Social Networks that Matter: Exploring the Role of Political Discussion for Online Political Participation

Sebastián Valenzuela[1], Yonghwan Kim[2] and Homero Gil de Zúñiga[2]

[1]School of Communications, Catholic University of Chile, Santiago, Chile, and
[2]School of Journalism, University of Texas at Austin, USA

Abstract

We examine the relationship between citizen-to-citizen discussions and online political participation considering various attributes of individuals' social networks: Modality, discussants' ties, diversity of opinions, and quality of argumentation. Using a national survey of U.S. residents we find that communication within networks is a significant predictor of web-based forms of political engagement, after controlling for offline participation, political orientations, news use, and socio-demographics. Consistent with the "strength of weak ties" argument, larger online networks and weak-tie discussion frequency are associated with online participation. While like-minded discussions are positively related to online participation, discussions with people who are not of like mind correlate negatively with it. Online network size and reasoning discussions were positively related to online participation, although these associations were rather weak compared to the role of other network characteristics.

Whereas the idea that "conversation *is* the soul of democracy" (Kim, Wyatt, & Katz, 1999, p. 362, emphasis theirs) has resonated for centuries (e.g., de Tocqueville, 1840/1988), only in the last few decades researchers have accumulated strong empirical evidence showing how informal discussions spur political engagement. Discussions create opportunities to learn mobilizing information, ponder about news or public issues, and reach common understandings, all of which are key antecedents of participation. Most of the existing literature, however, has focused on traditional forms of political engagement—forms that take place face-to-face or in offline settings such as

---

All correspondence concerning this article should be addressed to Sebastián Valenzuela, PhD, School of Communications, Catholic University of Chile, Alameda 340, Santiago, Chile. E-mail: savalenz@uc.cl

voting and attending campaign events (Huckfeldt, Mendez, & Osborn, 2004; McClurg, 2006; Mutz, 2006; Nir, 2005). With the Internet, new venues for political participation have become widespread, particularly among youth. Blogs, social network sites, user-generated news and specific websites have allowed individuals and organizations worldwide to engage in activities aimed at influencing government and policy (Gil de Zúñiga & Valenzuela, 2011; Kaufhold, Valenzuela, & Gil de Zúñiga, 2010; Mossberger, Tolbert, & McNeal, 2007; Park, Kee & Valenzuela, 2009).

The purpose of this study is to further our understanding of the relationship between political discussions that take place within individuals' social networks and political participation by focusing on online forms of engagement. It addresses the question of what specific attributes of citizen-based discussion networks are predictive of online political participation. Specifically, it tests the predictions of Granovetter's (1973) "strength of weak ties" hypothesis, Mutz' (2006) deliberation versus participation dilemma, and deliberative theorists' (e.g., Habermas, 1984) emphasis on reasoning communication. By taking into account several attributes of political discussion networks that previous research has studied in isolation, the article also seeks to provide a roadmap for future research on how political talk can foster and/or hinder Internet-based forms of political engagement.

Online Political Participation

Political participation, whether online or offline, refers to activity by ordinary citizens that has the intent or effect of influencing government action or some political outcomes (Brady, 1999). As a preeminent concept in the political behavior literature, scores of studies have analyzed the antecedents of voting, donating money to campaigns, taking part in protests, contacting elected officials and other political activities. Combining the insights from rational choice theory (Downs, 1957), the socioeconomic status model (Verba & Nie, 1972), and the mobilization model (Rosenstone & Hansen 1993), Verba and colleagues (Verba, Schlozman, & Brady, 1995) posited a civic voluntarism model to explain political engagement. According to this model, people participate when they are asked to join political causes and have the necessary resources to do so, such as time, money, and cognitive abilities. Additionally, internal political efficacy—the "feeling that one is capable of influencing the public decision-making process" (Milbrath & Goel, 1977, p. 57)—provides a psychological incentive for participation. These different sources of financial, human and social capital, in turn, reduce the costs of engaging in political activities.

The Internet has expanded the realm of political participation, as exemplified by the successful online campaign run by Barack Obama in the 2008

U.S. presidential election (Kenski, Hardy, & Jamieson, 2010). It is not clear, however, if the antecedents of political behavior online are the same as offline. For instance, U.S. survey data analyzed by Best and Krueger (2005) revealed that the resources described by the civic voluntarism model mattered less for online participation. Likewise, some studies have found that the Internet can attract people who are normally underrepresented in political participation, such as women, youth, and racial/ethnic minorities (Correa & Jeong, 2010; McCaughey & Ayers, 2003; Mossberger et al., 2008). Other research, however, suggests that digital technologies merely reinforce existing gaps in political participation, and that the use of interactive services during political campaigns is still dominated by those with higher socioeconomic status, educational attainment, and social capital (Hindman, 2009; Prior, 2007).

The somewhat contradictory evidence about the mobilizing and reinforcing effects of the Internet could be reconciled if online services can be shown to play an instrumental role in promoting participation by lowering the costs associated with acquiring mobilizing information and increasing political efficacy. This seems to hold true particularly when Internet use involves consumption of public affairs content such as news and this information is presented in an easy-to-navigate fashion (Boulianne, 2009). If this is the case, then online and offline political participation need not be treated as a unified form of engagement taking place in parallel worlds. As long as electronic voting is not widespread for national and regional elections, it is likely that online political behavior will lag behind traditional forms of engagement, which justifies treating both modes of participation as separate constructs.

The Characteristics of Political Discussion Networks

Political discussions, defined as "episodes of political conversation and discussion that take place between the non-elite members of a political community" (Schmitt-Beck, 2008, p. 341), have long been thought to be a major feature of the democratic process. Existing research indicates that when people talk about public affairs, they are more likely to mobilize and engage in political activities, particularly during election campaigns (Huckfeldt & Sprague, 1995; Shah, Cho, Eveland, & Kwak, 2005; Wyatt, Katz, & Kim, 2000). This is because conversations involve not only exchanges of information but also interpretive frameworks that help to process that information. By allowing people to grapple with ideas, elaborate arguments, and reflect upon the information acquired, conversations are a rich form of political information.

Yet, it is left to discern what specific attributes of informal discussions may spur participation. With some notable exceptions, the literature has focused on one or two variables of discussion at a time. A notable example of this trend is the work on how disagreement among discussants relates to

political engagement (Huckfeldt, Johnson, & Sprague, 2004; Mutz, 2006). Although it may well be more efficient to examine discussion attributes in isolation, here we consider several of them simultaneously—as they occur in the real world—in order to identify which characteristics are more consequential for political behavior that, in the current study, takes place online. We will consider four characteristics: Modality, type of relationship between discussants, degree of exposure to conflicting points of view, and use of logic and reasonableness. For each of these attributes, we posit specific expectations that will be analyzed empirically with an original survey of U.S. voting-age residents.

Interpersonal and Computer-Mediated Discussion Networks

With the diffusion of the Internet, researchers have begun to test the applicability of research findings based on face-to-face discussions to computer-mediated interactions (e.g., Ho & McLeod, 2008; Min, 2007; Price & Cappella, 2002). This is an important research matter because the two forms of political discussion differ in significant ways. Whereas offline discussions are mostly oral, synchronous, and rich in visual and social cues, online discussions tend to be written, and may be asynchronous or occur under conditions of anonymity (Lin, 2008). If anonymity reduces the costs of expressing political opinions and written content encourages further mental elaboration of information, online discussions can make a unique contribution to participation. By the same token, if anonymity leads to uncivil exchanges and web content easily distracts people away from political topics, online discussions can be less effective than face-to-face discussions at promoting participatory behaviors.

By eliminating time and space constraints, the Internet can dramatically reduce the costs of maintaining a larger social network. Several studies have found that online communications increase the amount and intensity of interactions within local community members (Hampton & Wellman, 2001; Kavanaugh, Carroll, Rosson, Zin, & Reese, 2005). Findings in this area suggest that Internet use can strengthen existing interpersonal ties and, at the same time, create new networks that continue offline. On the other hand, the Internet has also been found to promote nonlocal (i.e., geographically bound) social networks, such as online communities centered on common interests that perpetuate through discussions and exchanges of information (Papacharissi, 2004).

The reasons for joining online groups and becoming a member of an Internet network are manifold. Researchers have found that some individuals rely on online networks to overcome barriers to the formation of interpersonal networks, such as having a disability, being shy or belonging to a different cultural or socioeconomic group (Ho & McLeod, 2008; McKenna & Bargh,

1998). For these individuals, computer-mediated networks provide support and information that they do not find in the offline world. Other individuals find that online services such as Facebook and MySpace provide an efficient way of maintaining and solidifying existing offline relationships (Ellison, Steinfield, & Lampe, 2007; Valenzuela, Park, & Kee, 2009).

This supplementing role of online and offline social networks should not, however, be interpreted as both communication channels having the same characteristics and effects on online political participation. Scholars have long noted that uncivil behavior is more widespread in online political discussions, particularly when discussants are anonymous (Davis, 2005; Hill & Hughes, 1998). Because incivility in political exchanges depresses individuals' political trust (Mutz & Reeves, 2005), it may well be that online discussion networks deter political participation online. On the other hand, the textual nature of most online services results in communications that are deprived of the nonverbal cues typical of face-to-face interactions. As such, communications in online networks may be more goal-oriented than in offline networks (Berger, 2009). If this is the case, then computer-mediated discussions may be more efficient at mobilizing individuals to participate. Evidence of this already exists for civic-oriented forms of engagement (Gil de Zúñiga & Valenzuela, 2011).

Against these two contradictory possibilities, some research suggests a more nuanced picture on the link between online discussions and online participation. In separate studies of the 2000 and 2004 U.S. presidential elections, Shah and colleagues (2005, 2007) found that frequent political communication activities online made a unique contribution to participatory behaviors offline, even after controlling for news use, interpersonal political talk and exposure to campaign advertisements. In another study, Hardy and Scheufele (2005) showed that online chatting about politics had a direct association with political participation offline and a moderating effect on online news use. In other words, despite the uniqueness of interpersonal and computer-mediated networks, there is strong evidence that both types of discussion networks may promote political participation offline in similar ways. It is an empirical question if the same holds true for online forms of political engagement. Thus, the first couple of hypotheses of the study predict that:

H1a: Interpersonal network size is positively related with political participation online.

H1b: Online network size is positively related with political participation online.

Strong Ties and Weak Ties

Discussions can take place among individuals who are related to one another in varying degrees of closeness and intimacy. Discussion networks of friends

and family members are usually characterized by "intimacy, trust, respect, access, and mutual regard" (Kenny, 1994, p. 718). In discussions with visitors, friends of a friend, and strangers, on the other hand, there is no shared intimacy. Labeled as strong-tie networks and weak-tie networks, respectively, the two types of discussion networks have been found to have different effects on political participation. The early studies on personal influence found that strong-tie networks were a key source for political recruitment and participation (e.g., Katz & Lazarsfeld, 1955). However, with socioeconomic modernization, weak-tie networks have become more prominent and politically consequential. Granovetter (1973) argued that weak ties provide information and resources that individuals do not find in their immediate environment of relatives and close friends. In the political realm, the strength of weak ties lies in the provision of nonredundant, diverse information that stimulates political learning and offers new opportunities for mobilization (Huckfeldt, Beck, Dalton & Levine, 1995).

While there is substantive evidence that weak ties matter for political engagement (e.g., Kavanaugh et al., 2005; Kotler-Berkowitz, 2005), this evidence should not be used to dismiss the importance of strong ties. A cursory review of the political socialization literature yields strong support for the notion that political discussions around the family dining table are an important source of future engagement (Liebes & Ribak, 1992). On the other hand, stronger networks also tend to be agreeable ones (Mutz, 2006), which have been demonstrated to promote participation (McClurg, 2006). Therefore, it is not clear at all which type of discussion network is more consequential for participation in general or online participation in particular. Considering the mixed literature, we posit the following research question:

RQ1: What is the relationship between strong- and weak-tie discussion and political participation online?

Agreement and Disagreement

Scholarly interest on the role of heterogeneous networks on political participation has grown considerably in the last decade. Unfortunately, confusions and misunderstandings on the subject abound. The sociological perspective stresses the notion of diversity of participants' demographic background (e.g., ethnicity, gender, and socioeconomic status), whereas the political communication perspective focuses on differences in participants' political opinions. Here, we will focus on the effects on participation of differences in political views among discussants.

Since there is no agreed-upon operationalization of disagreement in political discussions and few studies control for several attributes of discussion at the same time, the literature on the subject is mixed. Mutz (2006) asked

respondents if they tend to have the different opinions compared to their discussion partners and then multiplied this measure by the frequency of discussion with each particular partner. With this measure, she found that higher disagreement deterred participation, either by increasing indecision and ambivalence about political issues or by making individuals more aware of the social costs of choosing to participate. Huckfeldt and colleagues (1995, 2004) relied on similarity of political affiliation as revealed by party ID or presidential vote. In their assessment, disagreement is much more pervasive and, thus, its impact on participation is not as negative as argued by Mutz. Lastly, Scheufele and colleagues (Scheufele, Hardy, Brossard, Waismel-Manor, & Nisbet 2006) incorporated dissimilarity in political affiliation along with differences in gender and other demographic characteristics and found that, actually, heterogeneity was positively related to participation.

Although asking for disagreement is a relatively simple, intuitive approach to gauging diversity of opinions, it risks confounding heterogeneity of viewpoints for isolation within discussion networks. Isolation is also related to political participation (see Hayes, Scheufele & Huge, 2006) but it is a different concept altogether. As Eveland and Hively (2009) have pointed out, discussions are not a zero-sum game; talking to like-minded people does not preclude from talking to nonlike-minded people. If that is the case, then researchers should include in their models of participation both discussion agreement and discussion disagreement. Consequently, in this study we will consider separately the relationships between online participation and both agreement and disagreement in political discussions.

While there is research that finds a positive link between discussion disagreement and political participation (Leighley, 1990; McLeod et al., 1999), the work of Mutz (2006) includes a variety of tests showing that under most circumstances the relationship is negative. That is, the more people are exposed to messages that challenge their views through their interpersonal network, the less they participate due to increased political ambivalence and fear of isolation. Conversely, discussion agreement should encourage participation by promoting a safer and supportive environment for the ego. These expectations were confirmed empirically by both Mutz (2006) and Eveland and Hively (2009), although it remains unclear the extent to which people actively avoid disagreement and seek agreement (Stromer-Galley & Muhlberger, 2009). Therefore, we posit two additional hypotheses:

H2a: Discussion agreement is positively related with political participation online.

H2b: Discussion disagreement is negatively related with political participation online.

Use of Reason and Evidence

Another characteristic of discussion networks is their level of reasonableness, that is, the extent to which participants of a network use logic and provide evidence for their claims when discussing political issues. This is a key aspect of political deliberation, in which citizens discuss public problems and solutions through conversations (Gastil, 2008). In the present study, we conceive reasonableness of discussion networks as assessments of the degree of reason, logic, and evidence in political discussions (Kim et al., 1999; Moy & Gastil, 2006).

By incorporating the use of logic and reasoning in discussion networks, we are taking into account Schudson's (1997) admonition that not all political conversations are meaningful for democratic participation. Whereas social conversation is not goal-oriented, political discussion is, or should attempt to be, problem-solving, issue-based and oriented toward exposing principles or defending public interests. Of course, informal political talk does not often follow the rules of deliberation, but it is expected that rational discussions, in which participants provide reasoned arguments and reflect upon them, can have beneficial effects on citizenship (Dryzek, 2000). This expectation rests on the assumption that reasonableness and evidence should facilitate reaching agreements on the problems or issues that needs to be addressed through government or collective action. At the same time, argumentation could enhance discussants' political knowledge, an important antecedent of participation.

The empirical evidence on the effect of reasonableness of discussions in participation tends to find a positive link. Kim et al. (1999) found that argument quality was a positive predictor of frequency of political conversations, which, in turn, was strongly associated with participatory activities. Rojas (2008) found that an "understanding orientation" towards discussions, which included an appreciation for reasonableness, was a significant predictor of measures of civic and political engagement, even after controlling for other attributes of discussions such as network size and heterogeneity. Considering these findings, our last hypothesis states:

H3: Reasoning discussion is positively related to political participation online.

Data and Method

Sample

To test the hypotheses, an online survey developed by the authors in conjunction with the CJCR: Community, Journalism and Communication Research group at the University of Texas at Austin was conducted among U.S. adults from across the United States shortly after the 2008 presidential

election. The survey instrument was administered using Qualtrics, a web survey software, and was pilot-tested before actual fieldwork. Respondents for the survey were selected from among those who registered to participate in an online panel administered by the Media Research Lab at the University of Texas at Austin. To overcome some of the limitations of using small, convenient samples such as college students, the Media Research Lab based this national sample on two U.S. Census variables, gender (52.2% males, 49.8% females) and age (30% 18–34 years; 39% 35–54 years; 31% ≥55 years). After matching a 10,000 random draw to these demographic characteristics, panel participants received the survey's URL through an e-mail invitation, which provided a time estimate to complete the survey and information about a monetary incentive for their participation. A first invitation was sent December 15, 2008 and three reminders were submitted in the following 3 weeks to improve response rates. A concluding reminder was sent January 5, 2009. A total of 1,432 e-mail addresses were invalid. Of the remaining 8,568 participants, 1,159 responded 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). This response rate was within the acceptable range for panel web-based surveys (Göritz, Reinhold, & Batinic, 2002) and similar to those reported by the Pew Research Center and its Internet & American Life Project employing random digit dialing (Pew Internet & American Life Project, 2009). As shown in the Appendix Table A1, when compared to U.S. Census data, our sample was older, had more females and was slightly better educated. However, there was no evidence that our sample was skewed in regard to income.

The analysis included one dependent variable, seven independent variables of interest, and ten control variables. The coding procedure of each variable is detailed below.

Dependent Variable

Online Political Participation. Respondents were asked to rate on a 10-point scale (where 1 = *never* and 10 = *all the time*) 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 "Post comments on a political blog." Items were added to create an index of online political participation (Cronbach's $\alpha = .87$, $M = 14.71$, $SD = 11.58$).

Independent Variables

Interpersonal Network Size. Survey respondents were asked in open-ended fashion to provide an estimate of the number of people they "talked to face-to-face or over the phone about politics or public affairs" during the past month. As could be expected, the variable was highly skewed ($M = 1.08$, *Median* $= 5.00$, $SD = 23.39$, skewness $= 12.03$). To produce a normalized distribution, the natural logarithm was computed ($M = 0.77$, *Median* $= 0.78$, $SD = 0.44$, skewness $= 0.23$).[1]

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 politics or public affairs." The variable was positively skewed as well ($M = 11.33$, *Medin* $= 1.00$, $SD = 63.71$, skewness $= 12.62$), so it was also transformed using the natural logarithm ($M = .46$, *Median* $= 0.30$, $SD = 0.53$, skewness $= 1.40$).

Strong-tie Discussion Frequency. The survey asked respondents to rate on a 10-point scale ($0 = never$, $9 = all\ the\ time$) how often they talked about politics or public affairs, whether online or offline, with family and friends ($M = 5.73$, $SD = 2.68$).

Weak-tie Discussion Frequency. Using the same 10-point scale for the previous variable, respondents were asked how often they talked about political or public affairs with co-workers and acquaintances and how often they talked with strangers. The two items were added to create an index of weak-tie discussion frequency (Spearman-Brown reliability coefficient $= .70$, $M = 5.80$, $SD = 4.35$).

Frequency of Discussion Agreement. Using a 10-point scale ($0 = never$, $9 = all\ the\ time$), respondents were asked the frequency with which they talked about politics or public affairs with people who agreed with them ($M = 4.45$, $SD = 2.57$).

Frequency of Discussion Disagreement. Respondents were asked the frequency with which they talked about politics or public affairs with people who disagreed with them, using the same 10-point scale than for the item measuring agreement ($M = 3.70$, $SD = 2.42$).

Frequency of Reasoning Discussion. Two items measuring how often respondents discussed with people who back up their arguments with evidence and with people who propose alternatives or policies for problem solving using

---

[1]We also tried recoding the values over a specific threshold into a single category. For four different thresholds (10, 20, 25, and 30), the relationship between the transformed variable and the dependent variables did not change significantly. To avoid the inherent arbitrariness of picking a threshold value, we opted for a logarithmic transformation, although we recognize that this makes the numbers of the variable less interpretable. To check that our results were not due to the presence of extreme outliers, we rerun the analysis excluding respondents with values > 50 for either of the network size variables; the results were virtually the same as those reported in Table I.

a 10-point scale were averaged into an index measuring level of reasoning within the network (Spearman–Brown reliability coefficient = 0.87, $M = 7.51$, $SD = 4.89$).

Control Variables

Offline Political Participation. Respondents were asked if during the past 12 months they had engaged or not 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," "Attended a political rally," "Participated in any demonstrations, protests, or marches," "Voted in the 2008 presidential election," "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 coded in binary fashion ($1 = yes$, $0 = no$) and added into a single index (Cronbach's $\alpha = .78$, $M = 2.39$, $SD = 2.0$).

Strength of Party Identification. Respondents were asked to rate their party identification using an 11-point scale ranging from strong Republican (8.7% of respondents) to strong Democrat (13.2% of respondents). The midpoint represented 29.1% of respondents. This item was folded into a 6-point scale, ranging from weak partisanship to strong partisanship ($M = 3.31$, $SD = 1.79$).

Internal Political Efficacy. An item asked respondents to rate their agreement with the statement "People like me can influence government". Responses ranged from $1 = not\ at\ all$ (15.7% of respondents) to $10 = all\ the\ time$ (7.3% of respondents; $M = 5.01$, $SD = 2.57$).

Offline News Media Use. Respondents were asked to rate on a 7-point scale (where $1 = every\ day$ and $7 = never$) how often they used the following media to get information about current events, public issues, or politics: network TV news, cable TV news, local TV news, and print newspapers. The items were reverse-coded, so that a higher number indicated more news use, and combined into an additive index (Cronbach's $\alpha = .70$, $M = 16.30$, $SD = 6.52$).

Online News Media Use. Respondents were asked to rate on a 7-point scale (where $1 = every\ day$ and $7 = never$) how often they used the following media to get information about current events, public issues, or politics: online newspapers, online news magazines and citizen journalism websites. The items were reverse-coded, so that a higher number indicated more news use, and combined into an additive index (Cronbach's $\alpha = .67$, $M = 5.50$, $SD = 4.24$).

Demographics. A variety of additional variables were included in the multivariate analysis to control for potential confounds. These are variables that the literature has found to be related to political participation online and

offline. The respondent's gender (67% females), age ($M = 45.79$, $SD = 11.31$) and race (70% whites) were straightforward in their measurement. Education was operationalized as highest level of formal education completed ($M = 4.15$, $Median = 2$-year college degree). For income, each respondent chose one of 15 categories of total annual household income ($M = 6.05$, $Median = $50,000–$59,999$).

Statistical Analysis

Hierarchical multiple OLS regression analysis was employed to test the hypotheses. The variables were entered causally in separate blocks: demographics, political orientations, news use, and discussion network attributes. This ordering allowed us (a) to assess the impact of each block of variables on participatory behavior online in terms of variance accounted for in the dependent variable, and (b) to examine the effects of discussion network attributes controlling for each other. All the analyses were conducted using the software SPSS 17.

Results

As shown in Table 1, the block of demographic variables explained <3% of the variance in online political participation. In contrast, political predispositions explained more than 35% of the variance of online participation—mainly due to the strong contribution made by offline forms of political participation ($\beta = .46$, $p < .001$) and internal political efficacy ($\beta = .11$, $p < .001$). The news use block, in turn, explained 4% of the variance in online participation. In general, younger, lower income respondents engaged more frequently in political activities online, as did those with a stronger identity with political parties and who were exposed to online news more frequently. These results suggest that political participation online and offline are closely related; nevertheless, demographic, political, and information-seeking factors exhibit a unique, independent relationship with online participation.

The block of discussion network attributes added significant explanatory power to the model. Together, these variables explained an additional 5.4% of variance. Respondents with a larger network of online discussants tended to be more engaged in online political activities ($\beta = 0.15$, $p < .001$), providing support for H1b. Interestingly, interpersonal network size was negatively associated with online participation once other network attributes were incorporated into the model ($\beta = -0.17$, $p < .001$). These results are consistent with the notion that people who discuss face-to-face are still not more likely to participate online. Thus, H1a was not supported.

In response to RQ1, we now turn to the role of strong-tie and weak-tie discussion frequency. The results indicate that, when controlling for each other,

Table 1
Hierarchical OLS Regression Predicting Online Political Participation

Variables	β
Block 1: Demographics	
Age	−.041[#]
Gender (female)	.006
Education	−.025
Income	−.089***
Race/Ethnicity (white non-Hispanic)	.014
ΔR^2	.026
Block 2: Political predispositions	
Offline political participation	.46***
Strength of partisanship	.065**
Internal political efficacy	.109***
ΔR^2	.351
Block 3: News use	
Offline news use	.012
Online news use	.133***
ΔR^2	.04
Block 4: Discussion network attributes	
Interpersonal network size (logged)	−.167***
Online network size (logged)	.146***
Strong-tie discussion frequency	.011
Weak-tie discussion frequency	.154***
Frequency of discussion agreement	.134***
Frequency of discussion disagreement	−.101**
Frequency of reasoning discussion	.076*
ΔR^2	.054
Adjusted R^2	.464

Notes: Cell entries show standardized regression coefficients. $n = 1{,}159$; [#]$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed).

weak-tie discussion networks had a positive, significant relationship to online participation ($\beta = 0.15$, $p < .001$) while strong-tie discussion did not ($\beta = 0.01$, $p > .20$).[2] These results support the existing literature that demonstrates the key role played by weak-tie networks in democratic citizenship, which allow people to tap into mobilizing resources that are not available in their closed networks of family and friends.

    Discussion agreement and disagreement had both significant, though opposite, relationships with online political participation, confirming that they do not have a zero-sum relationship. In line with the expectation that people who

---

[2]To test for the possibility of a curvilinear relationship between strong-tie discussion frequency and political participation online, we rerun the analysis with a squared term of strong-tie discussion frequency. The variable failed to achieve statistical significance.

receive less support for their views within their discussion networks tend to participate less, disagreement was negatively related to online engagement ($\beta = -0.10$, $p < .01$). Conversely, discussion agreement was positively related to online participation ($\beta = 0.12$, $p < .001$). These results are consistent with the deliberation versus participation dilemma. Consequently, H2a and H2b were supported.

Lastly, the variable measuring level of reasoning within individuals' discussion networks was positively related to participation online after controlling for other attributes of discussion networks ($\beta = 0.08$, $p < .05$), providing support for H3. However, the role of reasonableness in discussions was relatively minor once other discussions attributes were incorporated into the model. Thus, the analysis suggested that deliberative aspects of discussion were less important for online participation than other network characteristics.

Discussion

Summary of Findings

This study aimed to further our understanding of how discussions about politics and public affairs relate to political participation on and off the Internet. To date, few studies predicting political engagement have incorporated in their empirical models several attributes of discussion networks simultaneously. Even more rare is to see the role of discussion attributes on political participation when the latter is operationalized distinctively online and offline. The current study represents one effort towards filling these gaps by providing new insights on the mobilizing role in the new media environment of four dimensions of citizens' discussion networks: (a) modality (i.e., face-to-face and computer-mediated); (b) the strength of the ties that bind discussants; (c) the degree of expression of political similarity and difference between discussants; and (d) the use of logic and reasoning.

Using cross-sectional data from a national survey of voting-age adults collected in the United States shortly after the 2008 presidential election, this study found evidence that the size of online discussion networks is positively associated with greater online political participation. These findings support an instrumental perspective of Internet effects (Xenos & Moy, 2007). According to this view, web-based services facilitate the transmission of political messages, so that mobilizing information such as public petitions to authorities can be shared more effectively through interactive-based applications than through in-person conversations. Thus, online discussion networks can facilitate greater political engagement, especially online.

The results also indicate that some characteristics of discussants matter more for participation online than others. Discussing politics with weak ties—individuals who are outside the more closely-knit group of friends and family

members—seems to be quite consequential for online participation. As was hypothesized, those who frequently maintain these types of discussions exhibited a higher degree of political engagement online. These findings are most consistent with Granovetter's (1973) seminal work on the "strength of weak ties," which bridge individuals across different networks of people and provide new informational resources to individuals. Importantly, the role of weak ties was not subsumed by network size, a typical inference made by previous research. This finding suggests that strength of ties among discussants needs to be incorporated as a predictor in analyses that wish to explain how political discussion influence participatory behaviors online.

The results of the study also speak to the ongoing scholarly debate on the compatibility between political disagreement and citizens' engagement with politics. Discussion agreement was positively related to participation online while disagreement was negatively related with it. This overall pattern is consistent with the work of Mutz (2006). It may well be that disagreement elicits a better understanding of political affairs, but when it comes to motivate discussants to engage in online political activities, disagreement acts as a deterrent. This conclusion is bolstered by the positive link found between agreement and participation: politically homogenous networks seem more likely to include politically engaged individuals, too. Although this result may be interpreted as shedding a negative light on the benefits of heterogeneity of viewpoints, future research could resolve if political self-efficacy or other psychological predictor can counter these seemingly negative effects.

The last set of findings is related to the role played by the use of reason and evidence in citizens' discussions. The expectation was that there would be a positive association between reasonableness of discussions and political participation online. The analysis showed that the association was statistically significant but substantively weak once all the other discussion network attributes were controlled. The evidence suggests that this aspect of deliberations is not an important variable for political participation online.

Limitations and Future Research

Despite the new insights shed by this study, the analysis has several limitations. By employing survey data, we are constrained to self-reports of discussion network attributes, which may yield inaccurate measures due to imperfect recall and social desirability bias. Whereas self-reports of media exposure can be compared with TV ratings or newspaper circulation figures (e.g., Prior, 2009), there is no benchmark readily available to assess the accuracy of, say, individuals' reported size of their online discussion network. Consequently, future research could validate self-reported measures of discussion network attributes through experiments, snowball sample designs, and observational studies. For example, participants could be assigned to discussion groups of

varying size and asked, after a given period (a week, 2 weeks, or a month), to recall the number of people in their group. With a snowball survey, respondents could be asked to generate a list of their discussants as well as their contact information, so as to enable researchers to further verify the frequency with which these discussants talked about politics with the respondent. Observational studies could gauge more directly other discussion attributes, such as disagreement and reasoning. Nonetheless, previous research by Huckfeldt (2001) and Huckfeldt and Sprague (1995) provides some evidence that people can describe with relative accuracy the characteristics of their discussants. By employing a snowball sample technique, Huckfeldt (2001) was able to compare the accuracy of reports of discussants' political knowledge and found that the best predictor, by far, of people's *perceived* political knowledge of their discussants was the discussants' *actual* political knowledge. This led Huckfeldt (2001) to conclude that "people are not lost in a cloud of misperception when they engage in social communication about politics" (Huckfeldt, 2001, p. 437). While this body of work does not address network reasoning, we believe it lends support to the idea that surveys can yield a reasonable measure of discussion network attributes. On the other hand, while asking respondents about their discussions of politics and public affairs is common practice, clarifying in advance what is meant by these terms could yield discussion measures that are more robust and less prone to measurement error.

Another limitation is the cross-sectional nature of the data employed, which is not well-suited for testing causal-effects relationships. This means that the associations between political discussion and participation reported here could be interpreted otherwise; that participation online antecedes discussion of public affairs. Previous research by Rojas (2006), however, suggests that there is an asymmetrical reciprocal relationship between discussing and participating, an idea that has been demonstrated for political efficacy (Semetko & Valkenburg, 1998) and civic engagement (Shah et al., 2005) using panel data. While these studies show that discussion generally antecedes participation, future research using experimental settings, and longitudinal designs will have to sort out the causality quandary.

Another related problem of cross-sectional designs refers to endogeneity between explanatory and outcome variables. We have addressed the possibility that discussion networks are influenced by the same factors that affect political participation online by taking into account a host of control variables, including offline political participation, income, education, internal political efficacy, partisanship and news media use. Certainly, there are other ways of dealing with endogeneity, such as employing instrumental variables and two-stage least squares regression models. However, we have yet to find an instrumental variable that relates to political discussion but not to participation. This, of

course, should not be interpreted as political discussion and political participation being different labels to the same concept. Informal conversations about politics are not necessarily aimed at influencing government; they oftentimes fulfill purely social and entertainment goals (Mansbridge, 1999; Walsh, 2004).

In any case, we have been careful in highlighting the idea of relationships between discussion network attributes and participation online, rather than stating a unidirectional or causal-effect association between them.

Theoretical Contributions

Limitations notwithstanding, the results of the study contribute to the existing literature in two ways. First, we theorized that online and offline political participation are related, yet distinct concepts and we find evidence that supports this assumption. Even after controlling for the effect of offline political participation over political participatory behaviors on the online realm, it is clear that the discussion attributes distinctively predict variance in the ways people participate in political activities online. Thus, online and offline participation share a foundation but are empirically different, and discussion attributes explain reasonably well some of those differences.

Second, we demonstrate the value of considering simultaneously a host of attributes of political discussion networks. Weak ties, which have garnered considerable attention in sociological research but less so in the political communication literature, appear to be a key ingredient of discussion networks that mobilize citizens to participate in politics online. In contrast, discussion network attributes that have been highlighted by political communication scholars as essential for promoting citizen engagement, such as reasoning, seem to be far less consequential, at least for Internet-based political participation. Most importantly, the study confirms that disagreement and agreement in discussions are not mutually exclusive. Specifically, in line with Mutz' work on deliberative versus participatory democracy, the results suggest that disagreement is negatively related to engagement, while agreement is positively related to it.

We are convinced that the current findings will be elaborated upon by researchers interested in the mobilizing effect of other discussion network attributes. The psychological predispositions that foster or dampen these effects, such as political interest and knowledge, will be another venue for future research. Also, technical competency, which differs greatly across segments of the population (Correa, 2010), may moderate the relationship between discussion attributes and political participation online. These efforts should lead to a new theory of informal political conversations, a pending task for communication scholars.

References

American Association of Public Opinion Research. (2008). *Standard definitions: Final dispositions of case codes and outcome rates for surveys.* Retrieved from http://www .aapor.org/uploads/Standard_Definitions_04_08_Final.pdf.

Berger, C. R. (2009). Interpersonal communication. In D. W. Stacks, & M. B. Salwen (Eds.), *An integrated approach to communication theory and research* (2nd ed., pp. 260-279). Mahwah, NJ: Lawrence Erlbaum Associates.

Best, S. J., & Krueger, B. S. (2005). Analyzing the representativeness of Internet political participation. *Political Behavior, 27*(2), 183–216.

Boulianne, S. (2009). Does internet use affect engagement? A meta-analysis of research. *Political Communication, 26*(2), 193–211.

Brady, H. E. (1999). Political participation. In J. P. Robinson, P. R. Shaver & L. S. Wrightsman (Eds.), *Measures of political attitudes* (Vol. 2 of Measures of Social Psychological Attitudes, pp. 737–801). San Diego: Academic Press.

Correa, T. (2010). The participation divide among "web experts": Psychological factors, experience, and skills as predictors of web content creation among college students. *Journal of Computer-Mediated Communication, 16*, 71–92.

Correa, T., & Jeong, S. H. (2010). Race and online content creation. Why minorities are actively participating in the Web. *Information, Communication & Society,* [Epub ahead of print; December, 2, 2010, doi: 10.1080/1369118X .2010.514355].

Davis, R. (2005). *Politics online: Blogs, chatrooms, and discussion groups in American democracy.* New York: Routledge.

Downs, A. (1957). *An economic theory of democracy.* New York: Harper & Row.

Dryzek, J. S. (2000). *Deliberative democracy and beyond: Liberals, critics, contestations.* Oxford: Oxford University Press.

Eveland, W. P., Jr., & Hively, M. H. (2009). Political discussion frequency, network size, and "heterogeneity" of discussion as predictors of political knowledge and participation. *Journal of Communication, 59*, 205–224.

Gastil, J. (2008). *Political communication and deliberation.* Los Angeles, CA: Sage.

Gil de Zúñiga, H., & Valenzuela, S. (2011). The mediating path to a stronger citizenship: Online and offline networks, weak ties and civic engagement. *Communication Research, 38*, 397–421.

Göritz, A. S., Reinhold, N., & Batinic, B. (2002). Online panels. In B. Batinic, U.-D. Reips, M. Bosnjak & A. Werner (Eds.), *Online social sciences* (pp. 27–47). Seattle, WA: Hogrefe.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78*, 1360–138.

Habermas, J. (1984). *The theory of communicative action: Reason and the rationalization of society.* Boston, MA: Beacon Press.

Hampton, K., & Wellman, B. (2001). Long distance community in the network society: Contact and support beyond Netville. *American Behavioral Scientist, 45*, 476–495.

Hardy, B. W., & Scheufele, D. A. (2005). Examining differential gains from Internet use: Comparing the moderating role of talk and online interactions. *Journal of Communication, 55*, 71–84.

Hayes, A. F., Scheufele, D. A., & Huge, M. E. (2006). Nonparticipation as self-censorship: Publicly observable political activity in a polarized opinion climate. *Political Behavior, 28*, 259–283.

Hindman, M. S. (2009). *The myth of digital democracy*. Princeton, NJ: Princeton University Press.

Hill, K. A., & Hughes, J. E. (1998). *Cyberpolitics: Citizen activism in the age of the Internet*. Lanham, MD: Rowman & Littlefield.

Ho, S. S., & McLeod, D. M. (2008). Social-psychological influences on opinion expression in face-to-face and computer-mediated communication. *Communication Research, 35*, 190–207.

Huckfeldt, R. (2001). The social communication of political expertise. *American Journal of Political Science, 45*, 425–438.

Huckfeldt, R., Beck, P. A., Dalton, R. J., & Levine, J. (1995). Political environments, cohesive social groups, and the communication of public opinion. *American Journal of Political Science, 39*, 1025–1054.

Huckfeldt, R., Johnson, P. E., & Sprague, J. (2004). *Political disagreement: The survival of diverse opinions within communication networks*. Cambridge: Cambridge University Press.

Huckfeldt, R., Mendez, J. M., & Osborn, T. (2004). Disagreement, ambivalence, and engagement: The political consequences of heterogeneous networks. *Political Psychology, 25*, 65–95.

Huckfeldt, R., & Sprague, J. (1995). *Citizens, politics, and social communication: Information and influence in an election campaign*. Cambridge, UK: Cambridge University Press.

Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence: The part played by people in the flow of mass communication*. Glencoe, IL: Free Press.

Kaufhold, K., Valenzuela, S., & Gil de Zúñiga, H. (2010). Citizen journalism and democracy: How user-generated news use relates to political knowledge and participation. *Journalism & Mass Communication Quarterly, 87*, 515–529.

Kavanaugh, A., Carroll, J. M., Rosson, M. B., Zin, T. T., & Reese, D. D. (2005). Community networks: Where offline communities meet online. *Journal of Computer-Mediated Communication, 10*, article 3. Retrieved from http://jcmc.indi-ana.edu/vol10/issue4/kavanaugh.html.

Kenny, C. B. (1994). The microenvironment of attitude change. *Journal of Politics, 56*, 715–728.

Kenski, K., Hardy, B. W., & Jamieson, K. H. (2010). *The Obama victory: How media, money and message shaped the 2008 elections*. New York: Oxford University Press.

Kim, J., Wyatt, R. O., & Katz, E. (1999). News, talk, opinion, participation: The part played by conversation in deliberative democracy. *Political Communication, 16*, 361–385.

Kotler-Berkowitz, L. (2005). Friends and politics: Linking diverse friendship networks to political participation. In A. S. Zuckerman (Ed.), *The social logic of politics: Personal networks as contexts for political behavior* (pp. 152–170). Philadelphia, PA: Temple University Press.

Leighley, J. E. (1990). Social interaction and contextual influences on political participation. *American Politics Quarterly, 18*, 459–475.

Liebes, T., & Ribak, R. (1992). The contribution of family culture to political partici-
pation, political outlook, and its reproduction. *Communication Research, 19*, 618–641.

Lin, C. A. (2008). Effects of the Internet. In J. Bryant, & M. B. Oliver (Eds.), Media
effects: Advances in theory and research (3rd ed., pp. 567–591). New York:
Routledge.

Mansbridge, J. (1999). Everyday talk in the deliberative system. In S. Macedo (Ed.),
Deliberative politics: Essays on democracy and disagreement (pp. 211–239). Oxford:
Oxford University Press.

McCaughey, M., & Ayers, M. D. (2003). *Cyberactivism: Online activism in theory and
practice*. New York: Routledge.

McClurg, S. D. (2006). The electoral relevance of political talk: Examining disagree-
ment and expertise effects in social networks on political participation. *American
Journal of Political Science, 50*, 737–754.

McKenna, K. Y. A., & Bargh, J. A. (1998). Coming out in the age of the Internet:
Identity "demarginalization" through virtual group participation. *Journal of
Personality and Social Psychology, 75*, 681–694.

McLeod, J. M., Scheufele, D. A., Moy, P., Horowitz, E. M., Holbert, R. L.,
Zhang, W., *et al.* (1999). Understanding deliberation: The effects of discussion
networks on participation in a public forum. *Communication Research, 26*, 743–774.

Milbrath, L. W., & Goel, M. L. (1977). *Political participation: How and why do people
get involved in politics?* Chicago: Rand McNally.

Min, S.-J. (2007). Online vs. face-to-face deliberation: Effects on civic engagement.
Journal of Computer-Mediated Communication, 12, 1369–1387.

Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2007). *Digital citizenship: The
Internet, society and participation*. Cambridge, MA: MIT Press.

Moy, P., & Gastil, J. (2006). Predicting deliberative conversation: The impact of
discussion networks, media use, and political cognitions. *Political Communication,
23*, 443–446.

Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*.
New York: Cambridge University Press.

Mutz, D. C., & Reeves, B. (2005). The new videomalaise: Effects of televised incivil-
ity on political trust. *American Political Science Review, 99*, 1–15.

Nir, L. (2005). Ambivalent social networks and their consequences for participation.
International Journal of Public Opinion Research, 17, 422–442.

Papacharissi, Z. (2004). Democracy on-line: Civility, politeness, and the democratic
potential of on-line political discussion groups. *New Media & Society, 6*, 259–284.

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking
environment: Facebook Groups, uses and gratifications and social outcomes.
CyberPsychology & Behavior, 12, 729–733.

Pew Internet & American Life Project. (2009). *Our survey methodology in detail*.
Retrieved from http://people-press.org/methodology/our-survey-methodology-in-
detail/.

Price, V., & Cappella, J. N. (2002). Online deliberation and its influence: The
electronic dialogue project in campaign 20. *IT & Society, 1*, 303–329.

Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in
political involvement and polarizes elections*. New York: Cambridge University Press.

Prior, M. (2009). The immensely inflated news audience: Assessing bias in self-reported news exposure. *Public Opinion Quarterly, 73*, 130–143.

Rojas, H. (2006, June). *Orientations towards political conversation: Testing an asymmetrical reciprocal causation model of political engagement.* Paper presented at the annual meeting of the International Communication Association, Dresden, Germany.

Rojas, H. (2008). Strategy versus understanding: How orientations toward political conversation influence political engagement. *Communication Research, 35*, 452–448.

Rosenstone, S. J., & Hansen, J. M. (1993). *Mobilization, participation, and democracy in America*. New York: Macmillan.

Scheufele, D. A., Hardy, B. W., Brossard, D., Waismel-Manor, I. S., & Nisbet, E. (2006). Democracy based on difference: Examining the links between structural heterogeneity, heterogeneity of discussion networks, and democratic citizenship. *Journal of Communication, 56*, 728–753.

Schmitt-Beck, R. (2008). Interpersonal communication. In L. L. Kaid & C. Holtz-Bacha (Eds.), *Encyclopedia of political communication*, (Vol. 1, pp. 341–350). Los Angeles: Sage.

Schudson, M. (1997). Why conversation is not the soul of democracy. *Critical Studies in Mass Communication, 14*, 297–309.

Semetko, H. A., & Valkenburg, P. M. (1998). The impact of attentiveness on political efficacy: Evidence from a three-year German panel study. *International Journal of Public Opinion Research, 10*(3), 195–21.

Shah, D. V., Cho, J., Eveland, W. P., Jr., & Kwak, N. (2005). Information and expression in a digital age modeling Internet effects on civic participation. *Communication Research, 32*, 531–565.

Shah, D. V., Cho, J., Nah, S., Gotlieb, M. R., Hwang, H., Lee, N.-J., *et al.* (2007). Campaign ads, online messaging, and participation: Extending the communication mediation model. *Journal of Communication, 57*, 676–703.

Stromer-Galley, J., & Muhlberger, P. (2009). Agreement and disagreement in group deliberation and its consequences: Satisfaction, engagement, and opinion reevaluation. *Political Communication, 26*, 173–192.

de Tocqueville, A. (1988). *Democracy in America* (G. Lawrence, Trans.). New York: Harper Collins. (Original work published 1840).

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust and participation. *Journal of Computer-Mediated Communication, 14*, 875–901.

Verba, S., & Nie, N. H. (1972). *Participation in America: Political democracy and social equality*. New York: Harper & Row.

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.

Walsh, K. C. (2004). *Talking about politics: Informal groups and social identity in American life*. Chicago: University of Chicago Press.

Wyatt, R. O., Katz, E., & Kim, J. (2000). Bridging the spheres: Political and personal conversation in public and private spaces. *Journal of Communication, 50*, 71–92.

Xenos, M., & Moy, P. (2007). Direct and differential effects of the Internet on political and civic engagement. *Journal of Communication, 57*, 704–718.

Biographical Notes

Sebastián Valenzuela (PhD, University of Texas at Austin) is an assistant professor in the School of Communications at Catholic University of Chile. His research focuses on political communication, public opinion, digital technologies and media effects.

Yonghwan Kim (MA, University of Texas at Austin) is a doctoral candidate in the School of Journalism at the University of Texas at Austin. His research interests include new communication technology, media psychology, and public opinion research.

Homero Gil de Zúñiga (PhD, University of Wisconsin–Madison; PhD, Universidad Europea de Madrid, Spain) is an assistant professor in the School of Journalism at the University of Texas at Austin, where he heads the CJCR: Community, Journalism and Communication Research group. His work focuses on the influence of Internet use in people's daily lives as well as the effects of such use over the overall democratic process.

Appendix A

Table A1
Demographic Profile of Study Survey and Other Comparable Surveys

Variables	CJCR Survey December 2008–January 2009 (%)	Pew Internet & American Life Project Post-Election Survey November–December 2008 (%)	U.S. Census Community Population Survey November 2008 (%)
Age (years)			
18–24	3.5	6.0	12.5
25–34	18.9	9.9	17.8
35–44	21.6	13.5	18.4
45–64	5.5	4.5	34.6
≥65	5.5	3.2	16.6
Gender			
Male	33.0	47.2	48.3
Female	67.0	52.8	51.7
Race/Ethnicity			
White	84.4	79.8	68.5
Hispanic	4.5	6.1	13.7
African American	5.0	9.2	11.8
Asian	3.0	1.3	4.6
Education			
High school or less	15.4	38.4	44.6
Some college	28.1	27.7	28.3
College degree	37.2	19.8	18.1
Graduate degree	19.2	14.1	9.0
Household income			
<$49,999	41.1	51.2	42.0
$50,000–$99,999	37.9	31.8	35.3
≥$100,000	21.0	17.1	22.7