Political persuasion on social media: A moderated moderation model of political discussion disagreement and civil reasoning

Homero Gil de Zúñiga, Matthew Barnidge & Trevor Diehl

To cite this article: Homero Gil de Zúñiga, Matthew Barnidge & Trevor Diehl (2018) Political persuasion on social media: A moderated moderation model of political discussion disagreement and civil reasoning, The Information Society, 34:5, 302-315, DOI: 10.1080/01972243.2018.1497743

To link to this article: https://doi.org/10.1080/01972243.2018.1497743

© 2018 Homero Gil de Zúñiga, Matthew Barnidge and Trevor Diehl. Published with license by Taylor & Francis

Published online: 03 Dec 2018.

Submit your article to this journal

View Crossmark data
Political persuasion on social media: A moderated moderation model of political discussion disagreement and civil reasoning

Homero Gil de Zúñiga\textsuperscript{a,b}, Matthew Barnidge\textsuperscript{c}, and Trevor Diehl\textsuperscript{d}

\textsuperscript{a}Department of Communication, University of Vienna, Vienna, Austria; \textsuperscript{b}Facultad de Comunicación y Letras, Universidad Diego Portales, Santiago, Chile; \textsuperscript{c}Department of Journalism and Creative Media, The University of Alabama, Tuscaloosa, Alabama, USA; \textsuperscript{d}School of Broadcast and Cinematic Arts, Central Michigan University, Mt. Pleasant, Michigan, USA

ABSTRACT

Social media and news use arguably contribute to the prevalence of contentious politics because individuals may express dissent through their social networks as they consume news. This study seeks to test whether individuals might be more open to political persuasion in this context, especially if they are exposed to political disagreement or discuss politics in a civil manner. Relying on survey data from the UK, results based on a moderated moderation model show that (a) social media news use predicts political persuasion on social media (direct effects) and, (b) discussion disagreement and civil reasoning moderate this relationship in two-way and three-way interactions.

ARTICLE HISTORY

Received 1 May 2017
Accepted 7 June 2018

KEYWORDS

Civil reasoning; news use; political disagreement; political persuasion

Political communication in Western countries has grown increasingly contentious (Bennett and Segerberg 2012; Meyer and Tarrow 1998; Tilly and Tarrow 2015) and many people feel less favorable toward their fellow citizens on the “other side” of social and political issues (Garrett et al. 2014; Iyengar, Sood, and Lelkes 2013). Some have argued that social media have contributed to these social changes, suggesting that they make political disagreement (Halpern and Gibbs 2013; Papacharissi 2014) and counter-attitudinal information more visible and prevalent in the everyday lives of ordinary citizens (Bakshy, Messing, and Adamic 2015; Barberá 2014). In such an environment, some people are more likely to “dig in their heels” and close themselves off to the kinds of cross-cutting communication that might bring people together across social cleavages to discuss common problems and solutions (Mutz 2006).

At the same time, others have explored how social media make people more susceptible to the influence of others in their social networks (Bode 2016; Bond et al. 2012; Turcotte et al. 2015). In this research the focus has been on the social and communicative nature of attitude formation; persuasion is conceptualized as the outcome of cognitive reflection in response to discussion and exposure to news (e.g. Kim, Wyatt, and Katz 1999; Levitan and Visser 2009; Wood 2000). Although in online settings political communication may lead to less dependence on elite institutions for information, it also means that people are increasingly dependent on their networks for news and opinion (Benkler 2006). Therefore, a growing number of researchers have turned their attention to how socially mediated networks influence news consumption, political discourse, and political attitude formation (Feldman 2011; Glynn, Huge, and Hoffman 2012). Some scholars argue that exposure to debate and disagreement in this environment fosters democratic discussion (Halpern and Gibbs 2013; Papacharissi 2004). However, it remains less clear how the tone of discussion disagreement influences how open an individual is to political persuasion, particularly when people get their news on social media.

As an increasing number of adults, especially young adults, turn to social media for their news and information, understanding how political discussions make people more open to political persuasion on social media is key to understanding the nature of political contentiousness online (Gil de Zúñiga and Valenzuela, 2010; Ofcom 2015; Pew Research Center 2015). This
study examines the specific conditions under which persuasion occurs in social media settings. Relying on a representative survey of adults in the United Kingdom, this study investigates the relationships among news use, political disagreement, civil reasoning, and political persuasion on social media. The findings suggest that persuasion in social media is most likely to occur when people engage in cross-cutting discussions in general; and when strong arguments are presented in a civil manner.

**Literature review**

**Political news use and political persuasion**

Without new information, people are unlikely to reconsider their opinions, and when it comes to politics, the news media are one of the primary sources of new information on which citizens rely (Petty and Cacioppo 1986). Political persuasion, or the reconsidering of one’s political attitudes based on exposure to new information, has been explored as attitude ambivalence (Levitan and Visser 2009), strength and consistency of one’s attitudes and opinions (Kim, Wyatt, and Katz 1999), and the tendency to change one’s mind based on information they come across in their social environment (e.g. Mutz, Sniderman, and Brody 1996; Wood 2000). Recent evidence suggests that political affairs news use can have direct and relatively strong effects on political persuasion (Diehl, Weeks, and Gil de Zuñiga 2016; Barker and Lawrence 2006; Feldman 2011; Ladd and Lenz 2008; Zaller 1992). Researchers have offered various explanations for direct effects. Individuals may follow cues from elites of their own parties (Feldman et al. 2012; Zaller 1992). They could be influenced by agenda-setting and framing by the news media (McCombs and Shaw 1972; Nelson, Oxley, and Clawson 1997). Other evidence suggests that news use can persuade people regardless of their partisan leanings (Feldman 2011). For example, recent research shows that favorable media coverage of a political candidate increases his or her public support and newspaper endorsements of candidates can change the degree of public support (Barker and Lawrence 2006). The association between political news use and political persuasion may not be dependent on political ideology to the extent previously suggested (Zaller 1992).

Political information on social media might have a particularly powerful influence on persuasion because, in social media formats, news is delivered alongside information about social traits and public opinion. For example, Diehl, Weeks, and Gil de Zuñiga (2016) found a direct effect of social media news use on political persuasion among adults in the United States. Because social media rely on systems of social accreditation and recommendation, social media users may also be more likely to be persuaded through exposure to counter-attitudinal information (Messing and Westwood 2012; Turcotte et al. 2015). This is particularly the case when individuals have larger, more heterogeneous networks (Brundidge 2010). In networked spaces, individuals are often presented with conflicting considerations based not only on Partisan cues in the news media, but also on cues from their personal social contacts who posted the story (Bode 2016; Bond et al. 2012; Turcotte et al. 2015). Thus, political news use in social media environments presents users with overlapping and often conflicting dimensions of informational relevance (Kwon, Stefanone, and Barnett 2014). Social media news use becomes an ideal catalyst for exposure to new political information.

The potential diversity of information, mediated through social connections, could make people relatively more ambivalent and therefore more open to opinion change. Based on this literature, we predict a positive relationship between political news use on social media and political persuasion within social media.

H1: Social media political news use will be positively related to political persuasion on social media.

**Social media for political information, political disagreement, and persuasion**

People do not only encounter new information through the news media, but also through interactions in their social networks. Although scholars have long noted the importance of interpersonal networks for the diffusion of political information (Katz and Lazarsfeld 1955; Granovetter 1983; Gil de Zuñiga 2012, 2015), a new wave of scholarship has focused on the ways that online and offline social networks have become increasingly isomorphic (Rojas 2015; Rojas, Barnidge, and Abril 2016). Thanks to online social networking sites such as Facebook and Twitter, which largely translated offline social ties onto online platforms, there is arguable more convergence in the makeup and composition of online and offline social networks (e.g. Brundidge 2010; Eveland, Hutchens, and Morey 2013; Lee et al. 2014; Heatherly, Lu, and Lee 2017). Thus, as the adoption and use of social media has become more widespread, they have grown in importance as sources of political information, not only from the news media, but also from personal social ties (Bond et al 2012).
The observation that social media have grown in importance as sources of political information is important because recent research shows that they may promote exposure to political disagreement, particularly among those who use these platforms for news (Heatherly, Lu, and Lee 2016; Kim, Hsu, and Gil de Zúñiga 2013; Lee et al. 2014; Lu, Heatherly, and Lee 2016; Mitchell et al. 2014). Both survey evidence and analysis of “big data” show that social media expose people to news stories from both sides of the political spectrum, with the result that social media users are exposed to a broader array of stories than they would be otherwise (Bakshy, Messing, and Adamic 2015; Barberá 2014; Barnidge 2015; Kim 2011). This happens, in part these studies argue, because social media users tend to have easy access to more diverse networks—and, consequently, they are exposed to a wider variety of opinions.

The growing trend toward increased exposure to political disagreement in social networks is important because encountering political difference makes political persuasion more likely (Gil de Zúñiga, Valenzuela, and Weeks 2016). As Huckfeldt, Mendez, and Osborn (2004a) argue, social influence—that is, persuasion resulting from interpersonal interaction—is less likely if individuals only encounter information with which they already agree. Potentially, this process occurs because political disagreement has the capacity to make people more ambivalent about their prior attitudes and preferences, and this ambivalence makes people more open to the influence of new information (Mutz 2006). Given this theoretical perspective, we predict that exposure to political disagreement in both online and offline discussions will be positively associated with being open to political persuasion on social media.

H2: Political discussion disagreement will be positively related to political persuasion on social media.

The empirical evidence suggests that news use and exposure to political disagreement are related in social media spaces. More specifically, the idea that disagreement makes people more ambivalent toward, and therefore more open to, diverse information they encounter in the public sphere, implies that exposure to political disagreement moderates the relationship between news exposure and political persuasion. In addition, political communication scholars have long noted that the political effects of media use are often indirect. One strand in this area suggests that many political outcomes are the result of some combination of political and public affairs news consumption and political discussion. When individuals talk about the news, they also engage in cognitive processes that influence further reflection on what they discussed, and this reflection drives other behaviors, such as motivated news use or additional political discussion (Cho et al. 2009; Kim, Wyatt, and Katz 1999). Thus, the simple act of discussing politics with those holding opposing views should make individuals less recalcitrant in their political opinions because it forces them to think about the information they came across (Fishkin 1991; Mutz and Martin 2001). Though some scholars may argue that discussion diversity leads people to reinforce existing attitudes (e.g. Iyengar, Sood, and Lelkes 2013; Meyer and Tarrow 1998; Tilly and Tarrow 2015), exceptions may apply in social media because in certain online settings individuals may be more concerned with maintaining social ties than arguing about politics (Bisgin, Agarwal, and Xu 2012). The positive social media news use-political persuasion in social media relationship (H1) should be enhanced by an individual’s levels of political discussion disagreement. Thus, we hypothesize:

H3: The relationship between social media news use and political persuasion on social media will be moderated by political discussion disagreement. For those individuals who are exposed to disagreement in their discussions, the positive relationship social media news consumption-political persuasion will be stronger.

The moderating role of civil reasoning in political discussion

Reasoned discussion is engagement in political discussions in which judicious arguments are presented, and civil discussion conducted in a respectful, civil manner (Gastil 2000; Papacharissi 2004). The concept of civil reasoning combines these two dimensions and characterizes both the strength of arguments presented in discussions, and the civility of those discussions. Both of these concepts are important to theories of deliberative democracy, which suggest that people should come together across lines of social and political difference, and discuss common issues reasonably and in a respectful manner (Conover, Searing, and Crewe 2002; Mansbridge 1999).

Research shows that both of these dimensions—reasoning and civility—have an influence on political persuasion. First, as predicted by the Elaboration Likelihood Model, people are more persuaded by strong arguments than they are by weak arguments. For example, researchers have found that argument
strength affected attitudes about products in advertisements (Petty, Cacioppo, and Schumann 1983; Petty and Krosnick 1995). Hosman, Huebner, and Siltanen (2002) also found that argument quality had a direct effect on attitudes toward social issues. In a similar study, Kempf and Palan (2006) found that argument strength increased positive perceptions of word-of-mouth communication. Second, research also shows that people are more open to considering oppositional arguments when discussions are civil, and they are less likely to consider these arguments when discussions are uncivil. For example, Ng and Detenber (2005) found that civil online discussions were more credible and persuasive than uncivil discussions.

In other studies, Wallsten and Tarsi (2016) found that uncivil discussion in news comment sections leads to less favorable perceptions of the news, and news media in general. Finally, Anderson et al. (2014) found that uncivil discussion on YouTube polarized perceptions of nanotechnology based on prior attitudes toward the topic. Given that both well-reasoned and civil discussions tend to make persuasion more likely, we predict that exposure to online and offline political discussions characterized by civil reasoning will be positively associated with political persuasion.

H4: Civil reasoning will be positively related to political persuasion on social media.

Given that reasoned and civil discussions with others makes people more open to persuasion, civil reasoning should moderate the relationship between the two primary sources of new information (social media news use and political disagreement in online and offline discussions) and political persuasion (Diehl, Weeks, and Gil de Zúñiga 2016; Mutz 2006). In other words, we predict that people will be more receptive to new ideas from both news media and discussion disagreement when they are presented in a civil and reasoned manner.

H5: Civil reasoning will positively moderate the relationship between social media news use and political persuasion on social media. For those individuals who are exposed to civil reasoning in their discussions, the positive relationship social media news consumption-political persuasion will be stronger.

H6: Civil reasoning will positively moderate the relationship between political discussion disagreement and political persuasion on social media. For those individuals who are exposed to civil reasoning in their discussions, the positive relationship political discussion disagreement-political persuasion will be stronger.

Finally, given the predicted interaction between social media news use and political disagreement on persuasion, it makes sense to inquire as to whether civil reasoning interacts with this process. Social media are a major source of counter-attitudinal information, and disagreement in discussion makes preference change in response to this information more likely (Bakshy, Messing, and Adamic 2015; Barberá 2014; Huckfeldt, Johnson, and Sprague 2004b). If people are most open to these new ideas when they are presented in a civil and reasoned manner, then civil reasoning may further moderate this process. That is, it is possible that people will be the most open to new ideas when they (a) are exposed to counter-attitudinal information in the news media via social media, (b) they encounter disagreement within their political discussion networks (both online and offline), and (c) they engage in discussions that are both civil and reasonable. Because of the lack of prior research on this topic, we pose an exploratory hypothesis.

H7: Civil reasoning will positively moderate the conditional influence of political discussion disagreement in the relationship between social media news use and political persuasion on social media. For those individuals who are exposed to civil reasoning in their discussions, and to political discussion disagreement, the positive social media news use-political persuasion relationship will be stronger.

**Methodology**

**Sample**

Survey Sampling International (SSI) distributed the survey from February to March 2014 using a cluster sampling technique to ensure respondents matched the demographic profile of the UK (see Appendix Table A1). Sample quota was requested from SSI based on age, gender, and geographic zone (urban versus rural). In keeping with other studies employing online surveys, the sampling methodology and the sample met general expectations for validity and reliability (e.g., Bode et al. 2014; Bosnjak, Das, and Lynn 2016). Total collected cases (N=1529) were then screened for spam cases (i.e. failed to complete at least 60% of the questionnaire, they took very little time to complete the questionnaire, etc.; N=412), yielding a sample size of 1117 valid cases. Since this is non-probability sample, cooperation rates (proportion of respondents who on having been contacted agree to participate in the study) are calculated in lieu of typical response rates (American Association of Public
Opinion Research 2016). The cooperation rate (73%) is relatively high.

**Measures**

This section covers all variables employed in the study and descriptive statistics results from reliability tests. We employed a 10-point Likert scale, where 1 = never or strongly disagree, and 10 = always or strongly agree, for most survey questions.

**Social media political persuasion (self-reported)**

The main criterion variable of interest in the study is a measure of reconsidering political attitudes in social media, which was based on previous literature (Diehl, Weeks, and Gil de Zúñiga 2016; Weeks, Ardévol-Abreu, and Gil de Zúñiga 2017). Respondents were asked three questions: (a) “I have changed an opinion based upon what someone influential to me posted on social media (1 = disagree; 10 = agree),” (b) “How often do you take part in changing your mind about political issues because of information or interactions on social media (1 = never; 10 = strongly agree),” (c) “How often do you take part in reconsidering your political views because of information or interactions on social media (1 = never; 10 = strongly agree).” For the 3-item averaged scale, Cronbach’s $\alpha = 0.88$, $M = 2.77$, $SD = 2.10$.

**Social media news use**

Social media news use was the first independent variable of interest. This study builds on previous scholarship that highlights the various pro-social benefits of using networked communication technologies for news (Gil de Zúñiga, Molynex, and Zheng, 2014; Shah et al. 2005). Items asked how often respondents get their news from Facebook and Twitter, how often they encounter news when using social networking sites or micro-blogging sites, and how often they use social media to stay informed about current events and public affairs, to stay informed about the local community, and finally, to get news about current events from mainstream media. For the six-item average construct, Cronbach’s $\alpha = 0.91$, $M = 3.60$, $SD = 2.40$.

**Political discussion disagreement**

The survey also asked respondents to rate how often they “use social media to have discussions with people who have different views,” “how often do you talk about politics or public affairs online and offline with people who disagree with you,” and “whose political views are different from yours?” For the three-item average construct, Cronbach’s $\alpha = 0.76$, $M = 3.30$, $SD = 2.20$.

**Civil reasoning**

The measure for civil reasons was based on the assumption that respondents will make an association between providing evidence for claims and civil discussion (Gastil and Black 2007). Although it is possible that not all respondents make an association between evidence and civility, crosstab comparisons reveal that they are strongly associated. Although civility and rationality (providing evidence) are conceptually very different things, our data show that they are empirically tied, and therefore we opted to combine them. The three items for civil reasoning are: “How often do you talk about politics or public affairs online and offline with people who: (a) back up arguments with evidence, (b) propose alternatives or policies for problem solving, (c) who discuss politics in a civil manner?” For the three-item average construct, Cronbach’s $\alpha = 0.95$, $M = 3.40$, $SD = 2.60$.

**Political discussion network size**

Following Eveland, Hutchens, and Morey (2013), respondents were asked open-ended questions to get following estimates for the last month: “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,” and “about how many total people have you talked to face-to-face or over the phone about politics or public affairs.” Averaged item index, using a natural log to improve distribution was as follows: Spearman-Brown coefficient $= 0.67$; $M = .53$, $SD = 0.26$; skewness $= 1.40$.

**Political discussion frequency**

The frequency with which and individual engages in political discussion might influence the extent to which one experiences disagreement on social media (Eveland and Hutchens 2009). Frequency of political discussion was measured using five separate items that asked how often respondents talk about politics or public affairs online and offline, with a spouse or partner, family or relatives, friends, acquaintances, and strangers. For the 5-item average construct, Cronbach’s $\alpha = 0.84$; $M = 3.10$, $SD = 2.10$.

**Non-social media news media use**

Prior research has linked citizens’ offline news consumption with attitude change (e.g., Feldman 2011). Nine questions addressed overall news consumption in the study. Respondents were asked to rate how
often they get news from network TV, national and local newspapers, cable, satirical news programs, radio, online, and citizen journalism and “hyper local” websites. For the 9-item average construct, Cronbach’s \( \alpha = 0.80; M = 4.10, SD = 1.70 \).

**Frequency of social media use**
Most people use social media to connect with family and friends, socialize, or checkup on distant contacts (Quan-Haase and Young 2010). Respondents were asked to rate, on a typical day, “How much do you use social media,” “How often do you use social media to stay in touch with friends and family,” “How often do you use social media to meet new people who share interests,” and finally “How often do you use social media to contact people you wouldn’t meet otherwise?” For the 4-item average construct, Cronbach’s \( \alpha = 0.88, M = 4.50, SD = 2.60 \).

**Strength of ideology**
Strength of political ideology has been associated with political discussion and political attitude formation (Bartels 2002; Huckfeldt, Mendez, and Osborn 2004a). Two items asked, on a scale of 0–10, where 0 = strong conservative and 10 = strong liberal: “On social issues, where would you place yourself,” and “On economic issues, where would you place yourself?” Items were folded into a five-point index, where 0 = low affiliation and 5 = strong ideological affiliation. Here the Spearman-Brown coefficient \( = 0.96, M = 5.70, SD = 2.60 \).

**Political efficacy**
Research on deliberative democracy shows that the nature of political discussion is contingent upon levels of individual political self-efficacy (Gastil and Xenos 2010; Morrell 2005). Political efficacy was measured with the items: “I consider myself well qualified to participate in politics,” “I have a good understanding of the important political issues facing our country,” and “People like me can influence government.” For the 3-item average construct, Cronbach’s \( \alpha = 0.81; M = 4.40, SD = 2.2 \).

**Political knowledge**
More knowledgeable people tend to be more resistant to political persuasion (Huber and Arceneaux 2007). Respondents were asked multiple-choice questions about various political actors, rules related to government institutions, and current events (Delli Carpini and Keeter 1996). The questions were: (a) What job or political office does Nick Clegg currently hold, (b) How many years is a British Member of Parliament elected, (c) What political office does Sir John Thomas currently hold, (d) On which of the following does the UK government currently spend the least, (e) Do you happen to know what the “bedroom tax” is all about, (f) Which party currently has the most members in the House of Lords, (g) Which organization’s documents were released by Edward Snowden, (h) Recently, the UN and US were in negotiations with the Syrian government over the removal of what. These questions were based on top stories in Pew Research Center’s News Coverage Index for the weeks prior to the survey administration dates. For the eight-item average construct (1 = correct answer, 0 = incorrect answer; Range 0–8), Cronbach’s \( \alpha = 0.55; M = 3.30, SD = 1.70 \).

**Political interest**
Political interest has long been associated with political discussion, in both online and offline contexts (Verba, Schlozman, and Brady 1995; Bimber et al. 2015). Two items asked, “How interested are you in information about what’s going on in politics and public affairs,” and “How closely do you pay attention to information about what’s going on in politics and public affairs.” Here Spearman-Brown coefficient \( = 0.96, M = 5.70, SD = 2.60 \).

**Demographics**
The sample had more females (55.9%) than males (43.50), was mostly white (91%), middle-aged \( M = 45.70, SD = 12.75 \), and was moderately educated \( M = 3.17; \) some college). When compared with the U.K. Census, the population in our sample was slightly older, skewed female, and had higher levels of education. Education was measured in eight categories \( (1 = \) less than high school, 8 = doctoral degree). Income was measured using 8 categories of total annual household income \( M = 3.20; £15,000–£24,999 \).

**Analysis**
Statistical analysis relied on a series of ordinarily least squares (OLS) regression models. The models were designed to include three blocks of control variables: demographics, media use and network attributes, and political traits. The final block of variables contained the predictor variables of interest. Social media news use, political discussion disagreement, and civil reasoning were added in the fourth and final block of the OLS models. Political persuasion on social media was the main dependent variable in each model.
to moderated relationships, we also tested a conceptual model with two moderators. The three-way moderation model included all predictor variables, and was analyzed using Hayes PROCESS macro (Model 3; Hayes 2017). In this model, political discussion disagreement was the primary moderator (M), and civil reasoning operated as the secondary moderator (W) (Figure 1). Data analysis was conducted in SPSS 22.

**Results**

H1 hypothesized that social media news use will be positively associated with changing or reconsidering political opinions based on information received through social media. Table 1 also shows positive, statistically significant correlations between political persuasion in social media and frequency of social media use ($r = 0.59$, $p < .001$), nonsocial media news use ($r = 0.53$, $p < .001$), and social media news use ($r = 0.72$, $p < .001$). With the exception of overall social media use, the existence of these relationships is supported in the OLS regression analyses (Table 2). After accounting for the influence of demographics, discussion network attributes, and political orientations ($\Delta R^2 = 45\%$), social media news use remains strongly associated with political persuasion on social media ($\beta = 0.42$, $p < .001$) (Total model $R^2 = 60\%$). Holding all other predictors constant, an increase of one SD on the social media news use scale corresponds with an increase of 42% of a SD on the persuasion scale. H1 is supported.

H2 hypothesized that political discussion disagreement will be positively associated with political persuasion on social media. Exposure to dissenting political opinions online is positively related to persuasion in the zero-order correlations (Table 1) ($r = 0.58$, $p < .001$). Political discussion disagreement is a positive, statistically significant predictor of being
persuaded about politics through social media, even after accounting for demographics, political orientations, and overall media use (Table 2) ($\beta = 0.42, p < .001$). Thus, H2 is supported.

H3 predicts that political discussion disagreement will moderate the relationship between social media news use and political persuasion. In other words, there should be a stronger relationship between social media for news use and political persuasion (H1) when respondents show higher levels of political discussion disagreement. Table 3 shows the relevant results, which are reported as unstandardized beta coefficients. The interaction of exposure to political discussion disagreement and social media news use on political persuasion on social media was positive and statistically significant ($B = 0.05, SE = 0.01, p < 0.001$). Among respondents who report being exposed to higher levels of dissenting political discussion, the relationship between social media news use and political persuasion on social media is stronger. H3 is supported.

**Interaction terms**

The next set of hypotheses (H4-H6) address the role of civil reasoning in the process of political persuasion on social media. Civil reasoning is positively correlated with getting news on social media (Table 1) ($r = .36, p < .001$), political discussion disagreement ($r = .81, p < .001$), and social media political persuasion ($r = .38, p < .001$). In the OLS model (Table 2), civil reasoning had no direct relationship with social media political persuasion (H4). H4 is rejected. However, among people who score high in civil reasoning social media news use has a significant and positive relationship with political persuasion on social media (H5) (Table 3) ($B = 0.04, SE = 0.01, p < .001$). Thus, civil reasoning moderates the relationship between social media news use and political persuasion on social media, as expected, and H5 is supported. H6 predicts that civil reasoning will moderate the relationship between discussion political disagreement and political persuasion. Table 3 shows that the interaction fails to reach commonly accepted levels of statistical significance ($B = -0.016, SE = 0.010, n.s.$). H6 is rejected.

H7 asks how civil reasoning might influence the extent to which an individual will be persuaded by information on social media when they use social media for news and are exposed to political discussion disagreement. By employing a three-way interaction model, we can estimate the moderating influence of civil reasoning, which operates as a secondary moderator (Hayes 2017), in this process (see Figure 1).

The overall three-way interaction model (moderated moderation) accounted for 62.3% of the total variance of being political persuaded on social media. Furthermore, the three-way interaction of social media news use by political discussion disagreement and by reasoned discussions uniquely accounted for 0.3% of the variance ($F[20, 1057] = 88.77, p = .001$). The moderated moderation model shows a statistically significant and negative three-way interaction between social media news use, political discussion disagreement, and civil reasoning (Table 3) ($B = -0.008, SE = 0.003, p < .05$). Results from the three-way interaction model are visualized in Figure 2, which shows that the highest mean for persuasion occurs among the group that scored high in news use, disagreement, and civil reasoning ($M = 4.10$). Looking more closely at Figure 2, we see that there is a significant interaction between news use and disagreement at low levels of civic reasoning ($B = 0.07, SE = 0.02, p < .001$).

In instances where people do not present many arguments in their discussion, or their civil reasoning is low, the relationship between news use and persuasion is significantly stronger where there are high levels of disagreement ($B = 0.44, SE = 0.07, p < .001$) than where there are low levels of disagreement ($B = 0.15, SE = 0.05, p < .001$). On the other hand, where civil reasoning is high, there is no significant

### Table 2. OLS regression model testing relationships among social media news use, discussion political disagreement, and civil reasoning on social media political persuasion.

<table>
<thead>
<tr>
<th>Block 1: Demographics</th>
<th>Social media political persuasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.083***</td>
</tr>
<tr>
<td>Gender (1 = Female)</td>
<td>-0.041*</td>
</tr>
<tr>
<td>Education</td>
<td>-0.038</td>
</tr>
<tr>
<td>Income</td>
<td>-0.046*</td>
</tr>
<tr>
<td>Race (1 = White)</td>
<td>-0.038**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 2: News and Discussion Network Attributes</th>
<th>Social media political persuasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network size</td>
<td>0.097***</td>
</tr>
<tr>
<td>Political discussion frequency</td>
<td>0.038</td>
</tr>
<tr>
<td>Frequency of social media use</td>
<td>0.050</td>
</tr>
<tr>
<td>Non-social media news use</td>
<td>0.156***</td>
</tr>
<tr>
<td>ΔR²</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3: Political Orientations</th>
<th>Social media political persuasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of ideology</td>
<td>-0.025</td>
</tr>
<tr>
<td>Political efficacy</td>
<td>0.137***</td>
</tr>
<tr>
<td>Political knowledge</td>
<td>-0.111***</td>
</tr>
<tr>
<td>Political interest</td>
<td>-0.059*</td>
</tr>
<tr>
<td>ΔR²</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 4: Independent Variables</th>
<th>Social media political persuasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media news use</td>
<td>0.417***</td>
</tr>
<tr>
<td>Civil reasoning</td>
<td>-0.038</td>
</tr>
<tr>
<td>Discussion political disagreement</td>
<td>0.138**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>6%</td>
</tr>
<tr>
<td>Total R²</td>
<td>60%</td>
</tr>
</tbody>
</table>

Note. Cell entries are final-entry OLS standardized beta (β) coefficients. N = 1077. *p < .05; **p < .01; ***p < .001.
interaction between news use and disagreement on persuasion. For these subgroups, the relationship between news use and persuasion is statistically significant, and positive regardless of the level of disagreement, and these relationships are not statistically different from one another (for high disagreement, \( B = 0.53, SE = 0.04, p < .001 \); for low disagreement, \( B = 0.42, SE = 0.07, p < .001 \)).

**Discussion**

The prevalence of social media makes it easy to express one’s political opinion, share political information and news, and become exposed to the opinions of others. This study finds evidence for a model of persuasion in social media environments that suggests people are most open to persuasion when (a) they consume political news through social media, (b) they are exposed to political disagreement in both online and offline discussions, and (c) political arguments are presented in a reasoned and civil manner. In other words, people are less likely to “dig in their heels” when they encounter disagreeable, but well-reasoned and civil, information on social media. Reconsidering one’s political views is most likely to happen when discussion disagreement, or civility, is high and news consumption is high.

First, this study supports the idea that the news media and political discussion within interpersonal networks are the two primary sources of political information that makes people more open to persuasion. As social media have grown in importance as sources of news, so too has the link between social media news use and political persuasion. This study finds a direct relationship between these variables, which was the strongest among the variables of interest in the statistical model (Table 2). This finding is concurrent with prior research that shows a direct relationship between news use and political persuasion in social media contexts (Barker and Lawrence 2006; Feldman 2011; Ladd and Lenz 2008), and it contributes to an increasingly convincing argument for examining the influence of social media news use on political attitudes and opinions (Bode 2016; Bond

---

**Table 3.** OLS moderated moderation model showing three-way interactions among social media news use, political discussion disagreement, and civil reasoning political persuasion on social media.

<table>
<thead>
<tr>
<th>Interaction</th>
<th>B</th>
<th>SE</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM news use × political discussion disagreement</td>
<td>0.047</td>
<td>0.014</td>
<td>0.018</td>
</tr>
<tr>
<td>SM news use × civil reasoning</td>
<td>0.036</td>
<td>0.011</td>
<td>0.013</td>
</tr>
<tr>
<td>Political discussion disagreement × civil reasoning</td>
<td>–0.016</td>
<td>0.010</td>
<td>–0.035</td>
</tr>
<tr>
<td>SM news use × political discussion disagreement × civil reasoning</td>
<td>–0.008</td>
<td>0.003</td>
<td>–0.013</td>
</tr>
</tbody>
</table>

Note. SM = Social media. Analyses performed using the PROCESS macro for SPSS (Model 3; Hayes 2013). *Denotes statistically significant relationships where \( p < .05 \). Model includes the same demographic and political orientation control variables as found in Table 2.
The study also finds a direct relationship between political discussion disagreement and political persuasion in social media contexts, which aligns with previous literature showing a direct relationship between online and offline discussion and political persuasion on social media in the U.S. context. Offline and online social networks become increasingly isomorphic, and this process has arguably increased the amount of political disagreement people encounter in their daily lives through discussion (Bachmann and Gil de Zúñiga 2013; Barnidge 2015; Heatherly, Lu, and Lee 2016; Kim 2011; Rojas 2015). Because political disagreement has the capacity to make people more ambivalent, it arguably makes them more open to political persuasion.

Second, the study finds that political discussion disagreement moderates the relationship between social media news use and political persuasion on social media. More specifically, the study shows that the relationship between news use and reconsidering political beliefs is stronger among those who encounter political difference in online and offline discussions. Prior research suggests that political discussion largely mediates the relationship between news use and political attitude formation and/or change (Cho et al. 2009; Kim, Wyatt, and Katz 1999), perhaps because discussion promotes cognitive processes of reflection on previously held ideas. Therefore, the act of discussion the information to which one is exposed in both online and offline settings may make individuals more open to cross-cutting ideas (Fishkin 1991; Mutz and Martin 2001).

Third, the study shows that civil reasoning also plays a moderating role in the process of political persuasion on social media, pointing toward two specific conclusions. The first conclusion is that political persuasion on social media is most likely when people (a) use social media for news, (b) encounter political difference in their offline and online social networks, and (c) are presented with arguments in a reasonable and civil manner. Among the study’s respondents, those who scored high on these variables were also the most open to political persuasion in social media contexts. This conclusion implies that well-reasoned, civil disagreement about news articles posted on social media make conditions ripe for social influence. This implication fits with prior research showing the persuasive influence of disagreement, strong argumentation, and civility (Huckfeldt, Mendez, and Osborn 2004a; Ng and Detenber 2005; Petty and Cacioppo 1986).

Digging deeper into the process of moderated moderation behind political persuasion in social media contexts, the second conclusion is that political persuasion is more likely when people use social media for news and either (a) encounter political different in their social networks or (b) encounter well-reasoned ideas presented in a civil manner. Where reasoning was low, the relationship between news use and persuasion was stronger where disagreement was high. Where reasoning was high, the news use—persuasion relationship was strong at all levels of disagreement. This conclusion implies that disagreement may not be a necessary condition for political persuasion on social media. Rather, civil and well-reasoned argumentation can persuade people toward their own side.

There are some important limitations to note when interpreting the results of this study. First, the results are based on self-directed online surveys, which are prone to sampling and measurement error. However, the cluster and stratified quote sampling techniques implemented by SSI polling company in their opt-in panel provides estimates of population parameters that are in line with census estimates (see Appendix Table A1). Second, we do not know the content of the discussions on social media, and we do not have a measure of the particular opinions that people change when they report being persuaded. Therefore, it remains unclear whether individuals are changing their minds to conform to opinions prevailing in their social network, or if they are altering their preexisting attitudes to mirror a diverse opinion climate. Finally, the dependent variable of interest, persuasion on social media, is based on a self-reported measure. There may be an element of social-desirability that influence’s one’s response. Future studies might employ more direct observational designs or experiments to capture distinct altitudinal or behavioral changes in response to different types of social media content. Results from this study offer an opportunity for future studies to test these nuances in an experimental setting.

Despite these limitations, this study provides a clear contribution to our understanding of political attitude formation on social media. In particular it highlights the processes through which information is received and discussed in both online and offline social networks. Both political disagreement and civil reasoning may set the stage for persuasion on social media. But persuasion is most likely when both factors are at play. That is, people are most likely to reconsider their views when they engage in well-
reasoned, civil disagreement about the news and information they receive in social media settings. These conclusions provide a relatively optimistic view of social media’s contribution to democratic discourse, particularly in light of the growing tendency toward contention in Western societies.

Note

1. It is possible that not all respondents associate these two, though crosstab frequencies based on mean comparisons reveal that over 95% of the population score above the mean on both measures (civil reasoning and exposure to conversations where individuals provide evidence). Although civility and rationality (providing evidence) are conceptually very different things, our data show that they are empirically tied, and therefore we opted to combine them).

ORCID

Homero Gil de Zúñiga http://orcid.org/0000-0002-4187-3604

References


Eveland Jr, W. P., and H. M. Hutchens. 2009. Political discussion frequency, network size, and “heterogeneity” of
### Table A1. Demographic profile of study survey and other comparable surveys.

<table>
<thead>
<tr>
<th></th>
<th>Study UK Survey March 2014 (%)</th>
<th>UK Census 2011 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20–24</td>
<td>5.8</td>
<td>8.7</td>
</tr>
<tr>
<td>25–34</td>
<td>17.6</td>
<td>17.7</td>
</tr>
<tr>
<td>35–44</td>
<td>21.1</td>
<td>16.9</td>
</tr>
<tr>
<td>45–64</td>
<td>53.3</td>
<td>33.4</td>
</tr>
<tr>
<td>65 or more</td>
<td>2.2</td>
<td>23.1</td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44.1</td>
<td>48.6</td>
</tr>
<tr>
<td>Female</td>
<td>55.9</td>
<td>51.4</td>
</tr>
<tr>
<td><strong>Race/Ethnicity:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>91.2</td>
<td>87.6</td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>3.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Black/African</td>
<td>2.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Mixed groups</td>
<td>—</td>
<td>2.2</td>
</tr>
<tr>
<td>Other</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Qualifications:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary school or below</td>
<td>46.1</td>
<td>29.3</td>
</tr>
<tr>
<td>Some college</td>
<td>24.5</td>
<td>20.5</td>
</tr>
<tr>
<td>College degree or above</td>
<td>19.2</td>
<td>27</td>
</tr>
<tr>
<td>Technical or other</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td><strong>Household Income:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$49,999</td>
<td>85.4</td>
<td>—</td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>11.7</td>
<td>—</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>2.9</td>
<td>—</td>
</tr>
</tbody>
</table>

**Note.** Population statistics are based on 2014 ONS estimates. Since education levels were not available, the 2011 ONS Census was used instead.