Social Media Use for News and Individuals' Social Capital, Civic Engagement and Political Participation

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Recently, scholars tested how digital media use for informational purposes similarly contributes to foster democratic processes and the creation of social capital. Nevertheless, in the context of today's socially-networked-society and the rise of social media applications (i.e., Facebook) new perspectives need to be considered. Based on U.S. national data, results show that after controlling for demographic variables, traditional media use offline and online, political constructs (knowledge and efficacy), and frequency and size of political discussion networks, seeking information via social network sites is a positive and significant predictor of people's social capital and civic and political participatory behaviors, online and offline.

With the diffusion of social network sites (SNS) such as Facebook and MySpace, social media have become one of the most popular Internet services in the world. As of 2011, Alexa, a company that tracks web traffic, ranked these sites as two of the most visited sites in the world, where Facebook is only second to Google both in world and U.S. rankings (Alexa, 2011). The growing popularity of SNS has created a new debate: Do these Internet services contribute to society by allowing people to become informed, find common causes and participate in public life more often (e.g., Bennett, 2008), or do they foster shallower relationships, distract people from public affairs and deepen their political and civic disengagement (e.g., Hodgkinson, 2008)?

There is anecdotal evidence that shows that SNS can have a prosocial effect. In the 2008 U.S. presidential election, the Obama campaign created an online network site, my.barackobama.com, to successfully recruit campaign volunteers from across the country (Dickinson, 2008). In 2006, thousands

of American students used their MySpace profiles to organize national marches for immigration reform, with the strongest node anchored in California (Costanza-Chock, 2008). Outside the U.S., many commentators credit the 20,000 Canadian users who joined a Facebook group against a government-led copyright reform bill for the delay in the introduction of the bill in late 2008 (Nowak, 2008).

Despite the growing popularity of SNS and the efforts of civic and political organizations to adopt these services, there is limited empirical research on the effects of using these services on citizens' political attitudes and civic behaviors (Ellison, Steinfeld & Lampe, 2007; Pasek, more & Romer, 2009; Valenzuela, Park & Kee, 2009). Considering that SNS use has extended considerably within the general population (Pew, 2009), the time is ripe for expanding and elaborating on previous limited research based on college student samples.

The purpose of this article is to test whether SNS can promote democratically desirable attitudes and behaviors when individuals use these sites to keep up with news about public affairs or about their community. To map out these relationships, we employ original survey data from a national sample of U.S. adults.

We chose as our variables of interest social capital and citizen engagement in public affairs because both represent key markers of healthy, strong democracies (Barber, 1984; Putnam, 2000). Social capital facilitates associative behavior, fosters a strong civil society and makes political institutions and officials more responsive, all of which translates into a more effective political system. On the other hand, when people participate in civic and political activities, they have a voice in public affairs, can hold authorities accountable and are empowered to act on their own behalf (Verba, Schlozman, & Brady, 1995).

Literature Review

Social Capital and Participation. There is a rich tradition in social science research that has traced the performance of individuals and collectives to networks of social relationships (Bourdieu, 1983; Coleman, 1990; Lin, 2001). While one strand of the literature focuses on how individuals use the resources available in their network of personal contacts to achieve personal goals (e.g., Erickson, 1996), another strand focuses on the utility of networks for collective endeavors, including participation in civic and political groups. Both research traditions deal with different aspects of social capital, which Lin defined as ''resources embedded in one's social networks, resources that can be accessed or mobilized through ties in the network'' (Lin, 2008, p. 51; to learn more about the definition of social capital also see Shah & Gil de Zúñiga, 2008).[1] Because of its more direct link with democratic citizenship, the current study relies on the latter variant of social capital. That is, we view social capital as an antecedent of behavior that is oriented toward the public good, either at the community or the political level.

In addition to social capital, the study also focuses on individuals' participation. In political science, researchers usually equate participation with electoral activities, such as voting and working for political parties (Conway, 1985). Recognizing that participation goes beyond elections, others have included activities such as working for the community and attending a protest (Verba, Schlozman, & Brady, 1995). With the mounting influence of Internet use among citizens, new ways of participating in elections and public affairs have developed (for a recent overview, see Chadwick & Howard, 2008). Given the multidimensionality of the construct, this study measures participation at three different levels: (1) civic engagement (e.g., volunteering for charities), (2) offline political participation (e.g., attending political rallies), and (3) online political participation (e.g., forwarding political messages by e-mail). Civic participation involves behavior aimed at resolving problems of the community (Zukin, Keeter, Andolina, Jenkins, & Delli-Carpini, 2006), whereas political participation—both offline and online—refers to behavior seeking to influence government action and policymaking (Verba, Schlozman, & Brady, 1995).

Informational Motivations for Media Use. Ever since the seminal Columbia voting studies of the 1940s (Berelson, Lazarsfeld, & McPhee, 1954; Lazarsfeld, Berelson, & Gaudet, 1948), researchers have found a wide gap between the normative standards of democratic citizenship and voters' lack of political interest and disengagement from public affairs. Decades later, Putnam's (1995) blame on television as the "culprit" of declining levels of interpersonal trust, civic engagement and turnout among U.S. voters put the mass media at the center of scholarly attention on issues of citizenship. According to Putnam's "time displacement hypothesis," heavy television viewing distracts from social activities and participation in the community, eroding people's trust in fellow citizens. With the diffusion of the Internet in the late 1990s, some researchers extended this rationale to online activities, that is, more time spent online equals less time spent socializing and working for civic or political causes (e.g., Bugeja, 2004; Kraut et al., 1998; Nie, 2001).

Subsequent research, however, has found that media effects on social capital and participation are contingent upon individuals' motivations for using media (for an extended discussion of this argument, see Shah, Rojas & Cho, 2009). According to Katz and Gurevitch's (1974) classic typology, individuals use media for surveillance, personal identity construction, social relationships and entertainment. Existing research shows that using media for surveillance and information acquisition is positively associated with individual-level production of social capital and participation, while patterns of use related to private entertainment and diversion have a negative or muted effect (McLeod, Scheufele, & Moy, 1999; Norris, 2000; Prior, 2007; Shah, 1998; Wellman, Haase, Witte, & Hampton, 2001; Zhang & Chia, 2006). Thus, it is not the media *per se* that can affect individuals' social capital and engagement, but the specific ways in which individuals use media (Gil de Zúñiga, 2009).

Social Network Sites for News and Citizenship. SNS are online services that allow users to create an individual profile, connect with other users—usually people known offline—and navigate through these networks of contacts (Boyd & Ellison, 2008, p. 211). Profiles allow users to learn detailed information about their contacts, including personal background, interests, music tastes, and whereabouts. Users can also communicate with each other through a variety of tools within the same site, including chatting, sending private messages, leaving public comments in users' profiles, linking to outside content and sharing photos and videos.

There are important differences across SNS. Sites such as Facebook target the general population, while other sites target a particular niche. For instance, TakingITGlobal.org and YouthNoise.org offer social network services for users interested in addressing social issues such as poverty and human rights (Raynes-Goldie & Walker, 2008). Based on the previous discussion that it is not the specific affordances of a technology but the motivations for using it what matters (Gil de Zúñiga et al., 2011), this study analyzes the effect of informational motivations for using any type of SNS. Furthermore, we focus on information about public affairs that is communicated through online network sites, such as when individuals learn about opportunities for community work, discuss information about hot political issues, and share links to stories in the mainstream media.

Certainly, most of the information exchange that takes place in the most popular SNS is not related to public affairs, just as most of the content in television is for entertainment and not news. However, as SNS are incorporated into daily life, as recent evidence demonstrates (see, e.g., Pew, 2009; Correa, Willard Hinsley & Gil de Zúñiga, 2010), we should expect that the content available diversifies as well. Put in another way, people surely use SNS for personal identity construction, social relationships or entertainment; however, there is no reason to think that people who are motivated to follow public affairs will not use their SNS profile to use, contribute and share information that is public-oriented in nature (Hilbert, 2009). A documented case study is the 2008 U.S. presidential election, in which Facebook users shared links to news organizations such as CNN, the *New York Times* and the *Huffington Post* as well as cross-posted comments on their own Facebook profiles and on the

main candidates' Facebook profiles (Robertson, Vatrapu, & Medina, 2010). While these activities may have been performed for the purpose of expressing a political commitment towards a campaign, or due to the status of opinion leader of a particular Facebook user among his/her peers—that is, issues related to identity construction, trust and status maintenance—they had a common denominator: Facebook as a source of political information and news.

Based on the insights gained from the previous discussion of the literature, the following hypothesis will be tested:

H1: Social Network Sites use for news will be positively related to social capital.

H2: Social Network Sites use for news will be positively related to civic participation.

H3: Social Network Sites use for news will be positively related to political participation offline.

H4: Social Network Sites use for news will be positively related to political participation online.

In addition to the contribution of SNS use for news, the current study also explores the effects on social capital and participation of individuals' political predispositions and communication behaviors. Previous research suggests that individuals' political identity and psychological orientations can exert a strong effect on their willingness to join and participate in civic and political activities. For instance, strong Republicans and strong Democrats tend to feel more passionate about participating in civic and political activities than Independents. This is particularly true for postmaterialist issues, such as protecting the local environment (Holbert, 2005). Relatedly, being a member of a political party has also been found to be strongly related to various forms of engagement, both as a source of participation and as a consequence of taking part in civic activities (Putnam, 2000). Political self-efficacy, defined as perceptions of self-competence in regards to political and public affairs, is among the most important psychological predictors of taking part in collective activities (Verba, Schlozman & Brady, 1995). The explanation for this relationship is that efficacy lowers the costs of engaging in civic and political activities. Political knowledge is also predictive of active participation in public affairs (Junn, 1991) because people need information in order to decide how to voice their concerns in the public realm.

In addition to these political antecedents, media use and informal discussion networks have also been found to be related to the production of social capital, and to individuals' participation in civic and political causes (Gil de Zúñiga, Veenstra, Vraga, & Shah, 2010). Patterns of media use related to information acquisition (e.g., television news) and community building (e.g., online communities) are positively associated with civic participation, whereas patterns of use related to entertainment and diversion (e.g., reality shows and online movies) have a negative impact on engagement (Shah et al., 2001; Wellman, Haase, Witte, & Hampton, 2001). Informational media, such as news programs, can also promote civic-oriented behaviors by triggering mental reasoning and elaboration of news events, which subsequently promote individuals' participation in public affairs (Eveland, 2001). The communication process among citizens also influences people's civic attitudes and behaviors by allowing them to exchange information, elaborate on problems facing the community and learn about opportunities to participate in civic activities (Gastil & Dillard, 1999; Klofstad, 2007; McLeod et al., 1999; Rojas et al., 2005). At the same time, larger, diversified networks tend to bring more mobilizing information for participants. Lake and Huckfeldt (1998) have suggested that individuals with larger networks participate more because they are more likely to be exposed to people who have higher levels of education. These educated individuals, in turn, provide knowledge and expertise that enables citizens to become engaged in ways that they might otherwise not. Beyond the individual characteristics of network members, having more contacts can also increase individuals' frequency of discussion about public affairs, which has been

shown to have a direct effect on civic engagement (Shah et al., 2005). Even if people's networks do not expose them to knowledgeable individuals and are not characterized by frequent discussion of public affairs, sheer network size should still increase the likelihood of receiving nonredundant opportunities for and recruitment into participation (Huckfeldt, Beck, Dalton, & Levine, 1995). Consequently, the following analysis includes examining variables measuring these known factors.

Methods

This paper relies on an original survey data collected in the U.S. between December 15, 2008, and January 5, 2009. The selected panel members received the survey's URL through an e-mail invitation. This invitation provided respondents with a time estimate to complete the survey and information about a draw monetary incentive for their participation. The sample was based on an online panel provided by the Media Research Lab at the University of Texas at Austin. To overcome the limitations of web surveys and assure an accurate representation of the national adult population, the Media Research Lab based this particular sample on two U.S. Census variables, gender (50.2% men and 49.8% women) and age (30% 18–34; 39% 35–54; 31% 55 or more). The procedure of matching online samples with census data to provide a more accurate representation of the population has been validated by previous research (e.g., Correa, Willard Hinsley, & Gil de Zúñiga, 2010; Curran, Iyengar, Lund, & Moring, 2007; Iyengar & Hahn, 2009). The survey instrument was administered using Qualtrics, a web survey software, and was pilot-tested before actual fieldwork[2].

Compared to U.S. Census data, our sample had more females and was slightly better educated. Nevertheless, the demographic breakdown of our sample was similar to that of surveys conducted by the Pew Research Center and other organizations that employ random digit dialing (Pew Internet & American Life Project, 2009), which seems to lend support to how well our sample statistics estimate U.S. population parameters. The final subsample was composed of those respondents who reported having an SNS account (N = 475).

Operationalization of Variables. In this study, four dependent variables are explored, as well as an exhaustive list of control variables and SNS use for news as the key independent variable. The dependent variables were:

Social capital. As discussed in the literature, and based on previous operationalization of the concept of social capital (Lin, 2008; Shah & Gil de Zúñiga, 2008), this study created an index registering citizens' features of social life that enable participants to act together more effectively to pursue shared objectives in their communities. Thus, six items measuring different features of respondents' social capital were added: feel intimate in the community, share community values, talk about community problems, feel connected, help resolve problems and watch out for community members. Respondents answered on a 10-point scale to each item. Individual score of each item was summed up to create an index of social capital (α = .91, M = 33.4, SD = 11.9).

Civic participation. An index of civic participation was created by adding five items measuring the frequency of respondents' voluntary work for nonpolitical groups, raising money for charity, attending a meeting to discuss neighborhood problems, purchasing products for the social values advocated by the company, and banning a certain product or service because they disagreed with the social values of the company (Cronbach's α = .81, M = 18.7, SD = 11.7). The items used to create this index resulted from a combination of previous research and empirical testing. That is, the items were borrowed from previous research on civic engagement (Shah et al., 2005; Zukin et al., 2006) and subjected to a reliability test so as to retain those that yielded an index with the highest internal consistency.

Offline political participation. Respondents were asked if during the past 12 months they had engaged in any of the following activities: "Attended a public hearing, town hall meeting, or city council

meeting," "Called or sent a letter to an elected public official," "Spoken to a public official in person," "Posted a political sign, banner, button or bumper sticker," "Attended a political rally," "Participated in any demonstrations, protests, or marches," "Voted in the 2008 presidential election," "Written a letter to a news organization," "Participated in groups that took any local action for social or political reform," and "Been involved in public interest groups, political action groups, political clubs, or party committees." Responses to each statement were added into a single index ($\alpha = .82$, range $= 0$ to 10, $M = 2.89$, $SD = 2.35$).

Online political participation. Respondents were asked to rate on a 10-point scale how often they used the Internet for the following activities: "Write to a politician," "Make a campaign contribution," "Subscribe to a political listserv," "Sign up to volunteer for a campaign/issue," "Send a political message via e-mail" and "Write a letter to the editor of a newspaper." Items were added to create an index of online political participation ($\alpha = .87$, range $= 6$ to 60, $M = 15.02$, $SD = 10.75$).

Social network site use for news. This variable is the central independent variable in this study. The index of SNS use for news was created by averaging four items on a 10-point scale tapping what extent respondents' SNS use helped them "to stay informed about current events and public affairs," "to stay informed about the local community," "to get news about current events from mainstream news media," and "to get news about current events through friends" ($\alpha = .87$, $M = 14.9$, $SD = 9.9$).

To control for other variables that the literature has found to be related to each of the dependent variables, the multivariate analysis included the following constructs:

Socio-demographic variables. Age was measured with an open-ended question asking "What was your age on your last birthday?" ($M = 45.76$, $SD = 12.45$). A survey question that measured income asked "What was your family's total household income last year?" Answers ranged from 1 (under $20,000) to 15 (over $150,000) ($M = 6.05$, $Mdn = \$50,000$ to $\$59,999$, $SD = 4.03$). Education was measured with a 7-point scale ranging from "less than high school" to "doctoral degree" ($M = 4.11$, $Mdn = 2$-year college degree, $SD = 1.50$). As for the gender variable, males were assigned value "0" and females with "1" (Male $= 33\%$, Female $= 67\%$). Respondents' race was also requested in the survey (binary recoded as white $= 1$ (84.4%)).

News media use. This variable was created by combining 9 items ($\alpha = .69$, $M = 29.1$, $SD = 10.1$), including watching network, local, and cable TV news, listening to radio news, reading traditional and online newspapers and magazines, and visiting a site with news reports generated by regular people. Each item asked respondents "How often do you [read/watch/listen each medium] to get information about events, public issues and politics?" with a 7-point response scale ranging from "everyday" to "never."

General SNS use. The index of general SNS use was measured with a single item asking respondents "On a typical day, about how much time do you spend on online social network sites, such as Facebook and MySpace?" Respondents answered on seven-point scale ranging from "no time at all" to "more than three hours" ($M = 2.95$, $Mdn = $ More than 30 minutes and up to an hour, $SD = 1.41$)[3].

Online Network Size. Respondents were asked to provide an estimate of the number of people during the past month with whom they talked to via the Internet, including e-mail, chat rooms and social networking sites about public affairs. The variable was positively skewed ($M = 11.33$, $Mdn = 1.00$, $SD = 63.71$, skewness $= 12.62$), so it was transformed using the natural logarithm ($M = .46$, $Mdn = .30$, $SD = .55$, skewness $= 1.40$).

Discussion Network Attributes. This variable was created by adding scores of 11 items that tapped the frequency of individuals' conversation with others: friends and family; co-workers and acquaintances; strangers; people who agree with me; people who disagree with me; people who are more knowledgeable about politics; people who are less knowledgeable about politics; people outside my family who do not share my ethnicity, socio-economic status, or gender; people who back up their arguments with

evidence; people who are unreasonable and illogical when stating their point of view; people who propose alternatives or policies for problem solving ($\alpha = .93, M = 52.6, SD = 22.8$).

Strength of party identification. Respondents were asked to rate their party identification using an 11-point scale ranging from strong Republican (coded as 0; 8.7% of respondents) to strong Democrat (coded as 10; 13.2% of respondents), with the midpoint (coded as 5) being Independent (29.1% of respondents). This item was subsequently folded into a 6-point scale (that is, scores 0 and 10 were recoded to 6, 1 and 9 to 5, 2 and 8 to 4, 3 and 7 to 3, 4 and 6 to 2, and 5 to 1), ranging from no partisanship to strong partisanship ($M = 3.3, SD = 1.8$).

Political knowledge. Respondents were asked four questions related to public figures who had been in the news recently. Two were open-ended questions asking respondents to identify the name of the speaker of the U.S. House of Representatives (Nancy Pelosi) and the then vice president-elect (Joe Biden). The other two items were multiple-choice questions asking respondents to identify the name of the British Prime Minister (Gordon Brown) and the state of then-governor Sarah Palin (Alaska). Correct responses to each item were coded as 1, and incorrect or missing responses were coded as 0. The items were added to create an index of political knowledge (KR-20 $= .46$, range $= 0$ to $4, M = 3.05, SD = .91$)[4].

Internal political efficacy. Political efficacy is also another important control to isolate the effects of our variable of interest for it has also been identified as a robust predictor of participatory behaviors in the literature. Nonetheless, researchers suggest that some items used to measure internal efficacy, such as "people like me don't have any say about what the government does" are problematic because they measure both internal and external efficacy (see Morrell, 2003). Drawing from this approach, some scholars (e.g., Anderson & Tverdova, 2001; Bennett, 1997) have been inclined to utilize a single measure, such as whether individuals "think people like me can influence government." This study followed that approach as well ($M = 5.02, SD = 2.74$).

Statistical Analysis. The hypotheses were tested using four sets of hierarchical OLS regressions, one for each dependent variable.[5] Structural equation modeling was also employed to further our analyses and compare the causal order of media consumption and participatory variables. Finally, a set of partial correlations among all the dependent variables the SNS use for news is also presented. All analyses were conducted using SPSS 17.0 and MPlus 6.0.

Results

Hypothesis 1 predicted that SNS use for news surveillance would significantly increase social capital. As shown in Table 1, this proposition was supported: the extent to which respondents used social network sites to keep up with news about political news, public issues and information about their community was positively related to social capital ($\beta = .153, p < .001$). Among a host of controlling variables were gender ($\beta = .168, p < .001$), political efficacy ($\beta = .215, p < .001$), political discussion network attributes ($\beta = .208, p < .001$), the size of one's discussion network online ($\beta = .201, p < .001$) and consuming news by other means ($\beta = .155, p < .001$) had a significant relationship with social capital. The total variance of social capital explained by variables included in all four blocks was 20.8% ($R^2 = .21, p < .001$). In prediction of social capital, political antecedent factors explained 7.9% ($\Delta R^2 = .079, p < .001$) of the variance, while communication factors accounted for most variance in the entire model 8.7% ($\Delta R^2 = .087, p < .001$). Demographic variables explained 3% of the total variance ($\Delta R^2 = .030, p < .01$). SNS use for news yield an incremental variance explained of 1.2% ($\Delta R^2 = .012, p < .01$).

Similarly to hypothesis 1, regression analysis also supported hypothesis 2 granting an important role of SNS use for news in predicting civic participation ($\beta = .220, p < .001$). The more people used SNS for news, the more they engaged in civic activities to cope with community issues. The

Table 1 Prediction of social capital and civic participation

	Social Capital	Civic Participation
Block 1: Demographics		
Age	.093#	−.027
Gender	.168***	.116**
Race	.045	.091#
Income	.096#	.029
Education	.020	.101*
ΔR^2 (%)	3.0**	4.4***
Block 2: Political Antecedents		
Partisanship	.046	.032
Political efficacy	.215***	.250***
Political knowledge	.050	.110*
ΔR^2 (%)	7.9**	14.0***
Block 3: Media & Discussion		
Media use	.155***	.311***
Discussion Network Attributes	.208***	.178***
Online Network Size	.201***	.195***
General SNS use	.017	.029
ΔR^2 (%)	8.7***	19.4***
Block 4: Social Media		
SNS use for news	.153**	.220***
ΔR^2 (%)	1.2***	1.5***
Total R^2 (%)	20.8***	41.3***

Note: Sample size = 474. Cell entries are final-entry OLS standardized Beta (β) coefficients.
*p < .05; **p < .01; ***p < .001.

SNS use for news alone explained an additional 1.5% of variance in civic participation ($\Delta R^2 = .015$, p < .001). Aside from this focal independent variable, some other control variables exerted significant influence on civic participation, such as gender ($\beta = .116$, p < .01), education ($\beta = .101$, p < .05), political efficacy ($\beta = .250$, p < .001), news media use ($\beta = .311$, p < .001), discussion network attributes ($\beta = .178$, p < .001), online network sites ($\beta = .195$, p < .001) and other media use for news ($\beta = .311$, p < .001). Variables included in the analysis of this study accounted for 41.3% of total variance in civic participation. Specifically, communication behaviors (i.e., news media use, online discussion network size, etc) explained the most portion of variance 19.4% ($\Delta R^2 = .194$, p < .001), followed by political antecedents variables 14% ($\Delta R^2 = .140$, p < .001) and demographic variables 4.4% ($\Delta R^2 = .044$, p < .01).

As predicted by hypothesis 3 and 4, informational use of SNS use for news had a significant and positive association with both online ($\beta = .153$, p < .001) and offline political participation ($\beta = .136$, p < .001). The SNS use for news accounted for 3.6% and 1.4% respectively, of the variance for online and offline participation, and this incremental variance was explained beyond that accounted by all the detailed controls included in the model[6]. With regard to the control variables, political efficacy ($\beta = .215$, p < .001), news media use ($\beta = .251$, p < .001) and political discussion network attributes ($\beta = .144$, p < .01) had a positive impact on online participation. Age and education ($\beta = .085$,

Table 2 Prediction of online and offline political participation

	Online Political Participation	Offline Political Participation
Block 1: Demographics		
Age	.086*	.173***
Gender	.067	.062
Race	−.012	.087#
Income	−.047	.067
Education	.160***	.206***
ΔR^2 (%)	1.3**	10.7***
Block 2: Political Antecedents		
Partisanship	.196***	.141***
Political efficacy	.215***	.203***
Political knowledge	.057	.090*
ΔR^2 (%)	17.3***	10.4***
Block 3: Media & Discussion		
Media use	.251***	.143***
Discussion Network Attributes	.144**	.171***
Online Network Size	.231***	.093*
General SNS use	.002	.046
ΔR^2 (%)	17.1***	10.7***
Block 4: Social Media		
SNS use for news	.153**	.136***
ΔR^2 (%)	3.6***	1.4***
Total R^2 (%)	39.3***	32.5***

Note: Sample size = 474. Cell entries are final-entry OLS standardized Beta (β) coefficients.
*p < .05; **p < .01; ***p < .001.

p < .05; β =.160, p < .001) were the only statistically significant variables under the demographic block related to online activities of participation. Additionally, variables in the political antecedent (ΔR^2 = .173, p < .001) and media and discussion blocks (ΔR^2 = .171, p < .001) also significantly accounted for positive effects in explaining online participation. Overall, the older, more educated one is, couple with greater exposure to news and larger political discussion networks, the more inclined this person will be to engage politically online. In total, 39.3% of variance in online participation was explained by variables included in the analysis.

As for the offline participation, age (β = .173, p < .001), education (β = .206, p < .001), political efficacy (β = .203, p < .001), news media use (β = .143, p < .05) and the characteristics of people's discussion networks (β = .171, p < .001) were found as significant predictors of offline participatory activities. The offline form of political participation was explained about the same extent by the three control blocks used in this study. All the blocks, demographic variables (ΔR^2 = .107, p < .001), orientation (ΔR^2 = .104, p < .001) and communication block (ΔR^2 = .107, p < .001) similarly contributed to predict people's levels of political participation offline. The overall model including all blocks in the analysis altogether took up 32.5% in explaining offline political participation[7]. Based on these findings, the notion of a virtuous circle might be taken for granted, people who get informed via SNS tend to participate more, and participation also leads to information seeking behaviors.
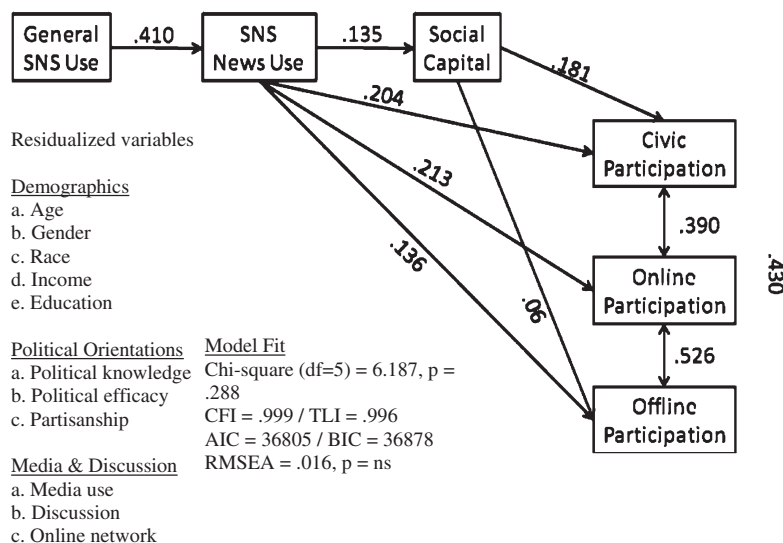
Figure 1 SEM testing causal inference from media use to participation

Nevertheless, the causal paths that go from media consumption to participation yield more solid measures of model fit than vice versa. This indicates an asymmetrical reciprocal causation between media use and participation (Rojas, 2006; see Figure 1 and Figure 2).

As a final interesting note to results in relation to SNS, there was no evidence whatsoever to statistically relate general overall frequency use of SNS to increasing citizens' participatory behaviors and social capital. This lends support to the idea that a specific use of the media (i.e, news surveillance) may in have more to do with respect these characteristics of the democratic process than overall frequency of SNS use. Additionally, the study contains a table of zero-order Pearson's correlations to shed more light over the relationship among all the variables of interest with particular emphasis in the ways SNS use for news may relate to variables used in the statistical models as controls (See Table 3). Not only SNS use for news correlates with all types of citizen participation—civically ($r = .20$, $p < .001$) and politically online ($r = .18$, $p < .001$) and offline ($r = .11$, $p < .05$)—and social capital ($r = .12$, $p < .05$), but also results show that all other variables are associated. Of particular interest is the relationship found in this study between the consumption of news via SNS and some of the structural or demographic variables. For instance, young people (age: $r = -.10$, $p < .05$), minorities or non-whites (race: $r = -.13$, $p < .01$), people with lower income ($r = -.15$, $p < .001$) and with lower levels of education ($r = -.11$, $p < .05$) will be inclined to use SNS for news. This may be a sign of certain positive implications for a healthier democracy as usually unprivileged citizens tend to consume less news through more traditional venues online and off.

Discussion

Although the effects of citizens' news consumption via SNS is a relatively new venue that merits further examination in the context of the general U.S. public opinion, this study sought to be a first step in that direction, revealing a number of important leads for future research. The present research empirically tested the influence of SNS use for news on four types of public life within the social and political process: proliferation of social capital, civic engagement and online and offline political participation.
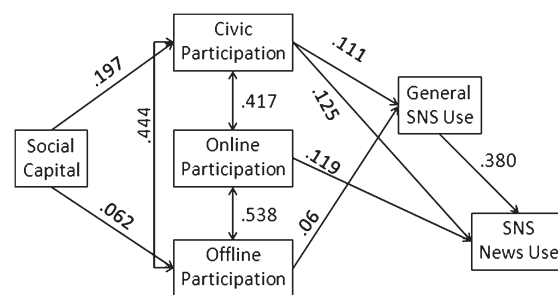
Figure 2 SEM testing casual inference from participation to media use (alternative model)

As proposed by the hypotheses posed in this study, informational use of SNS exerted a significant and positive impact on individuals' activities aimed at engaging in civic and political action. Thus, results invite us to think that achieving a better understanding on how citizens use SNS may help clarify the newer and different paths that spur political and civic action over the Internet. In this vein, this study also found a statistical relationship between using SNS for news and reporting higher levels of social capital which implies that social media may also facilitate community life beyond the strict measures of civic participation. Interestingly, all these relationships are true once the models meticulously controlled for the respondents' demographic particularities, news media use, general SNS use, important political antecedents, people's discussion networks, as well as other discussion attributes and characteristics as to whom and how individuals discuss politics. This is indeed positive news for those seeking to view SNS as tools for democracy, and puts SNS in consonance with previous findings in which traditional sources of information and less conventional informational outlets such as blogs yield similar effects (see Gil de Zúñiga, Puig-i-Abril & Rojas, 2009). In short, SNS also seem to provide adequate and relevant information to reinvigorate the democratic process.

These findings open some questions an interesting points to discuss as they also elicit a thrilling venue to conduct research in the years to come. First, how different is the information that people encounter in these sites? And second, why does it seem to have such a positive impact on citizens' participatory behaviors?

As elaborated in the literature review, learning about what happens around us and in our community, reflecting on it, and discussing about it with others constructively affects the political realm; as well as it facilitates a cohesive community by enabling citizens to engage in civic action. The models presented

Table 3 Zero order correlations among all independent and dependent variables in the study

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age	—																
2. Gender	$-.11^b$	—															
3. Race	$.18^b$	.02	—														
4. Income	.02	$-.13^c$	.01	—													
5. Education	$.06^a$	$-.12^c$	$-.04$	$.45^c$	—												
6. Partisanship	.05	$-.05$	.04	$.10^a$	$.16^c$	—											
7. Political Efficacy	.04	$-.02$	$-.10^b$	.02	$.15^c$	$.14^c$	—										
8. Political Knowledge	$.11^a$	$-.41$	.09	$.14^c$	$.22^c$	$.18^c$	$.30^c$	—									
9. Media Use	.03	$-.12^c$	$-.16^c$	$.17^c$	$.24^c$	.06	$.27^c$	$.24^c$	—								
10. Discussion Net. Attr.	$-.07$	$-.03$	$-.13^b$	$-.21^c$	$-.14^b$	$-.02$	$.14^b$	$.12^b$	$.32^c$	—							
11. Online Network Size	$-.19^b$	$-.03$	.03	.01	$.11^a$	$-.03$	$-.04$	.07	.01	.02	—						
12. General SNS	$-.19^b$	$-.01$	$-.15^c$	$-.11^b$	$-.11^a$	.02	.04	.03	$.20^c$	$.49^c$	$-.02$	—					
13. SNS News Use	$-.10^a$	$-.03$	$-.13^b$	$-.15^c$	$-.12^a$	$-.07$	$.14^b$	$.10^a$	$.40^c$	$.77^c$	.02	$.49^c$	—				
14. Social Capital	.05	.03	$-.01$	$.12^c$	$.18^c$	.06	$.30^c$	.07	$.22^c$	$.17^c$	$-.01$	$.12^a$	$.19^c$	—			
15. Civic Participation	.02	.04	$-.04$	$.16^c$	$.20^c$	$.10^a$	$.33^c$	$.10^a$	$.45^c$	$.24^c$	.07	$.20^c$	$.34^c$	$.38^c$	—		
16. Online Political Par.	.05	.01	$-.05$	.01	$.15^c$	$.18^c$	$.34^c$	$.12^b$	$.39^c$	$.34^c$	$-.04$	$.18^c$	$.34^c$	$.22^c$	$.51^c$	—	
17. Offline Political Par.	$.17^b$	.03	$-.01$	$.20^c$	$.32^c$	$.16^c$	$.30^c$	$.11^a$	$.34^c$	$.16^c$	.01	$.11^a$	$.18^c$	$.25^c$	$.49^c$	$.62^c$	—

Note: Cell entries are two-tailed zero order correlation coefficients. ($N = 474$).
Superscript a = p < .05, Superscript b = p < .01, Superscript c = p < .001.

in this study carefully controlled for the effect that other media may had in this process. And they were pretty exhaustive, including traditional media, news online, and even sources of news generated by the so called "citizen journalism." Thus, the influence information distributed and presented through SNSs comes add to all the positive effects those other sources of information may already have. Thus, it is plausible to think that the information and what people learn through SNSs is to some extent distinct. Or at least different than the information provided through other informational venues. Perhaps this is also due to the fact that the information citizens are exposed to in these websites is also filtered by people whom SNS users trust and relate to, so it may be another reason why this information may become more effective.

In relation to the second question, it can be argued that the inherent structure of the SNSs facilitates not only the acquisition of information but also the discussion of its importance and relevance with other members of a particular individual's social network *in situ*, which may increase the elaboration and reflection mechanism for an individual to make sense of what they were informed about. Finally, SNS also achieve the high interactivity component that the Internet may provide, which coupled with the simplicity to organize information and relate to similar topics also could enhance the way people get informed. This in turn, could also make possible a smooth mobilization process. A related explanation for the positive relationship between SNS use, social capital and citizen engagement may be found in the uses and gratifications approach (Katz & Gurevitch, 1974; Ruggiero, 2000). SNS can help with personal identity construction by enabling multiple channels for interpersonal feedback and peer acceptance, which have been found to be related to the production of social capital (Harter, 1999). Also, SNS can reinforce existing ties and communities by keeping users constantly updated about what is going on with their contacts (Park, Kee & Valenzuela, 2009). At the same time, increased information exchange among online group participants typically helps to build trusting relationships along with members, further enhancing the potential of SNS to increase social capital. In other words, by making users feel connected to a community and increasing their knowledge of other members, SNS can foster norms of reciprocity and trust and, therefore, create opportunities for civic and political engagement.

All in all, these findings help to shed some light with respect to the effects of SNSs use for news in the democratic process. Nevertheless, there are a number of drawbacks in evidence, with one of the most noticeable being the nature of our data. Based on national U.S. data we are confident about the generalizability of the findings; nonetheless, this study relies on cross-sectional data and strictly speaking, causality should be interpreted with caution, particularly with respect to the relationship between news consumption and participation. However, previous research employing panel data indicates that an asymmetrical reciprocal model may be in order. Rojas (2006) found that participating in politics at time 1 makes one more likely to talk about politics at time 2, but the relationship between talking politics at time 1 and participating at time 2 is much stronger. Similar empirical evidence was advanced by Shah, Cho, Eveland, and Kwak (2005). Therefore, while there is evidence to suggest that the informational characteristics measured in this study antecede political engagement, as the ad hoc structural equation model analyses also attest, longitudinal analyses could shed more light on the causality quandary. This area would greatly benefit from a stronger and more systematic research agenda, including longitudinal data. However, this paper should be interpreted as an initial step in a novel and promising direction. Another venue for future research is to examine contextual effects, such as the socio-economic characteristics of the communities in which the respondents live. Unfortunately, the current data does not include such type of variables so we envision these tasks as appealing lines of research for future studies. Likewise, scholars may be inclined to pursue the effect of some of the independent variables included in this study over the criterion variables in the form of interactions. We only tested the possible effect of SNS use for news and intrapersonal political efficacy and found

no meaningful relationship. Other interactions could be explored. This, of course, is a suggestion for future research.

Despite its limitations, this article makes a modest but somewhat important contribution to political communication research. Given the growing popularity and penetration of SNS, and the way they are embraced by today's society, these relatively immature news sources beg further study. The contribution of this emerging venue for information to participatory behaviors is now established. After all, learning through social media may indeed contribute to not only the proliferation of a networked society but also it may facilitate a healthier democracy. Or at least, a more participatory one.

Notes

1 Note that this definition differs from Putnam's more popular conceptualization of social capital, which conflates trust and reciprocity with social networks: ''Features of social life–networks, norms, and trust–that enable participants to act together more effectively to pursue shared objectives. . . Social capital, in short, refers to social connections and the attendant norms and trust'' (Putnam, 1995, pp. 664–665). In our view, trust may be an antecedent or consequence of social capital, but it is a different concept altogether from social capital (See Gil de Zúñiga & Valenzuela, 2011).

2 After matching a 10,000 random draw to these demographic characteristics, a total of 1,432 e-mail addresses were invalid. Of the remaining 8,568 participants, 1,159 responded on all items and 323 had missing values for some of the variables of interest in the analysis. Accordingly, based on the American Association of Public Opinion Research's (AAPOR) RR3 calculation, the response rate was 22.8% (AAPOR, 2008, pp. 34–35). The formula for RR3 is (complete interviews) / (complete interviews + eligible nonresponse + e (unknown eligibility)), where e was estimated using the proportional allocation method, i.e., (eligible cases) / (eligible cases + ineligible cases).

3 An avid reader may notice that our measurement of general use of SNS is based on one single item. Although we acknowledge that composite indexes are more robust and minimize the risk of including measurement error, the purpose of this variable is to introduce more stringent controls to better isolate the effect of SNS use for news on all participatory criterion variables on this study.

4 The measurement of Cronbach's α is based on the assumptions of classic test theory, which assumes that the items are measured at the interval level. For variables completely constructed from dichotomous indicators such as the knowledge variable employed in this study, however, a different version of α exists: the Kuder-Richardson estimate, or KR-20. As Hayes (2005) explained, ''KR-20 and is named after the two psychometricians who derived it (Kuder & Richardson, 1937). KR-20 actually predates Cronbach's influential paper in which he described α. But no special formula is needed for KR-20 because it is mathematically equivalent to Cronbach's α.'' (p. 114). The reliability among the four items of political knowledge measurement is somewhat low. However, considering that each measurement item varies in the degree of difficulty, this magnitude of reliability is quite understandable. For example, while more than 95 percent of respondents answered correctly to the question about Sarah Palin, less than half of them provided the correct name of British prime minister. In fact, the Pearson's correlation between the two items is fairly low (r = .17, p < .001). For this reason, the political knowledge index was employed in the analysis of this study in spite of the conventionally insufficient degree of reliability (see Valentino et al., 2004).

5 In order to determine whether OLS regression models would be adequate, we conducted Durbin-Wu-Hausman (DWH) tests of endogeneity, which compare the results of efficient, but

possibly inconsistent OLS estimations with those of less efficient, but consistent, two-stage least squares (2SLS) estimations (see Davidson & MacKinnon, 1993, 237–242). The DWH test statistic is approximately distributed as χ^2 with the number of potentially endogenous regressors as degrees of freedom. In three out of four cases the test statistic was insignificant, suggesting that there was no evidence of endogeneity (social capital, $\chi^2 = .26$, d.f. $= 1$, p $= n.s$; civic engagement, $\chi^2 = 1.84$, d.f. $= 1$, p $=$ n.s.; online political participation, $\chi^2 = 1.97$, d.f. $= 1$, p $=$ n.s.). For the model of offline political participation—the only model in which the DWH test statistic was significant ($\chi^2 = 6.23$, d.f. $= 1$, $p < .05$)—we conducted a 2SLS. In this case, SNS for news was first regressed on the control variables discussed in the methods section (i.e., age, gender, education, income, discussion frequency, news media use, political efficacy, online network size), and a variable that was predictive of SNS for news but was not predictive, in our model, of offline political participation. This instrumental variable was the number of contacts in the respondent's SNS network (logged). The predicted values of SNS for news were then entered in the regression of offline political participation. The results of the 2SLS regression were entirely consistent with the results of the original OLS regression. That is, the direction and significance of the coefficient for SNS for news was the same whether using OLS or 2SLS. Specifically, the betas for SNS for news using OLS and 2SLS were .136 ($p < .001$) and .298 ($p < .001$), respectively.

6   Readers may wonder to what extent using SNS for news may represent a net gain in terms of people's political and civic behaviors, and levels of social capital. That is, although there might be a linear relationship between using SNS for news and the tendency of participating more, this effect may not account for much beyond the positive effects of using traditional media use online and off. To test this empirical quandary, we conducted two different sets of analyses: 1) we compared the means of all our criterion variables for both SNS users (N = 474) and for those who do not use SNS (614). All the means were higher for the group of SNS use for news than for non-users. Furthermore, the differences in the means were statistically significant for all of our criterion variables except offline political participation. 2) The second test conducted in the study is even more stringent as we run two different regressions controlling for all the variables in our models, leaving the last block with media use as the variable of interest predicting all modes of participation and social capital. That way we compared whether the betas of those who use SNS for news and those who don't are similar. The rational here is that they should be very similar, that way the effect of using SNS for news is an effect that goes above and beyond the effect media use has on people. As theorized, the betas were very similar (Civic Participation: SNS users $\beta = .420$ vs Non-users $\beta = .334$; Offline Participation: SNS users $\beta = .223$ vs Non-users $\beta = .221$; Online Participation: SNS users $\beta = .358$ vs Non-users $\beta = .259$; Social Capital: SNS users $\beta = .212$ vs Non-users $\beta = .121$). Most importantly, a follow up Standardized Beta Difference test based on z scores revealed that these differences were not statistically significant providing support to the notion that media use has a similar positive effect to those who use SNS for news and those who don't. Thus, the use of SNS for news indeed yields a net gain in people's participatory levels.

7   The nature of the data employed in this study does not entirely entitle the authors to empirically test the causal order of the relationship among the variables of interest in the study. That is, testing whether media consumption via SNS builds people social capital and leads citizens to participate or conversely, participation drives informational media use through SNS. Nevertheless, in an effort to provide ad hoc analyses to our regression models, the two competing causal theoretical models were empirically tested with *structural equation modeling* analyses to observe which one yields a better fit for the data. As results suggest, the presented models are readily comparable as

they test similar relationships, only exchanging the causal order, while keeping the numbers of known values minus the number of free parameters equal (df = 5; see Mueller, 1997).

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