DY (2018) The antecedents of incidental news exposure on social media. *Social Media + Society* 4(2).

American Association of Public Opinion Research (AAPOR) (2016) Standard definitions: Final dispositions of case codes and outcome rates for surveys. Available at: https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf (accessed 23 April 2019).

Ananny M and Kreiss D (2011) A new contract for the press: Copyright, public domain journalism, and self-governance in a digital age. *Critical Studies in Media Communication* 28(4): 314–333.

Antunovic D, Parsons P and Cooke TR (2018) 'Checking' and googling: Stages of news consumption among young adults. *Journalism* 19(5): 632–648.

Bakshy E, Messing S and Adamic L (2015) Exposure to ideologically diverse news and opinion on Facebook. *Science* 348: 1130–1132.

Barberá P (2014) How social media reduces mass political polarization: Evidence from Germany, Spain, and the United States. Working paper. Available at: http://pablobarbera.com/static/barbera-polarization-social-media.pdf

Barnidge M (2015) The role of news in promoting political disagreement on social media. *Computers in Human Behavior* 52: 211–218.

Barnidge M (2017) Exposure to political disagreement in social media versus face-to-face and anonymous online settings. *Political Communication* 34(2): 302–321.

Baym N (2010) *Personal Connections in the Digital Age*. Maiden, MA: Polity Press.

Bergström A and Jervelycke Belfrage M (2018) News in social media: Incidental consumption and the role of opinion leaders. *Digital Journalism* 6(5): 583–598.

Boczkowski PJ, Mitchelstein E and Matassi M (2018) 'News comes across when I'm in a moment of leisure': Understanding the practices of incidental news consumption on social media. *New Media & Society* 20(10): 3523–3539.

Bode L (2016) Political news in the news feed: Learning politics from social media. *Mass Communication and Society* 19(1): 24–48.

boyd dm and Ellison NB (2007) Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication* 13(1): 210–230.

Brady HE, Verba S and Schlozman KL (1995) Beyond SES: A resource model of political participation. *American Political Science Review* 89(2): 271–294.

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(4): 680–700.

Delli Carpini MX and Keeter S (1996) *What Americans Know about Politics and Why It Matters*. New Haven, CT: Yale University Press.

Downs A (1957) An economic theory of political action in a democracy. *Journal of Political Economy* 65(2): 135–150.

Eliasoph N (1998) *Avoiding Politics: How Americans Produce Apathy in Everyday Life*. New York: Cambridge University Press.

Ellison NB, Steinfield C and Lampe C (2007) The benefits of Facebook 'friends': Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication* 12(4): 1143–1168.

Eveland WP Jr and Hively MH (2009) Political discussion frequency, network size, and 'heterogeneity' of discussion as predictors of political knowledge and participation. *Journal of Communication* 59(2): 205–224.

Feezell JT (2018) Agenda setting through social media: The importance of incidental news exposure and social filtering in the digital era. *Political Research Quarterly* 71(2): 482–494.

Feezell JT and Jones JL (2017) Disagreement without deterrence: The importance of the setting for the study of political disagreement and participation of youth. *American Politics Research* 47(4): 915–946.

Fletcher R and Nielsen RK (2018) Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society* 20(7): 2450–2468.

Garrett RK and Stroud NJ (2014) Partisan paths to exposure diversity: Differences in pro- and counterattitudinal news consumption. *Journal of Communication* 64(4): 680–701.

Gil de Zúñiga H, Jung N and Valenzuela S (2012) Social media use for news and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication* 17(3): 319–336.

Gottfried J and Shearer E (2017) News use across social media platforms 2017. A report for the Pew Research Center. Available at: https://www.journalism.org/2017/09/07/news-use-across-social-media-platforms-2017/

Gutmann A and Thompson D (1996) *Democracy and Disagreement: Why Moral Conflict Cannot Be Avoided in Politics, and What Should Be Done about It*. Cambridge, MA: The Belknap Press.

Hermida A, Fletcher F, Korell D, et al. (2012) Share, like, recommend: Decoding the social media news consumer. *Journalism Studies* 13(5–6): 815–824.

Huckfeldt R, Johnson PE and Sprague J (2004) *Political Disagreement: The Survival of Diverse Opinions within Communication Networks*. New York: Cambridge University Press.

Hutchens MJ, Hmielowski JD and Beam MA (2019) Reinforcing spirals of political discussion and affective polarization. *Communication Monographs* 86(3): 357–376.

John NA and Dvir-Gvirsman S (2015) 'I don't like you anymore': Facebook unfriending by Israelis during the Israel–Gaza conflict of 2014. *Journal of Communication* 65(6): 953–974.

Karnowski V, Kümpel AS, Leonhard L, et al. (2017) From incidental news exposure to news engagement: How perceptions of the news post and news usage patterns influence engagement with news articles encountered on Facebook. *Computers in Human Behavior* 76: 42–50.

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(2): 971–977.

Kim Y, Chen HT and Gil de Zúñiga H (2013) Stumbling upon news on the Internet: Effects of incidental news exposure and relative entertainment use on political engagement. *Computers in Human Behavior* 29(6): 2607–2614.

Kümpel AS, Karnowski V and Keyling T (2015) News sharing in social media: A review of current research on news sharing users, content, and networks. *Social Media + Society* 1(2): 2056305115610141.

Kwon KH, Stefanone MA and Barnett GA (2014) Social network influence on online behavioral choices: Exploring group formation on social network sites. *American Behavioral Scientist* 58(10): 1345–1360.

Lazarsfeld PF, Berelson B and Gaudet H (1948) *The People's Choice*. New York: Columbia University Press.

Lee JK and Kim E (2017) Incidental exposure to news: Predictors in the social media setting and effects on information gain online. *Computers in Human Behavior* 75: 1008–1015.

Lee JK, Choi J, Kim C, et al. (2014) Social media, network heterogeneity, and opinion polarization. *Journal of Communication* 64(4): 702–722.

Lu Y and Lee JK (2019) Stumbling upon the other side: Incidental learning of counter- attitudinal political information on Facebook. *New Media & Society* 21(1): 248–265.

Mansbridge J (1999) Everyday talk in the deliberative system: In Macedo S (ed.) *Deliberative Politics: Essays on Democracy and Disagreement*. New York: Oxford University Press, pp. 1–211.

Min SJ and Wohn DY (2018) All the news that you don't like: Cross-cutting exposure and political participation in the age of social media. *Computers in Human Behavior* 83: 24–31.

Mutz DC (2006) *Hearing the Other Side: Deliberative Versus Participatory Democracy*. New York: Cambridge University Press.

Niemi RG, Craig SC and Mattei F (1991) Measuring internal political efficacy in the 1988 National Election Study. *American Political Science Review* 85(4): 1407–1413.

Norman DA (1988) *The Psychology of Everyday Things*. New York: Basic Books.

Oeldorf-Hirsch A (2018) The role of engagement in learning from active and incidental news exposure on social media. *Mass Communication and Society* 21(2): 225–247.

Ohme J, Albaek E and de Vreese CH (2016) Exposure research going mobile: A smartphone-based measurement of media exposure to political information in a convergent media environment. *Communication Methods and Measures* 10(2–3): 135–148.

Pariser E (2011) *The Filter Bubble: What the Internet Is Hiding from You*. New York: Penguin.

Prior M (2007) *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. New York: Cambridge University Press.

Settle JE (2018) *Frenemies: How Social Media Polarizes America*. New York: Cambridge University Press.

Sherif M and Hovland CI (1961) *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. New Haven, CT: Yale University Press.

Strömbäck J, Djerf-Pierre M and Shehata A (2013) The dynamics of political interest and news media consumption: A longitudinal perspective. *International Journal of Public Opinion Research* 24(4): 414–435.

Stroud NJ and Muddiman A (2012) Exposure to news and diverse views in the internet age. *I/S: A Journal of Law and Policy for the Information Society* 8: 605–617.

Tajfel H (1982) Social psychology of intergroup relations. *Annual Review of Psychology* 33: 1–39.

Tewksbury D, Weaver AJ and Maddex BD (2001) Accidentally informed: Incidental news exposure on the World Wide Web. *Journalism & Mass Communication Quarterly* 78(3): 533–554.

Walsh KC (2004) *Talking about Politics: Informal Groups and Social Identity in American Life*. Chicago, IL: University of Chicago Press.

Walsh KC, Jennings MK and Stoker L (2004) The effects of social class identification on participatory orientations towards government. *British Journal of Political Science* 34(3): 469–495.

Weeks BE, Lane DS, Kim DH, et al. (2017) Incidental exposure, selective exposure, and political information sharing: Integrating online exposure patterns and expression on social media. *Journal of Computer-Mediated Communication* 22(6): 363–379.

Wojcieszak ME and Mutz DC (2009) Online groups and political discourse: Do online discussion spaces facilitate exposure to political disagreement? *Journal of Communication* 59(1): 40–56.

Yang JH, Barnidge M and Rojas H (2017) The politics of 'unfriending': User filtration in response to political disagreement on social media. *Computers in Human Behavior* 70: 22–29.

Author biography

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Appendix 1. Demographic profiles of Wave 1 survey sample and target population.

	The present study	US Census Bureau – American Community Survey
	(%)	(%)
Gender		
Male	49.8	49.2
Female	50.2	50.8
Age (median)	49.0	37.7
Ethnicity/race		
White	76.9	62.0
Black or African American Native	13.5	12.3
American Indian and Alaska Native	1.6	0.7
Asian	3.8	5.2
Native Hawaiian and Other Pacific Islander	0.6	0.2
Hispanic	12.6	17.3
Employment		
Employed	58.7	63.5
Unemployed	41.3	36.5
House hold income (mean)	US$45,000–US$60,000	US$77,866
Education		
Less than high school graduate	–	13.0
High school graduate, GED, or alternative	13.4	27.5
Some college or associate's degree	34.0	29.2
Bachelor's degree or higher	50.5	30.3

The US Census Bureau – American Community Survey (2016) is available online at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF.