The role of news in promoting political disagreement on social media ☆

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ABSTRACT

Determining whether and how social media networks expose individuals to political disagreement is critical to understanding how individuals experience civil society in the digital age. Recent research from the United States and Europe shows that, all else equal, heavy social media users are exposed to more political disagreement on social media than light users. The present study seeks to elaborate on these findings in the context of Colombia. In doing so, it adds depth to existing theory about social media and political disagreement by outlining a process for how social media use results in exposure to disagreement and the role played by news. Results from path analysis show that (a) news use on social media acts as a link between general use and disagreement and (b) political engagement mediates the relationship between news use and disagreement. Results are discussed in light of existing literature and possibilities for further research.

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1. Introduction

As social media proliferate on a global scale, often with substantial political impact (e.g., Eltantawy & Weist, 2011; Harlow, 2012; Howard & Parks, 2012; Lim, 2012; Valenzuela, Arriagada, & Scherman, 2012), important questions arise about their role in processes related to political expression and the public sphere. Recent arguments assert that the modern individual is situated within an egocentric public sphere (Papacharissi, 2009; Rojas, 2014; Wojcieszak & Rojas, 2011). Individuals are increasingly embedded in loose, personalized networks of affiliation and exchange (Benkler, 2006; Rainie & Wellman, 2012), and they are connected to these networks through digital media that promote expression and interactivity (Bennett, 2008; Boyd & Ellison, 2007; Loader & Mercea, 2011). These digital communication networks link the private spaces of individuals with the public sphere, that is, they connect people with civil society (Friedland, Hove, & Rojas, 2006; Loader & Mercea, 2011; Rojas, 2014). Determining whether and how *political disagreement* occurs within these networks is therefore critical to understanding how individuals experience civil society in the digital age (Barbera, 2014; Brundidge, 2010; Kim, 2011; Kim, Hsu, & Gil de Zúñiga, 2013).

Recent research from the United States and Europe shows evidence that social media use is positively related to political disagreement on social media (Barbera, 2014; Kim, 2011; Kim et al., 2013; Mitchell, Gotfried, Kiley, & Matsa, 2014). All else equal, heavy social media users are exposed to more political disagreement than light users. The present study seeks to elaborate on these findings in the context of Colombia. In doing so, it adds depth to existing theory about social media and political disagreement by outlining a process for how social media use results in exposure to political disagreement. This model rests on two broad claims. First, social media use facilitates exposure to news posted by a wider array of individuals and organizations. Second, political disagreement occurs when individuals engage with social opinion about news.

1.1. Existing theory

Existing theory about why social media use results in political disagreement rests on two observations: (a) Social media afford opportunities to share information and express personal opinions and (b) social media diversify communication within egocentric networks through the articulation of weak tie relationships (Barbera, 2014; Brundidge, 2010; Kim et al., 2013). In simpler terms, social media expose people to more information from more sources than they would otherwise be exposed to. Selectivity does little to counteract these forces. Social selectivity is multidimensional and not limited to political choice (Kim et al., 2013). Informational selectivity, meanwhile, is more likely to be politically motivated. However, people do not necessarily avoid crosscutting news media online (Garrett, 2009) and interpersonal recommendations on social media often trump partisan media cues (Messing & Westwood, 2014). Thus, social media might inadvertently expose individuals to political disagreement (Brundidge, 2010).

Importantly, this theory is built on the concept of *communicative diversity* rather than *social network diversity*. Social media may not diversify social networks, but they do diversify communication that occurs within them. This is a subtle but important distinction that avoids the pitfalls of counterarguments based on social norms of connectivity. Rather than use social media to meet new people, most people use them to articulate existing social connections (Boyd & Ellison, 2007; Ellison, Steinfeld, & Lampe, 2007), although it must be said that some social media sites (e.g., Twitter) are more conducive to network expansion than others (e.g., Facebook or Instagram). But even while the primary role of social media is to articulate existing social networks rather than to expand them, articulation still diversifies communication in comparison to interpersonal contexts, which are limited by geographic space (Brundidge, 2010; Huckfeldt, Johnson, & Sprague, 2004), and anonymous online contexts, in which relatively homogeneous political communication occurs (Hill & Hughes, 1998; Wojcieszak, 2008).

1.2. News and information in online social networks

When it comes to political communication on social media, news is (one of) the primary source of public information, and recent literature emphasizes the role of news in promoting communicative diversity on social media. For example, Lee, Choi, Kim, and Kim (2014) show that social media diversify communication networks, in part, through news use (see also, Barbera, 2014), which implies, of course, that social media promote news use. This conclusion is generally borne out by observational analysis: Research shows a positive relationship between social media use and news use on social media in various political contexts (Gil de Zúñiga, Jung, & Valenzuela, 2012; Valenzuela et al., 2012).

Part of the explanation for the relationship between general use and news use has to do with network size and structure. Larger, more diffuse networks are better at spreading information in social networks because they contain more weak ties (Granovetter, 1973). Research shows a consistently positive association between network size and content diffusion (Adar & Adamic, 2005; Bakshy, Karrar, & Adamic, 2009; Cha, Mislove, & Gummadi, 2009). Meanwhile, a large-scale Facebook experiment shows that the number of friends posting a link to a story increased the probability of sharing that story (Bakshy, Rosenn, Marlow, & Adamic, 2012). Finally, social media network size is positively related to relevant behaviors, including political participation and/or group formation, commonly thought to result from information exposure (e.g., Backstrom, Huttenlocher, Kleinberg, & Lan, 2006; Gil de Zúñiga et al., 2012; Valenzuela et al., 2012). And while other structural characteristics of networks are also important for information diffusion (Centola, 2010), network size facilitates the influence of many of these structures (Horowitz & Malkhi, 2003).

Information-sharing affordances of social media represent another explanation for the relationship between use and news use (Loader & Mercea, 2011). Posting news is relatively uncommon among the average user, but it is very common among politically involved users (Glynn, Huge, & Hoffman, 2012). In fact, approximately 20–30% of social media users, who some have called "power users," account for substantially more content than typical users (Hampton, Goulet, Marlow, & Raine, 2014a). In other words, a few users post a lot of news, which means that the average user is exposed to more news than they post. Once again, this conclusion is borne out in research: About 50% of U.S. adult web users get news from social media, which is approximately the same proportion as those who watch TV news (Barbera, 2014; Mitchell et al., 2014). In Colombia, the percentages are even higher, where, according to this study, 66% of social media users report using either Facebook or Twitter for news.

Given the above literature, there is good reason to believe that network size and frequency of use will be positively related to news use on social media. However, it is also important to remember that the way individuals use media matters when it comes to its effects (Shah, Kwak, & Holbert, 2001; Shah, McLeod, & Yoon, 2001). The Internet generally contributes to the fragmentation of the news audience based on interests or preferences (Prior, 2005). The politically disinterested might use social media less, particularly those social media oriented toward news (e.g., Twitter). They might also use social media differently, choosing not to read or pay attention to news. Therefore, it is important to consider the role of political interest when examining the relationship between general social media use and news use.

1.3. Social media news as a space of engagement

News use promotes engagement with politics and public affairs. For example, news use is associated with political learning (Eveland, Shah, & Kwak, 2003), political discussion (Shah, Cho, Eveland, & Kwak, 2005), cognitive reflection (Cho et al., 2009), and political participation (Shah et al., 2001). These studies, which belong the family of models knows as the communication mediation models, suggest that media effects are largely indirect and mediated through indicators of cognitive and/or discursive engagement with information. Political talk, or informal discussion about politics in everyday life, figures centrally into many of these models (e.g., Shah et al., 2005; Nah, Veenstra, & Shah, 2006) and is considered to be a key facilitator of civic and/or political participation.

News use on social media also promotes political expression (Gil de Zúñiga et al., 2012; Valenzuela et al., 2012). In fact, social media afford new forms of political messaging (Gil de Zúñiga et al., 2012) built around the virtual spaces that news stories provide online. And even while recent research shows that commenting on news articles is relatively rare on social media (Hampton, Raine, Lu, Dwyer, Shin, & Purcell, 2014b), when it does occur, it can have influential effects on information processing and its subsequent outcomes, including political participation (Park, 2013; Yamamoto, Kushin, & Dalisay, 2013; Zhang, Johnson, Seltzer, & Bichard, 2010) and exposure to disagreement (Kim, 2011; Kim et al., 2013).

But political talk–or other forms of political messaging–is not the only way to engage with news and public affairs information on social media. People have always used news to monitor social opinion about public issues (Noelle-Neumann, 1984[1993]), and social media visualize social information about others in extended egocentric networks (see, e.g., Walther, Van der Heide, Kim, Westerman, & Tong, 2008). Arguably, social media users have more information with which to monitor their social networks for political opinions as compared to other communicative settings (Ho & McLeod, 2008; Schulz & Roessler, 2012). Moreover, social media juxtapose information from mass-mediated and interpersonal sources (Walther et al., 2011). These messages could interact to influence information evaluation and perceptions of others' opinions (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013; Paek, Hove, & Jeong, 2013; Walther, DeAndrea, Kim, & Anthony, 2010; Xu, 2013).

This literature implies that, on social media, interaction with others *via* political talk or political messaging is not necessary in order to engage with the news and public affairs. Individuals can get a sense of the conversations around stories without participating in those conversations themselves. Therefore, it is important to consider how political monitoring on social media–that is, learning about friend's or follower's political opinions *via* social media content–acts as an additional form of engagement that is interrelated with political messaging.

1.4. Disagreement as the outcome of engagement

The now-classic studies on political disagreement defined it either as the lack of agreement between two discussants (e.g., Huckfeldt et al., 2004) or the perception of disagreement resulting from interaction (e.g., Mutz, 2006). These conceptual differences are important because differences in operationalization can yield different results (Klofstad, Sokhey, & McClurg, 2012). Specifically, comparative measures typically find more evidence of disagreement, while perceptual measures typically find less. These discrepancies are also reflected in studies of social media, with some employing perceptual measures of exposure to crosscutting views (e.g., Kim, 2011; Kim et al., 2013) and others using comparative measures of social media ties (e.g., Barbera, 2014). This study opts for the perceptual conceptualization of disagreement. As Mutz (2006) argues, it is the experience of disagreement that matters most when it comes to political behavior. While the lack of agreement has a subtle influence (Huckfeldt et al., 2004), disagreement has deeper and more lasting effects (Mutz, 2006).

Another advantage of the perceptual approach is that it helps to distinguish disagreement from a related antecedent, communicative diversity. Disagreement is more likely in diverse communication networks (Barbera, 2014), but engagement with diverse information makes it more likely that individuals will perceive a discrepancy between themselves and others (Mutz, 2006). Hypothetically, it therefore makes sense to predict that disagreement on social media will be an outcome of engagement with others about public affairs information. Remembering the indirect nature of media effects predicted by the communication mediation models (e.g., Shah et al., 2005), social media news use should have an indirect relationship with political disagreement on social media, such that it is mediated through political talk and political monitoring.

1.5. Theoretical model

The theoretical model in Fig. 1 illustrates the expectations outlined above. Based on the discussion of news use on social media, the model predicts that social media network size (γ_7) and social media use (γ_3) will be positively related to social media news use, and that these relationships will exist above and beyond the influence of political interest (γ_5). Based on the discussion of engagement with news on social media, the model predicts that social media news use will be positively related to both political talk (β_1) and political monitoring (β_2) on social media. In order to isolate these relationships, paths were included between the antecedent variables and political talk/monitoring. Finally, and based on the discussion of disagreement as the outcome of engagement with news on social media, the model predicts that social media news use will have direct (β_3) and indirect positive relationships with political disagreement on social media through political talk (β_5) and political monitoring (β_6), which will themselves be interrelated (β_4).

2. Methods

2.1. Context of study

This study uses the most current data from an ongoing, biennial survey of Colombian adults in urban areas. Colombia's history of violence and polarizing politics has resulted in relatively low levels of trust in the government and democratic processes, and the rise of efforts to promote transparency and responsiveness in local government, particularly in urban areas (Rojas, 2010). In Colombia, citizens are beginning to peacefully reengage in political processes in the aftermath of more than 50 years of political and drug-related violence. Colombia therefore provides an important context for understanding how social media facilitate political engagement in emerging democracies.

2.2. Sample and data

The data were collected from June 28 to July 29, 2014 in 10 Colombian cities by major universities in the United States and Colombia as part of their ongoing, biennial study of communication and political attitudes in Colombia. Survey respondents were selected using a multi-step stratified random sample procedure that selected households randomly based on city size and census data. A local professional polling firm, *Deproyectos Limitada*, collected the data and 1102 face-to-face completed responses were obtained for a response rate of 55%. These data were filtered based on social media use (Facebook or Twitter) and cleaned (*n* = 518). The descriptive statistics reported below were calculated within this subset.

2.3. Measurement: endogenous variables

Political disagreement on social media was measured using a five-point scale (*M* = 1.35, *SD* = 1.10). Respondents were asked: "How often do you disagree with the political opinions your friends on Facebook or other online social networks?" (0 = Never, 4 = Always). This measurement aligns with the study's conceptualization of political disagreement as a perception that results from
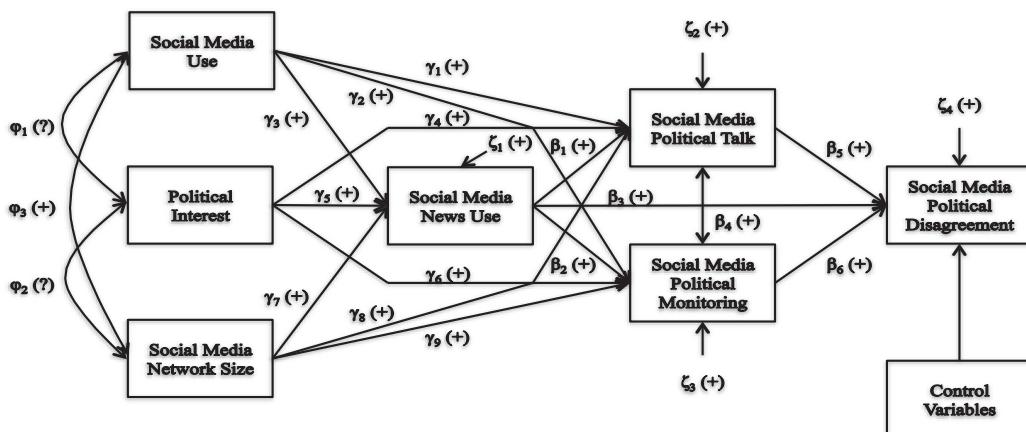

Fig. 1. Theoretical path model showing expected relationships between exogenous and endogenous variables.

experience. The frequency of political talk on social media was measured by asking how often respondents started talking politics with their friends because of social media (0 = Never, 5 = Frequently; $M = 1.37$, $SD = 1.46$). Political monitoring on social media was measured on a similar scale as political talk frequency ($M = 2.06$, $SD = 1.62$). Respondents were asked how often they learn about their friends' political orientations through social media. Finally, the social media news use variable was constructed from three survey items asking respondents how they read, watch, or listen to news on social media (a) in general, (b) about the Colombian peace process with militant groups, and (c) about the most recent presidential election. The first two items were measured on six-point scales (0 = Never, 5 = Frequently). The last item was measured in terms of days per week (0–7). The items were standardized and combined into a scale (Cronbach's $\alpha = .90$, $M = .54$, $SD = .98$).

2.4. Measurement: exogenous variables

The social media use variable was constructed from two items asking respondents how often they check (a) Facebook and (b) Twitter (0 = Never, 5 = Several times a day). For those respondents who only use one platform or the other, the answer for the corresponding item was taken as the value on the final variable. For those who use both Facebook and Twitter, scores on the two items were averaged ($r = .30$; $M = 3.56$, $SD = 1.30$). A similar strategy was used to measure social media network size. Two survey items asked respondents (a) how many Facebook friends they have and (b) how many people they follow on Twitter. Scores were averaged for those who use both ($r = .25$; $M = 268.10$, $SD = 531.24$). Because this distribution was highly skewed, a square root transformation was performed ($M = 13.58$, $SD = 9.54$). Finally, the political interest variable is a scale that averages three items asking respondents about their interest in local or regional, national, and international politics (Cronbach's $\alpha = .89$; $M = 1.97$, $SD = 1.51$, where 0 = Not at all and 5 = A lot).

2.5. Measurement: control variables

The control variables included interpersonal political disagreement and offline news use, as well as age, sex, education, and monthly household income. To construct the interpersonal political disagreement variable, respondents were asked how often they talked about the most recent election campaign with their (a) family, (b) friends, (c) neighbors, and (d) coworkers (0 = Never, 3 = Often). An additive index of these items was created, excluding only cases that did not answer any of the four items. A separate item asked respondents "Across all of your conversations about the most recent election campaign, how many of your discussion partners supported the same political party as you did?" Answers to these questions were weighted by the political talk frequency index to create the final variable ($M = 1.86$, $SD = 1.56$). The offline news use variable is a scale that averages eight survey items ranging from 0 (Never) to 5 (Frequently) asking respondents how frequently they read, watch, or listen to news via radio, newspapers, magazines, and television (Cronbach's $\alpha = .72$; $M = 2.08$, $SD = .95$).

More than half of the social media subsample was female (56%), and the average social media user was between 33 and 34 years old ($M = 33.75$, $SD = 12.63$; this variable was centered). The average social media user had completed at least some college ($M = 4.75$, $SD = 1.21$, where 0 = No education and 7 = Post-graduate degree), and lived in a household that makes between CP $501,000 and $2,000,000 per month (approximately USD $204–$820; $M = 1.90$, $SD = 1.52$, where 0 =< CP$500,000 and 8 => CP$10,000,000). Preliminary analyses also controlled for online news use, political efficacy, political participation, political knowledge, strength of

party identification, and socio-economic status. These variables were removed to reduce multicollinearity.

2.6. Analysis

Data were cleaned and entered into R, where the social media subset was created ($n = 518$). In order to determine whether a test of the full model was warranted, ordinary least squares (OLS) regression was used to describe the predictors of political disagreement on social media, as well as the predictors of the antecedent endogenous variables. Because news use on social media received central treatment in both theory and analysis, the final OLS model was submitted to a three-fold cross-validation in order to justify its inclusion. Next, data were exported to SPSS for a formal mediation test using Hayes' PROCESS macro (2013) to determine whether the engagement variables (political talk and political monitoring) mediate the relationship between news use and political disagreement. After these preliminary tests, a path analysis was estimated by maximum likelihood (ML) with the R package "lavaan" (Rosseel, 2012), which provided a rigorous test of the model illustrated in Fig. 1. Finally, results were compared to null and alternative models to justify reporting the study model.

3. Results

Before testing the full model, OLS regression was used to assess the relationships between social media political disagreement and the other social media variables of interest. Table 1 shows results for a series of models in additive blocks that estimated changes in explained variance (all results reported in this section were statistically significant with $p < .05$, unless otherwise noted). The first model, which included none of the social media predictors, explained about 13% of the variance in the outcome; political interest ($\beta = .19$), offline news use ($\beta = .13$), and interpersonal political disagreement ($\beta = .11$) were significantly related. The next model showed that the general social media use added little to no explanatory power and was not significantly related to the

Table 1
Regression analyses predicting social media political disagreement.

Predictor	Social media political disagreement			
Sex (1 = female)	−.05	−.04	−.03	−.02
Age	−.14*	−.13*	−.06	−.07
Education	.08	.07	.04	.02
Monthly household Income	−.06	−.06	−.08	−.05
Political interest	.19*	.19*	.15*	.01
Offline news use	.13*	.13*	.12	.06
Interpersonal political disagreement	.11*	.11*	.07	.05
R^2	.13*			
Social media use		.05	−.02	−.04
R^2		.13*		
R^2 change		.00		
Social media network size			.06	.03
Social media news use			.20*	.01
R^2			.16*	
R^2 change			.03*	
Social media political talk frequency				.19*
Social network political monitoring				.31*
R^2				.27*
R^2 change				.11*

Notes: N = 518. Cell entries are standardized beta coefficients (β) from ordinary least squares (OLS) multiple regression analyses. A three-fold cross-validation shows that model in column 4 produces less error with the social media new use variable (MSPE = 161.66) than without it (MSPE = 163.18). A formal mediation test (Hayes, 2013, model 6) shows that the relationship between social media news use and social media political disagreement is fully mediated by social media political talk frequency and social media political monitoring.

* $p < .05$ (two-tailed tests).

outcome. The third model added social media network size and social media news use. The news use variable was significantly related to social media political disagreement (β = .20), and these variables accounted for additional 3% of its variance. The final model added the social media political talk frequency and social network political monitoring variables, which accounted for an additional 11% of the variance in the outcome. Both political talk (β = .19) and political monitoring (β = .31) were significantly related to political disagreement, but news use was not (β = .01, *n.s.*).

Social media political talk frequency and social network political monitoring–indicators of engagement with political information–were the strongest predictors of political disagreement on social media. Individuals who are engaged with such content also report more political disagreement on social media. The results also showed that social media news use was related to disagreement before these variables were added to the model, which suggests that the relationship between news use and disagreement may be mediated by the other two variables. Before testing this possibility, however, it is necessary to determine whether the model performed better with the social media news use variable than without it. A three-fold cross validation showed that the model including the social media news use variable produced less error (MSPE = 161.66) than a model without it (MSPE = 163.18).

These results justify, to some extent, the inclusion of the news use variable and warrant a formal mediation test. The data were exported to SPSS, where a mediation analysis was conducted using Hayes' (2013) PROCESS macro (model 6). Generally, results showed that the relationship between social media news use and political disagreement on social media was fully mediated by social media political talk and social media political monitoring. News use had an indirect relationship with political disagreement through both political talk (B = .08, SE = .03, 95% CI[.03, .14]) and political monitoring (B = .08, SE = .02, 95% CI[.05, .14]), while the direct relationship was not significant (total indirect effect = .21 (SE = .03, 95% CI[.14, .28]).

Next, an antecedent analysis was conducted with OLS regression to show how social media use and social media network size related to the three endogenous predictors: social media news use, social media political talk frequency, and social media political monitoring. Results reported in Table 2 showed that both social media use and network size were significantly related to social media news use (β = .25 for use; β = .12 for network size), but not to political talk frequency or political monitoring. News use, meanwhile, was related to both talk frequency (β = .37) and monitoring (β = .37). Taken together, these results suggest that heavy social

media users were more likely to use news on social media and news use on social media is associated with political engagement.

A path model was estimated using the correlation matrix in Table 3 in order to test the full model illustrated in Fig. 1. The response variable was residualized on the set of controls in Tables 1 and 2. Results of the analysis are shown in Fig. 2. Generally, the model was a good fit to the data ($\chi^2_{(3)}$ = 3.384, p = .336). Chi-square based fit indices (CFI = 1.000; GFI = .998) and error-based indices (RMSEA = .016, p = .753; SRMR = .012) showed the model represented the data well. The model outperformed a null model that did not include the social media news use variable ($\chi^2_{(3)}$ = 6.313, p = .097; CFI = .993; GFI = .996; RMSEA = .046, p = .469; SRMR = .021).

The relationships depicted in Fig. 2 support the general predictions of the theoretical model (only significant paths shown where p < .05). First, social media use and network size were positively related to news use (γ_3 = .29; γ_7 = .19), as well as to each other (φ_3 = .31).

Second, these relationships existed above and beyond the influence of political interest, which was itself related to news use, political talk, and political monitoring (γ ranges from .30 to .34). Third, news use is positively related to indicators of engagement with public affairs information, political talk and political monitoring (β_1 = .39 and β_2 = .39). Finally, the relationship between news use and political disagreement was indirect, fully mediated by political engagement variables (β_{Total} = .17). The engagement variables were related to disagreement (β_5 = .14 and β_6 = .29) and to one another (β_4 = .37).

Several alternative models were tested to ensure that the model depicted in Fig. 2 was the best model for the data. Two rules were employed when selecting alternatives: (1) the first block of variables must remain the same and (2) only one response variable is allowed per model. The first rule was justified based on the logical ordering of variables–social media use and network size undoubtedly precede the other variables in time, while political interest represents a relatively stable individual-level predisposition that drives political behavior on social media more than the reverse. The second rule grew out of practical considerations for test feasibility (the inclusion of multi-outcome models dramatically increases the number of possible alternatives) and model identification (paths must be "freed" in order to construct statistically identified models, which means they are not true alternatives to the reported model in the sense that they cannot include all the relationships that the reported model did). Moreover, the second rule was justified given that the article focuses solely on explaining the experience of political disagreement on social media rather than any associated outcomes.

Given these two rules, all models with the same response variable were statistically equivalent across all possible combinations of the other three endogenous variables that maintained the same structure of relationships. For instance, where political

Table 2
Regression analyses showing predictors of antecedent social media variables.

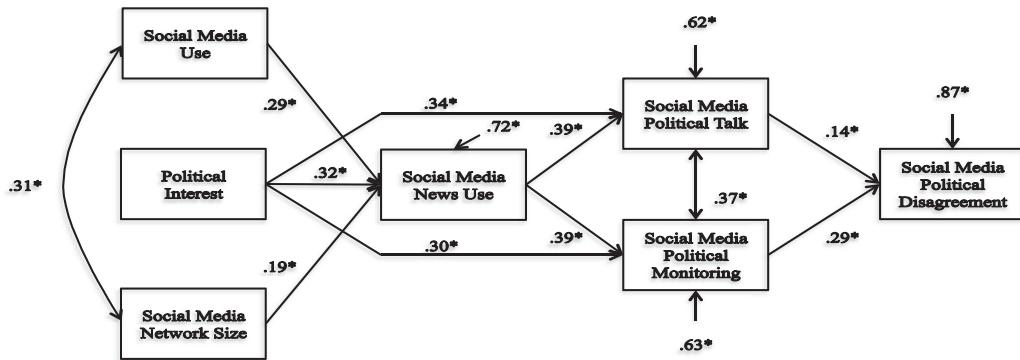| Predictor	Social media news use	Social media political talk frequency	Social media political monitoring
Sex (1 = female)	−.03	−.07[*]	.01
Age	−.20[*]	.03	.03
Education	.15[*]	.01	.07
Monthly household income	.07	−.05	−.05
Political interest	.18[*]	.29[*]	.26[*]
Interpersonal political disagreement	.07	.10[*]	.13[*]
Offline news use	.16[*]	.10[*]	.01
Social media use	.25[*]	.01	.06
Social media network size	.12[*]	.03	.07
Social media news use	–	.37[*]	.37[*]
R^2	.36[*]	.41[*]	.39[*]

Note: N = 518. Cell entries are standardized beta coefficients (β) from ordinary least squares (OLS) multiple regression analyses.
[*] p < .05 (two-tailed tests).

Table 3
Correlation matrix for exogenous and endogenous variables in path analysis.

Variable	1.	2.	3.	4.	5.	6.	7.
1. Social media political disagreement	1.00	–	–	–	–	–	–
2. Social media political talk frequency	.29	1.00	–	–	–	–	–
3. Social media political monitoring	.35	.61	1.00	–	–	–	–
4. Social media news use	.18	.53	.53	1.00	–	–	–
5. Social media network size	.09	.17	.21	.30	1.00	–	–
6. Social media use	.04	.20	.25	.38	.31	1.00	–
7. Political interest	.13	.49	.45	.36	.07	.08	1.00

Notes: Cell entries are Pearson's correlation coefficients (r).

Fig. 2. Only significant paths shown where $p < .05$. $N = 518$. Completely standardized solution from path analysis. $\chi^2_{(3)} = 3.384$, $p = .336$; CFI = 1.000; GFI = .998; RMSEA = .016, $p = .753$; SRMR = .012. A null model (without social media news use) was not a good fit to the data ($\chi^2_{(3)} = 6.313$, $p = .097$; CFI = .993; GFI = .996; RMSEA = .046, $p = .469$; SRMR = .021). The model controls for sex (1 = female), age, education, monthly household income, offline news, and interpersonal political disagreement.

disagreement was the response variable, any combination of social media news use, social media political talk, and social media political monitoring that maintained the structure shown in Fig. 1 produced statistically equivalent results. The same was true for each possible response variable. Essentially, then, alternatives were narrowed to three models that each considered a different response variable. Table 4 shows the goodness of fit statistics for these models. Results showed that the reported model (and its equivalents) represented the best possible model given the data. None of the alternatives reached acceptable goodness of fit levels.

4. Discussion

This study made several predictions based on the model illustrated in Fig. 1. First, social media use and network size would be positively related to news use on social media. Second, social media news use would be positively related to political messaging and monitoring on social media. Third, political messaging and monitoring would mediate the relationship between news use and political disagreement on social media. Finally, these relationships would exist independently of political interest. Results strongly support these predictions. The model depicted in Fig. 1 is a good fit to the data and outperforms alternative models. Finally, the model reflects the structure of the relationships among the endogenous variables.

While existing literature focuses on the United States and Europe (e.g., Barbera, 2014; Kim, 2011), this study examines political disagreement on social media in the context of a developing nation. Thus, the study adds to the existing literature by providing additional evidence of this relationship in a new context. It also outlines a process that shows how social media expose users to political disagreement. While existing literature has examined news use through direct or indirect observation (Barbera, 2014; Kim, 2011), this study illustrates the process through which news use relates to political disagreement on social media.

The findings show that political disagreement occurs on social media when individuals engage with social opinion about news posted by users. News use on social media is related to political engagement (Gil de Zúñiga et al., 2012; Valenzuela et al., 2012), and users encounter disagreement through direct (Huckfeldt et al., 2004; Mutz, 2006) and indirect (Schulz & Roessler, 2012) interaction with others about the news.

The study reflects the idea that social media use facilitates exposure to news from a wider array of individuals and organizations more than it provides direct evidence of it. Results show that news use plays an integral role in connecting generic social media use with political disagreement (see also, Kim, 2011). The study therefore assumes that news use diversifies political communication on social media and focuses on the subsequent relationships between news use and disagreement consistent with that assumption. Although some limited evidence suggests that news use is related to the heterogeneity of communication networks (Barbera, 2014; Lee et al., 2014), more research is needed to directly investigate the role of news in diversifying communication on social media.

Despite language that implies time-ordered processes, this study cannot establish causality. Rather, it presents a set of relationships at a single time point. Interpretations of mediation and path analyses should therefore bear this consideration in mind, and conclusions based on tests of alternative causal order should be taken as preliminary and conditional. In general, these issues highlight the need for panel data on the subject of social media use and political disagreement. This study does not establish that social media users are exposed to more political disagreement than non-users, although it does account for the influence of offline disagreement on social media disagreement. Subsample mean comparisons based additive measures of disagreement appear to uniformly overestimate the difference between social media users and non-users, while averaging the items uniformly underestimates the difference. Generally, there is a need to consider new

Table 4
Goodness of fit statistics for study model as compared to alternative models.

Model	$\chi^2_{(3)}$	$p_{\chi 2(3)}$	CFI	GFI	RMSEA	p_{RMSEA}	SRMR
DV = social media political disagreement	3.384	.336	1.000	.998	.016	.753	.012
DV = social media political monitoring	20.900	<.001	.980	.989	.106	.012	.023
DV = social media political talk frequency	38.442	<.001	.960	.980	.149	<.001	.033
DV = social media news use	66.868	<.001	.928	.967	.201	<.001	.056

Notes: The dependent variable in the study model is social media political disagreement. All models with the same response variable are statistically equivalent across all possible combinations of the other three endogenous variables.

measurements of disagreement that cut across communicative settings. Additional limitations stem from the single-item measurement of political disagreement, political talk, and political monitoring on social media. Ideally, future studies would include more robust measurement scales of these items. These results may not be generalizable beyond Colombia's urban population. They are most generalizable to urban populations that share Colombia's cultural, institutional, or socioeconomic features. Colombia's political culture is characterized by expressiveness and, at times, conflict. Institutionally, it has a multiparty, presidential political system and a centrist press that exhibits low levels of political parallelism. Socioeconomically, it is a developing nation with an emerging middle class in urban areas.

Despite these limitations, this study provides relatively strong evidence that news use on social media plays an important role in promoting political disagreement. News is a primary vehicle through which social media diversify political communication within egocentric social networks, and it promotes engagement with political and public affairs information. Social media users are most likely to encounter political disagreement in the spaces of engagement that form around news stories on social media. Generally, these findings contribute to the understanding of how individuals experience and engage with civil society in an era of egocentric publics.

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