From Encounters to Engagement

- Examining Political Engagement in an Age of Social Media

by

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CHAPTER I

Introduction

The rise of new technologies has brought about a significant shift in the landscape of communication and continues to transform the interactive patterns of citizens. The use of digital technologies allows individuals to easily connect with others, and seamlessly move across communicative boundaries to discuss matters of their interest. The proliferation of various information platforms on the Internet produced an explosion of information available to the public. Such changes in the communication environment have led researchers to explore the political impact of interacting in the newly emerged venues, with an interest in understanding the process through which citizens become involved in democracy.

One of the defining elements of the current media landscape is the widespread use of social media. Over the past decade, social networking sites have become part of the everyday lives of Internet users around the world. In addition to facilitating interpersonal interactions between network ties, social media have evolved as an effective tool for disseminating news and seeking information. In this context, this dissertation seeks to explore the potential political outcomes of social media use. While there is a rapidly growing body of research about the impact of political uses of social media, this dissertation seeks to contribute to extant literature by drawing attention to the potential of everyday uses of social media. More specifically, this dissertation argues that social media have ushered in a fundamental shift from *purposefully*

seeking information to *encountering* information through social mediation, and addresses the need to go beyond the uses and gratification framework.

This dissertation is composed of three studies that contribute to our understanding of the political potential of social media use. The following Chapter 2 will introduce the theoretical foundations of this research through a literature review on the transformation of political communication in response to the rise of new technologies. This chapter will also discuss the unique characteristics of interacting in social media that create an opportunity to encounter politics and current affairs through communicating with others. Next, Chapters 3, 4, and 5 will each present studies that explore the outcomes of social media use on three different dimensions of democratic citizenship. Finally, Chapter 6 will discuss the findings of the three studies from a broader perspective, tying them back to the core questions that motivated this dissertation. This final chapter will also address the limitations of this research and suggest opportunities for future research.

CHAPTER II

Theoretical Motivations and Background

The overarching subject this dissertation explores is the relationship between social media use and democratic citizenship. This research is motivated by the question of whether the distinct interactive dynamics in social media can invigorate citizens' political engagement, by facilitating a social stream of information that allows users to encounter news and politics. The premise of the current research marks a clear departure from the theoretical framework of previous new media research based on the uses and gratifications model, which gave little weight to the potential political benefits of recreational uses of technologies and focused more on the positive outcomes of informational uses. This chapter reviews prior work that addressed the political consequences of the changing media environment from a macro perspective, and considers the characteristics of social media that illustrate their potential to widen the spectrum of opportunities for users to encounter news and political content.

Political Communication in the Digital Age

The widespread use of information and communication technologies, particularly the Internet, has led to various predictions about their political outcomes. Early empirical work on the political impact of the Internet predicted that Internet use would bring detrimental

consequences to citizens' engagement in civic and political life (Kraut et al., 1998; Nie & Erbring, 2000; Putnam, 1996). This argument was based on the assumption that the web would primarily be used for recreational purposes, and would erode social connections through time displacement and social withdrawal (Kraut et al., 1998; Putnam, 1996). Yet this view was challenged on a number of aspects, particularly because of the change in focus from the *time* people spent on the Internet to *how* people used the Internet.

The prominent view in subsequent research has been that the impact of the online environment is largely dependent on the type of use, demonstrating the positive democratic outcomes of utilizing the web with informational or political purposes (McLeod & Scheufele, Moy, 1999; Shah, Eveland, & Kwak, 2005; Wellman, Haase, Witte, & Hampton, 2001). Drawing from the theoretical establishments of the uses and gratifications model (Katz, Blumer, & Gurevitch, 1974), studies have shown that in contrast with recreational or entertainmentoriented uses of the Internet, using the web to access news or exchange political viewpoints with others plays an instrumental role in promoting citizen participation in political activities (Hardy & Scheufele, 2005). The flexibility of the web would enhance the users' ability to get news and information in a timely manner and go into greater depth about current issues of importance (Davis, 1999; Jones, 1995; Rheingold, 1993). Using the Internet to share political perspectives with others or to contact political elites by email have been found to directly contribute to citizens' engagement in political activities (Shah et al., 2005). Such informational uses of the Internet enable citizens to form better-informed opinions and acquire necessary mobilizing information, which can positively contribute to their participation in politics (Graber, Bimber, Bennett, Davis & Norris, 2004; Price & Cappella, 2002). These findings are presented in

contrast with the insignificant or negative impact of recreational uses of the Internet on civic and political engagement.

Focusing on the vast amount of information available on the Internet, another group of scholars have argued that the Internet creates a high-choice media environment with diverse sources for specific information, which is not only expected to intensify the selectivity of users and limit their information exposure to be based on personal predispositions, but also enable them to stay politics-free in their daily information intake (Prior, 2007). This argument contrasts the current media environment with that of the 1970's, when the television set in the average household in the United States provided less than ten channels, and only three broadcast networks captured nearly 80 percent of all viewing (Prior, 2007). Yet four decades later, over 90 percent of American households with television have cable or satellite subscription with a choice of hundreds of channels (Nielsen, 2012), and 70 percent of Americans have high-speed broadband Internet access at home (Pew Internet & American Life Project, 2013).

Prior (2007) maintains that in the previous low-choice environment, citizens with even political interest or less education could still learn about politics as a result of "byproduct learning," whether or not they were particularly motivated to follow the news. In the high-choice environment, however, greater importance is placed on the individuals' motivation to seek political information, given that they now have the option to switch from viewing news to entertainment and to opt out from current affairs or politics (Prior, 2007). According to this view, the online media environment would decrease the frequency of involuntary exposure to political information or incidental learning about politics, to the extent that the knowledge gap among citizens could potentially be further widened (Prior, 2007).

This discussion was framed as the change from politics by default (Neuman, 1996) to politics by choice (Prior, 2007); a shift from an environment where citizens came across politics while seeking to fulfill other communicative needs, to one that emphasizes the individuals' motivation and interest to actively choose politics. The emphasis on individuals' choice raised concerns regarding the consequences of selective exposure in the online information environment. Not only can the enhanced choice of users decrease the likelihood of their inadvertent exposure to news and politics, but also increase their selectivity in choosing political content, which can intensify the fragmentation and polarization of public discourse (Bennett & Iyengar, 2008; Sunstein, 2007).

Nevertheless, this dissertation draws attention to how the web continues to evolve and is undergoing a significant shift towards convergence. The creation and proliferation of social media represent a transformation of the online information ecology, where *information* is increasingly merged with *sociality*. Originally created to facilitate interpersonal connections among known network ties, social media have grown as a platform for communication where users can interact with their friends and exchange information about virtually any topic of their interest. As social media become increasingly integrated into the everyday lives of citizens, the implications of interacting in these networks have attracted considerable interest from various fields of research. The following section will review the characteristics of the social media environment with a focus on their growing significance as a platform for news and information.

The Social Media Environment

In 2013, Facebook and Twitter ranked among the top ten most visited sites in the world, with Facebook only second to Google both in the world and the United States (Alexa, 2013). Social media represent a sizeable category of online services that allow users to establish their personal "profiles" and to easily connect with others by exchanging messages or posting commentaries in textual or visual formats (boyd, 2006; boyd & Ellsion, 2007). While social networking sites operate on the basis of personal profiles through which individual users update their status to express themselves, over the years, most services have also incorporated a centralized newsfeed interface that provides an aggregate overview of status updates in reversechronological order. Such an interface facilitates the collective sharing and accessing of news and information circulated within networks, redefining the dynamics of news diffusion and accelerating the growth of social networking sites as an open information platform. Citizens are now able to instantly connect and share information with any number of peers in their online social networks (Bakshy, Marlow, Rosenn, & Adamic, 2012). Thus, as a platform for "sociallymediated" information, social networking sites have changed the costs of content distribution as well as the patterns of information exposure.

Whereas the content shared in social networking sites is not necessarily expected to be about politics or social issues, users report that news and public affairs information have become increasingly visible. Recent studies show that along with pictures of children, animals, and light-hearted talk about everyday concerns, news and discussions about politics flourish in social networking sites (Tufekci & Wilson, 2012). Given the blurred boundaries between what defines political and apolitical communicative spaces online (Brundidge, 2010), news and political

conversations flow seamlessly into social networking sites (Bakshy et al., 2012). The presence of news in social networking sites has grown to the extent that the window through which the public views the world is increasingly the Facebook newsfeed or Twitter timeline, rather than the front page of the New York Times, particularly for the 18-30 age group demographics (Messing & Westwood, 2012).

In this context, researchers have explored the political outcomes of citizens' interactions in social networking sites. Studies have revealed the positive consequences of social media use with respect to a number of aspects, such as facilitating political discussions (Kim, 2011; Velasquez, 2012), participations in civic and political activities (Gil de Zúñiga, Jung, & Valenzuela, 2012; Kim, Hsu, & Gil de Zúñiga, 2013; Valenzuela, Park, & Kee, 2009), as well as the likelihood of voting during elections (Aral, 2012). Applying the framework of the uses and gratifications theory (Katz, Blumer, & Gurevitch, 1974), these studies show that when social media are utilized for particular purposes, their use can significantly contribute to the individuals' engagement in politics (Gil de Zúñiga et al., 2012). That is, using social media to get news or political campaign updates, to start a political group, or to send political messages, was positively associated with indicators of political involvement (Aral, 2012; Kim, 2011; Gil de Zúñiga et al., 2012). These previous research efforts provide valuable insight into the political aspect of interacting in the online social networks. Nevertheless, limiting this discussion to uses driven by specific purposes, whether political or informational, would place an artificial boundary on the field's understanding about the general uses of social media. The next section will consider the unique dynamics in social media that are redefining their function as an interactive information platform where users can *encounter* news and politics shared by social intermediaries in their networks.

Encountering Information in Social Media

At the structural level, any content that is shared by users in social networking sites is pushed to the newsfeeds of their friends, generating a user-directed stream of information broadcasted within their networks. The significant influx of news and political conversations and the structural features that enable individuals to broadcast information have created an interesting intersection between socializing and information sharing in a single interactive venue. That is, social media platforms represent a notable change in the online information dynamics, through which users can be inadvertently exposed to contents shared by their friends, and can now *encounter* information even in the absence of a particular intention to be informed.

The primary motivation of social media users is to stay socially connected with others (Pew Internet & American Life Project, 2013). Nevertheless, users state that they also acquire information that they did not expect; illustrating that social media use can significantly increase the opportunities for encountering news and political information (Nielsen Reports, 2009). Such inadvertent exposure can be facilitated through a non-avoidance of encounters with political information (Brundidge, 2010).

While little empirical research has explored the implications of incidental exposure to news, research findings suggest that accidentally encountering news on the Internet can lead to greater knowledge in current affairs (Tewksbury, Weaver, & Maddex, 2001), and engagement in political activities (Kim, Chen, & Gil de Zúñiga, 2013; Lemert, 1984). News and information mediated through social ties present politics in less cognitively demanding ways and can generate instantaneous interest to further seek relevant information, enhancing the individuals' understanding of news (Mutz, 2006; Pan, Shen, Paek, & Sun, 2006). Studies examining the

impact of different dimensions of Internet use have found that "socially-based Web activities," such as chatting with peers was positively linked to the users' participation in political activities (Moy, Manosevitch, Stam, & Dunsmore, 2005). In a more recent study, stumbling upon news while browsing the Internet was found to be a positive predictor of engagement in political activities, both in the offline and online contexts (Kim, et al, 2013). These research findings suggest the potential of interactive platforms that are not specifically politically driven, but where politics is brought up incidentally, such as social networking sites (Neuman, Hindman, & Bimber, 2010; Wojcieszak & Mutz 2009).

In this context, this dissertation examines the democratic outcomes of interacting in social media platforms, with a particular focus on the social element involved in the information sharing. More specifically, this dissertation explores whether networked communication among social ties can effectively inform and motivate citizens to become involved in the political process. Granted that a healthy participatory democracy is the product of citizens' political deliberation, this dissertation asks if social media can serve as an effective source for information and expand the venue for political expression to promote an informed and engaged citizenry. Moreover, this dissertation draws attention to the role of network characteristics in shaping the impact of social media use.

The Moderating Role of Network Characteristics

Research suggests that all interpersonal relations and constructions of a citizen's social network serve as a filter on the macro environmental flow of political information (Huckfeldt, Beck, Dalton, & Levine, 1995). The consequences of the larger information environment often

depend on the existence of micro environments and social networks which expose citizens to surrounding opinion distributions. The social flow of political information is thus understood as a process of individual preference operating within larger contexts of information flows (Huckfeldt, et al, 1995). This networked flow of ideas and information is present in social media more than anywhere else, where individuals seek to build interpersonal connections. In the online social network context, it is therefore neither the individual's preference nor the entire online environment that solely determinate the flow. Rather, the information that citizens ultimately obtain through social channels of communication is contingent on the composition of one's network.

As suggested by Rogers and Bhowmik (1969), both homophily and heterophilly, or the similarity and dissimilarity between individuals in networks are necessary ingredients for the effective diffusion of information. Homophily refers to the tendency for individuals to cultivate social ties that are similar to themselves, resulting in a social structure characterized by groups that are largely homogenous along socio-graphic traits and attitudinal orientations (Lazarsfeld & Merton, 1954). When networks are completely homogenous, individuals are likely to already know the information shared by others. On the other hand, when networks are completely heterogeneous, individuals are less likely to share a "common code", and no information sharing would occur (Rogers & Bhowmik, 1969). Thus, in order to maximize the effectiveness of communication, networks should be on a spectrum between homo- and heterogeneity on variables relevant to the situation (Rogers & Bhowmik, 1969).

Scholars have put forth different predictions about the diversity of online social networks. Some suggest that online social networks will tend to exhibit homophily because individuals are more likely to choose friends that have similar tastes and preferences (Aral, & Walker, 2012;

Huckfeldt & Sprague, 1995, McPherson, Smith-Lovin, Cook, 2001). Homophily would limit people's social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience. The principle of homophily would suggest that the news and information brought to attention within one's online social network would not necessarily accommodate partisan diversity. In fact, a recent study of Twitter with the 10 most controversial issues in the U.S. found that Twitter users are unlikely to be exposed to cross-ideological content from the clusters of users they followed, as these are usually politically homogeneous (Himelboim, McCreery, & Smith, 2013). This study illustrates that the political discourse in online social networks such as Twitter is highly partisan, and that the clusters of users are characterized by homogeneous political views (Himelboim, McCreery, & Smith, 2013).

On the other hand, scholars suggest that while some social media users may choose to establish connections based on their political orientations, it is not the only criterion to establish friendship in online social networks (Lee, Choi, Kim, & Kim, 2014). Most social media platforms encourage users to maintain relationships that include both strong and weak ties (Hampton, Goulet, Her, & Rainie, 2009), increasing the likelihood of introducing counterattitudinal content into social networks (Mutz & Mondak, 2006). The enhanced connectedness among weak ties increases the likelihood that social media users stumble upon novel viewpoints that they might not otherwise hear from more tightly knit social circles (Granovetter, 1973; Bakshy et al., 2012). The inflow of information mediated through close as well as distant social ties in online networks can increase the likelihood of crosscutting encounters (Boase, Horrigan, Wellmann, & Rainie, 2006; Goel, Mason, & Watts, 2010; Kim, Hsu, & Gil de Zúñiga, 2013).

While scholars agree that heterogeneous discussion networks are more likely to expose individuals to diverse political viewpoints and that homogeneous networks could intensify

partisan polarization (Huckfeld, Mendez, & Osborn, 2004), there is competing evidence to predict the actual characteristics of online social networks. Nevertheless, given that the information any individual user will encounter through interacting in social media will strongly depend the characteristics of the network, this dissertation incorporates this concept as a moderator of the potential political outcomes of social media use.

The Potential Outcomes of Social Media Use

While there is a significant influx of news, current affairs, and politics into online social networks, whether encountering contents through the social stream of information can in fact contribute to a well-informed and engaged democratic citizenry remains unclear. Recent studies provide evidence to suggest that the news stories visible in online social networks might not necessarily correspond to the news reported in traditional news media. A study of the most emailed news stories of the New York Times website shows that stories involving emotional or useful elements were shared more often than the newspaper's headlines featured online (Berger & Milkman, 2012). Reports also show that due to the real-time nature of social media, issues that draw immediate attention are introduced more frequently than enduring problems that require relatively long-term attention (Newman, 2011). A report by the Reuters Institute for the Study of Journalism shows that the most frequently shared news stories on Twitter were shocking, funny, or weird in terms of the mood (Newman, 2011). Over a four-month period, the most shared news were about disasters and deaths, latest updates on breaking stories, quirky and funny stories, provocative comments and analyses, and original and distinctive content (Newman, 2011).

Thus, while news and political information in social media can attract the attention of users and lead to an increased awareness of issues or motivation for engagement, there is a chance that its use might paint a different picture of the world, swayed by psychological factors that drive human interests. In addition, there is competing evidence to conceptualize the social media as a sphere for political discourse that embraces political diversity. Taken together, despite the growing number of studies addressing the political impact of online social networking, their relationship remains unclear, as is the underlying mechanism that produces the relationships. In an effort to construct a better understanding of the consequences of social media use, this dissertation presents three studies that examine the political outcomes of interacting in these venues. Based on the premise that interacting in social media will allow individuals to encounter news and political information, the current dissertation examines the implications of online social networking on three different dimensions of democratic citizenship.

The first study presented in Chapter 3 explores whether citizens' interactions in social media can help building an informed citizenry. Given the substantial presence of news and information in social media and the challenges of identifying unverified claims in the online information environment, the first research project focuses on whether social media can function as a reliable source for news. More specifically, the first study explores whether encountering news and politics in social media can be sufficient to correctly inform citizens. Instead of testing the relationship between of social media use and political knowledge, this study explores the relationship between social media use and the users' beliefs around political rumors. The goal of the first project is to investigate whether the *sociality* in information sharing in networks may circulate unverified claims, and highlights the centrality of network homogeneity in generating the flow.

Chapter 4 explores the potential of social media to serve as a democratic sphere that facilitates citizens' engagement in political discourse. Based on the assumption that the structural features of social media allow users to encounter information, this project investigates the potential to be exposed to crosscutting viewpoints. Moving a step further, the second study examines the behavioral outcomes of encountering crosscutting viewpoints on expressing one's own political opinions. Taking into account the theoretical establishments of previous research on crosscutting exposure and the spiral of silence, this project incorporates the role of user's perception about others' political viewpoints. This project sheds light on the potential of social media to embrace diversity and plurality in political discussion and facilitate expressive behavior, in a context where users are highly sensitized toward the social presence of others.

Finally, the Chapter 5 presents a project that examines whether encountering news and politics in social media can ultimately promote citizens' behavioral participation in the democratic process. This project draws attention to the political potential of routine use of social media, by examining the behavioral outcomes of non-politically driven social media use. Moreover, taking into account the significant role social intermediaries, this study examines the role of users' trust in the information source. In this study, I examine the potential of social media use to meaningfully contribute to political participation, perhaps to the extent that it can engage users who are less interested in politics. This project underscores the growing importance of trust in defining the impact of information acquired through social interactions.

The common thread that runs through all three studies in this dissertation is the notion that the interactive environment in social media can produce a shift from purposefully seeking information to inadvertently receiving information, and thereby facilitate encounters with politics and news through social networking. Each project explores a particular dimension of the

democratic consequences of social media use, with an overarching objective to understand its potential to inform and engage citizens. Taken together, this dissertation clarifies the meaning of social media as a public sphere, and provides evidence on the possibilities as well as the limitations of encounters with politics to contribute to engagement in politics.

CHAPTER III

Study 1: Social Media as a Source for News

In April 2013, the U.S. stock market experienced an abrupt sell-off that caused the S & P 500 to decline 0.9%, which was enough to wipe out \$130 billion in stock value in a matter of seconds (Matthews, 2013). This incident was caused by a false tweet from the Associated Press's Twitter account, which told its millions of followers that President Obama had been injured in an explosion at the White House (Bradshaw, Massoudi, & Scannell, 2013). While the Associated Press quickly addressed the situation by informing its readers that the Twitter account had been hacked and that the information was false, the single tweet was enough to send a shock wave through the stock market (Matthews, 2013). It was during the same month that social networking sites played host to a series of rumors and speculations about the suspects of the Boston marathon bombing (Bradshaw et al., 2013; Sanchez, 2013). The difference in the two incidents is that the AP case involved misuse of the "verified" source that is otherwise widely accepted as reporting confirmed facts, while the search for the bombing suspects involved the online crowd to take part in the ongoing speculations. Both cases, however, illustrate the risk associated with the newly emerged social platform in disseminating inaccurate information. This chapter explores the potential of social media to serve as a reliable source for news and contribute to an informed democratic citizenry, by focusing on their relationship with political rumors.

News Media Use and Political Rumors

Given that a healthy participatory democracy depends on the active engagement of an informed citizenry, the role of social media in providing accurate information becomes particularly relevant. Research has shown that individuals' use of different media outlets can significantly impact their knowledge of public affairs (Culbertson & Stempel III, 1986; Moy, Torres, Tanaka, McCluskey, 2005), as well as their perceptions around an issue (Pierce, Lee-Sammons, Steger, & Lovrich, 1990). Particular media tend to be more effective in enhancing the learning process, for instance, print media being traditionally more effective over television (Becker & Dunwoody, 1982).

The new media environment has transformed the expressive potential of the average citizens, and individuals are now in a position to post messages and images that can be viewed instantly by global audiences at minimal costs (Lupia & Sin, 2003). The Internet offers a variety of ways to disseminate news and information, and the process prior to publication differs significantly from that of the traditional media. Information in traditional mass media are selected, edited, and disseminated by professional gatekeepers and are identified with authoritative sources, yet such editorial policies in many online information platforms are nonexistent, unknown, or ambiguous (Flanagin & Metzger, 2000). Such characteristics of the online environment led researchers to predict that the Internet would serve not only as an information highway but also a path for political rumoring (Ayres, 1999). In a study of "legitimate media" (daily newspapers and network TV news) and "less legitimate media" (blogs and grocery store tabloids), Stempel and colleagues (2007) found that reading daily newspapers and their website versions were negatively associated with beliefs about the conspiracies

regarding the U.S. government's involvement in the 9/11 attacks. In contrast, frequently consuming news from online blogs and reading tabloids were positively associated with beliefs in the conspiracy, controlling for uses of other media (Stempel, Hargrove, & Stempel, 2007). Moreover, investigations of federal officials report numerous websites and online newsgroups contain questionable information about major medical conditions, and the Securities and Exchange Commission report filing charges against stock promoters who created and circulated false rumors about their own company's stock prices on the Internet (Knight Foundation, 2001). Thus, while the Internet has certainly enhanced the ability of its users to quickly access and disseminate information, whether it also opened the door to misinformation and circulation of rumors remains questionable (Ayres, 1999; Garrett, 2011).

Linking Social Media Use to Rumor Beliefs

The spread and belief in unverified information in the online media landscape becomes particularly more compounding as a growing number of Internet users embrace social media as alternative tools for acquiring news and information. The rise of the social media has redefined the diffusion of information, by complementing and sometimes replacing existing forms of social interaction (Ratkiewicz et al., 2011). The enhanced connectivity and interactivity in online social platforms have expanded the capacity of citizens as producers and disseminators of information, facilitating an unprecedented flow of news and information within social networks (Ratkiewicz et al., 2011). Real-time coverage of breaking news, such as natural disasters, local emergencies, and other large-scale accidents in Twitter, for example, highlights a breakthrough in news dissemination within online social networks. In online social networks, users can not

only share links to news reports of traditional media, but also easily share information on any topic, without undergoing multiple verification processes that professional news reporters are required to. Thus the newsfeeds in social media have become of central importance to both producers and consumers of news, and their prominence as a news disseminator on the Internet continues to grow (Papacharissi & de Fatima Oliveira, 2012).

While the large-scale diffusion of news facilitated through social media can mobilize citizens to take part in collective action (Papacharissi & de Fatima Oliveira, 2012), the network structure can be leveraged to disseminate incorrect information or unverified rumors (Qazvinia, Rosengren, Radev, & Mei, 2011). Even at the early development stages of computer-mediated social networks, some researchers expressed fear that these social networks would accelerate the flow of misinformation, including rumors, complaints, jokes, and subversive communications (Finholt & Sproull, 1990). The processes underlying the transmission of rumor correspond well with the characteristics of online social networks, as rumors do occur not in a vacuum but in the context of social networks (DiFonzo & Bordia, 2007). Recent case studies of Twitter during emergent crisis situations illustrate that false or unconfirmed rumors can spread rapidly in social media (Oh, Kwon, & Rao, 2010). For instance, a case study on Twitter after the 2010 earthquake in Chile illustrates that there was a greater number of unique tweets classified as false rumors than confirmed truths (Mendoza, Poblete, Castillo, 2010). What seems more interesting is that while the proportion information denying confirmed truths may not always surpass information about confirmed truths, the number of denials becomes much larger when the information corresponds to a false rumor (Mendoza, Poblete, & Castillo, 2010).

Research has also shown that while individuals can question the validity of rumors, there are conditions under which they are particularly more likely to accept unverified information as

truth (Garrett, 2011). Word-of-mouth referrals have been empirically demonstrated to be extremely effective mechanisms of persuasion (Brown & Reingen, 1987), and the role of intermediary opinion leaders in shaping people's understanding of public affairs has been illustrated in previous studies (Lazarsfeld, Berelson, & Gaudet, 1994). In a study of political rumors on the Internet, Garrett (2011) found that using emails with friends and family members as a source for political information significantly increased the likelihood of both exposure to and belief in political rumors. This finding was contrasted against the impact of using mainstream news media, which in fact increased exposure to rumor rebuttal and showed no significant relationship with belief in rumors (Garrett, 2011).

In light of these previous findings, this study explores whether using social media as a source for news is associated with a greater likelihood of encountering unverified political rumors than with using traditional news media. More specifically, this study predicts that using social media as a news source will be positively associated with the users' belief in political rumors. On the other hand, the use of traditional news media is expected to reduce the likelihood of believing in political rumors, and weaken the relationship between social media use and rumor beliefs.

H1: Social media use as a news source will positively predict belief in political rumors.

H2: Traditional news media use will negatively moderate the relationship between social media use as a news source and belief in political rumors.

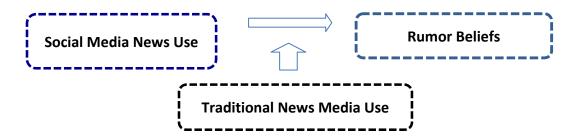


Figure 1.

Traditional news media use as a moderator between social media news use and rumor beliefs (H2)

Network Characteristics

Since rumoring occurs in social contexts, the characteristics of the network play a key role in determining the impact of the rumor (Watts, 2003). Studies have shown that rumors circulate more *within* rather than *across* homogeneous networks, and tend to produce disproportionate exposure to particular rumors (DiFonzo & Bordia, 2007). Homogeneous networks also provide less informational diversity and fewer opportunities to detect inaccuracies (DiFonzo, 2010). In a study of networks with different levels of homogeneity, the same rumor was more likely to be dominant in a tightly-knit and clustered network (Trpeski, Tang, & Kocarev, 2010), showing that individuals involved in homogenous social networks are more likely to have been exposed to the same rumor (Festinger et al., 1948; DiFonzo, 2010).

In addition, there is an increased risk of a reinforcing spiral in homogeneous networks (Slater, 2007), and the positive feedback loop within closed groups is likely to invoke a particular interpretation of events or issues to become more prevalent in the network. Rumors tend to gradually acquire more credibility and appeal, as more network neighbors acquire those (Ratkiewicz et al., 2011). After rumors cross the threshold level to become widespread in a

network, they tend to be considered as "common knowledge" among members of that network (Ratkiewicz et al., 2011). Thus, this study predicts that higher levels of perceived similarity in online social networks will lead to a greater likelihood of resonance of a particular rumor in the social network. More specifically, the present study predicts that perceptions of political similarity of users' online social networks will strengthen the association between using social media as a news source and belief in political rumors.

H3: Perceived political similarity in networks will strengthen the link between social media use as a news source and belief in political rumors

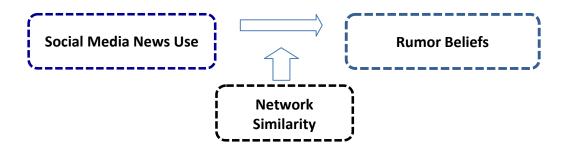


Figure 2.
Political similarity as a moderator between social media news use and rumor beliefs (H3)

Method

Data

To evaluate the predictions about the dynamics of political rumors in the online information environment, this study examined data collected through an online survey in South Korea, March 2013. Participants were recruited through an international online survey firm with a pre-recruited national panel of approximately 960,000 members that mirror the demographic characteristics of the 20-59 year old population in South Korea. From the panel, 4203 respondents were randomly chosen and e-mail solicitations were sent out to participate in the survey. The sample (n=205) was drawn via a non-probability quota sampling method to represent four age groups, 20–29 (n=47), 30–39 (n=50), 40–49 (n=50), 50–59 (n=58), and an equal ratio of gender; males (n=101), females (n=104). The online survey was closed once each subgroup (age and gender) reached its quota, and thus the response rate was not calculated. There were 137 additional respondents who were originally included in the sample, but excluded later from it because they did not meet the criteria for participation (i.e. not an active user of social networking sites). Despite the limitations of a non-probability sampling method, previous studies have utilized the same quota sampling design across gender and age groups to enhance the representativeness of the sample (Kim, 2012).

Key demographic characteristics of the sample resemble the profiles of the population figures reported by the South Korean government's statistical agency, *Statistics Korea*, with respect to age (mean ages in both the sample and population are 39) and gender (50.3% female in the sample and 49.0% in the population). The annual median household income of the population (KRW 4,090,000) was within the same range as the sample median (KRW 4,000,000

- 5,000,000). There was a greater proportion of respondents with higher education in the sample (62.4% have a college degree) as compared to the population (40.2% have a college degree).

Measures

Belief in Political Rumors. The survey asked respondents about their belief in three political rumors that were circulated online (see Appendix for question wording). If the participants were familiar with the rumor, they were asked to indicate what they believed to be the truth. Each rumor contained controversies that were officially refuted by involved politicians as falsehoods. While the three rumors included in this study are not a representative of all unverified political information, the high-profile nature of these political rumors circulated on the web allow for an initial exploration of their relationship with media use. Respondents were asked to indicate their belief in three high-profile political rumors in South Korea on a three point scale, ranging from "not true (1) to "true (3)." The responses were summed to create an additive index (M=5.61, SD=1.41, Cronbach α = .48).

Traditional News Media Use. Studies report that traditional news sources and their online counterparts are subject to professional and social standards and constraints (Johnson & Kaye, 1998). Thus, respondents were asked to report their weekly exposure to news from three traditional news media outlets: watch national television news (M=3.77, SD=1.35), read daily major newspapers (P=2.08, SD=1.15). Responses were coded on a five-point scale, ranging from "never (1)" to "everyday (5)." A composite index was created by adding up the responses (P=8.04; P=0.76; Cronbach P=0.50).

Social Media Use for News. The use of social networking sites was measured by asking respondents how often they get their news from online social networking sites, such as Facebook, Twitter, Cyworld, etc. The same five-point scale was used for a weekly basis, ranging from "never (1)" to "everyday (5)" (M = 2.90; SD = 1.41).

Perceived Political Similarity. The respondents' perception of political similarity in networks was measured with two items that asked respondents how *similar* they felt to their friends in online social networks with regard to two items. First, respondents were asked to indicate how much they agree with the statement "my friends in online social networks and I have similar political viewpoints" on a five point scale, ranging from "strongly disagree" (1) "to strongly agree" (5). Second, respondents were asked to rate on a five-point scale, ranging from "completely different" (1) to "almost the same" (5), how similar they felt to their friends about the candidate favored in the 2012 presidential election. The responses were summed to create an additive index (M = 6.0; SD = 1.55, Cronbach $\alpha = .54$).

Control variables. A set of demographic variables served as controls in the analysis: gender (49.3% males), age (mean=40, SD=10.97), education (median=college degree) and household income (median=KRW 4,000,000 - 5,000,000). In addition, this study controlled for the respondents' political predisposition with three items: interest in politics, political ideology, and support for candidate in the 2012 South Korean Presidential Election. Respondents were asked to indicate their level of political interest on an eight-point scale, ranging from "definitely not interested (1)" to "definitely interested (8)" (*M*=5.0, SD=1.47). In addition, to parse out the variance in rumor belief arising from differences in the respondents' news media sources, the present study also controlled for the respondents' political ideology (liberal: 24.9%, moderate: 45.4%, conservative: 29.8%) and support for the presidential candidate in the 2012 election (Park:

36.6%, Moon: 38.5%, Ahn-withdrawn: 17.1%, none: 7.8%), which would significantly shape the their belief in political rumors.

Analytic Procedure

To examine the hypothesized relationships between the use of traditional news media and social media as news sources and the users' perceptions around political rumors, multivariate regression analyses were run with belief in rumor as the outcome variable. The survey did not explicitly ask respondents to indicate whether each news source directly contributed to rumor exposure or belief, as this level of detail would be difficult for respondents to self-report with accuracy (Garrett, 2011; Schwartz, 1999). Instead, the influence of news source on rumors was analyzed by including control variables and testing the statistical significance of each relationship. In addition to testing the direct relationship between social media use and rumor beliefs, this study also explored how the political similarity of users' online social networks moderates the relationship. To carry out this analysis, interaction terms were created between social media use for news and perceived political similarity. In order to avoid potential multicollinearity problems between the interaction term and its components, all of the component variables were standardized prior to the formation of the interaction terms (Cronbach, 1987).

Results

The central motivation for this study was to explore the extent to which citizens' use of social media as a news source shape their belief in political rumors, and thereby provide a starting point for understanding the consequences of the social mediation of news and information in the changing media environment. Toward this end, this study began by examining the direct relationships between citizens' use of the traditional news media and social media for news, and the respective associations with belief in high-profile political rumors.

Findings reported in Table 1 provide evidence to support H1, which predicted that there will be a positive relationship between social media use and belief in political rumors. Notably, the significant result of political ideology (β =-.20, p<.01) in the block of control variables demonstrates that the belief in political rumors are greatly influenced by the respondents' preexisting political leanings. Yet even after controlling for the respondents' political predispositions as well as a set of demographic variables, findings highlight that social media use as a news source is a positive predictor of rumor beliefs (β =.15, p<.05). In addition, a negative relationship was found between getting news from the traditional news media and belief in rumor (β =-.21, p<.01). That is, the more frequently respondents watched news on national television, read major daily newspapers, or accessed the online versions of the major news organizations, the less likely they were to believe the political rumors. In contrast, the significant positive relationship result of social networking site use for news for belief in political rumors suggests that the news and information in the social media environment can meaningfully shape the users' perceptions around political rumors. The significant results of both the traditional news media

and social media use suggest that citizens' media consumption patterns relate to their beliefs in political rumors, independent of their political ideologies.

Table 1
Predictors of Political Rumor Beliefs

	Beliefin	Belief in Rumor	
	β	t Value	
Control Variables			
Age	07	95	
Gender (high: female)	.09	1.29	
Education	.10	1.47	
Household Income	.00	.09	
Political Interest	.10	1.40	
Political Ideology	20**	-2.90	
Presidential Candidate Support	.14*	1.97	
$R^2(\%)$	10.8%		
News Source			
Traditional News Media	21**	-2.69	
Social Media	.15*	2.07	
Total R ² (%)	15.0%		

Note: Entries are standardized final regression coefficients.

#p<.10; *p<.05; **p<.01

The next hypothesis predicted that traditional news media use would negative moderate the relationship between social media use and belief in political rumors (H2). As shown in Table 2, a significant negative interaction was found between social media use and traditional news media use (β =-.13, p<.05) in predicting belief in political rumors. This result indicates that when individuals who were getting their news from social media also frequently consumed traditional news media, the relationship between social media use and rumor beliefs was significantly weaker.

Table 2
Two-way Interaction – Social Media Use x Traditional News Media Use

	Belief in Rumor	
	β	t Value
Prior Blocks (R ² ,%)	15.0%	
Traditional News Media Use	13*	1.99
x Social Media Use		
Inc. R ² (%)	1.6*	
Total R ² (%)	16.5%	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, political ideology, presidential candidate support, social media use for news, and traditional news media use
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. #p<.10; *p<.05; **p<.01

Finally, interested in how network characteristics shape the relationship between relying on social media for news and belief in rumors, the next hypothesis examined the moderating role of the perceived political similarity in social networks (H3), a two-way interaction was examined. As the shown in Table 3, a positive interaction term was found between perceived political similarity and social media use for news (β =.10, p<.10), indicating that the relationship between social media use and rumor belief becomes stronger for citizens in online social networks that tended to have more similar political viewpoints.

Table 3
Two-way Interaction – Social Media Use x Perceived Political Similarity

	Belief in Rumor	
	β	t Value
Prior Blocks (R ² ,%)	15.0%	
Perceived Political Similarity	.19**	2.78
Inc. R ² (%)	.32%	
Social Media Use	.10#	1.33
x Perceived Political Similarity		
Inc. R ² (%)	1.30#	
Total R ² (%)	19.0%	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, political ideology, presidential candidate support, social media use for news, traditional news media use
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. #p<.10; *p<.05; **p<.01

For a better illustration of the interactive relationship, the predicted values are plotted in Figure 3. The two different slopes for high and low levels of social network similarity demonstrate that the association between social media use for news and belief in political rumors is stronger when users feel that their friends hold similar political views as themselves. In fact, the slope for those with low levels of social network similarity is almost flat, suggesting that the positive relationship between social media for news and rumor beliefs may be of greater concern for individuals in more politically similar or homogenous networks. While the negative interaction term is significant only at a statistically marginal level, a positive significant coefficient was found of perceived political similarity in predicting rumor beliefs (β =.19, p<.10), suggesting that the characteristics of the network are an important factor in understanding political rumors.

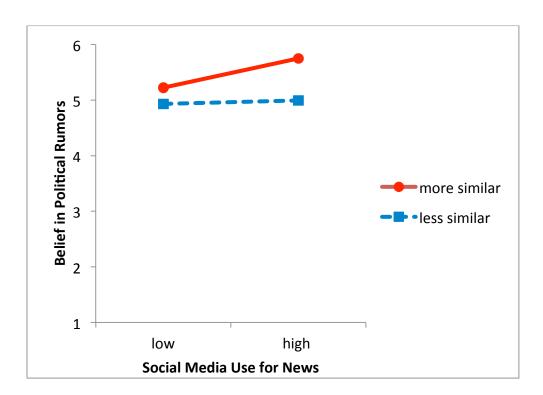


Figure 3.

Two-way interaction between social media use for news and perceived political similarity

Discussion

The current research adds valuable insight about the potential of social media to contribute to an informed democratic citizenry, by specifically exploring their role as a source for news and political information. Recent reports suggest that there is a substantial influx of news and politics into social media platforms, which is expected to raise the chances of encountering information and hopes for incidental learning. Yet instead of directly testing the relationship between citizens' media use and knowledge in politics, this research took a somewhat different approach and examined the possibility of the social streams of information to not only disseminate news but also unverified political rumors. Although scholars have begun to investigate the diffusion mechanism of misinformation in social networks, how the use of social media platforms relate to individuals' perceptions and beliefs remains largely unexplored.

To begin with, findings of this study underscore the findings of previous research that established citizens' news consumption habits can significantly shape their perceptions around political rumors. While political ideology, which is deeply connected with the rise and fall of political rumors, was a strong determinant of citizens' rumor beliefs, their news consumption habits significantly accounted for additional variance. The results show that frequent use of traditional news media outlets, including watching national television news and reading major daily newspapers or their online versions, negatively predicted citizen's beliefs about unverified political rumors. On the other hand, greater reliance on social media for news illustrated a significant positive relationship with political rumor beliefs. These findings suggest that the nature of news mediated in the social networks might differ from that in the traditional news media, in ways that can mold different understandings about political rumors.

News from traditional news media and their online versions can be more effective in providing citizens with more appropriate and necessary information to critically evaluate the claims manifested in political rumors. In contrast with the professional oversight and factchecking procedures that news in the traditional media has to undergo prior to reaching its audience, information shared in the social media can be molded by any user, who can blend emotions with opinions, drama with fact, and reflect deeply subjective values and interpretations (Papacharissi & de Fatima Oliveira, 2012). Studies of the blogosphere and citizen journalism have shown that many who participate lack the basic traits associated with journalists, such as reporting with objectivity and double-checking information (Gil de Zúñiga et al., 2011; Tremayne, 2007). Instead, they have been known to take on different roles as observers, analyzers, and commentators who provide an interpretation of current affairs events (Andrews, 2003). The news frames constructed by citizens contributing to the newsfeed in online social network networks may thus reflect enduring ideologies of individuals or particular social groups. As a result, news can become part of a storytelling process in social media (Papacharissi & de Fatima Oliveira, 2012), which could consequently serve to perpetuate existing stereotypes and biases embedded in political rumors.

In addition, information that is curated in social media is not only a product of collaborative filtering among individual users, but also the result of an algorithmic function that is unique to each social networking service provider. While these algorithms generally remain obscure, it is known that they can determine the visibility of information in social media newsfeeds (Gillespie, 2014). It may be that the inclusion or promotion of information is a reflection of the users' record of previous interactions in social networks, in which case the newsfeed can contribute to a reinforcing spiral (Slater, 2007). Because of these reasons, some

scholars suggest that the newsfeeds in social networks reveal the incompatibilities between traditional journalistic values and news frames in social media platforms (Papacharissi & de Fatima Oliveira, 2012).

With an interest in how the network characteristics in shaping the flow of information in social media, this study examined the similarity of users' political viewpoints. Findings in this study confirm that higher levels of political similarity in social networking sites predict a stronger relationship with relying on social media for news and believing in political rumors, even after controlling for the respondents' demographics, political predispositions, and traditional news media use. Though significant at a marginal level, the results of the two-way interaction provide suggestive evidence of how relying on news and information mediated through an online social network of like-minded individuals can intensify individuals' beliefs about controversial issues or unfounded rumors. This finding sheds new light on the information dynamics in online social platforms, as well as the centrality of network characteristics in shaping the civic and political outcomes of social media use.

Finally, there are a few limitations in this study to be discussed. The findings in this study are based on data from a cross-sectional online survey, which allows for exploring and clarifying structural relationships, yet provides weak support for causal inferences. Given that rumors constantly evolve, longitudinal research that observes rumor beliefs over time could provide more robust evidence to understand the role of different news sources during the process. Moreover, the relatively low reliability (α = .48) of the belief in political rumor measure in the study suggests that three items might not be sufficient to fully capture a representative picture the citizens' beliefs political rumors. Future research could benefit from including more items that can better reflect the divide of public discourse with political rumors. In addition, an in-depth

content analysis of the nature of news and information that gain currency in social media to large scale audiences will enrich the understanding of the dynamics of social networks.

Despite these limitations, the present study illustrates a meaningful step toward understanding the potential consequences of information diffusion in online social networks. What can start out as a mistake or a prank can be compounded within the network, and overshadow the truth of the information. Considering that the long-term viability of participatory democracy depends on an informed citizenry with accurate information (Delli Carpini & Keeter, 1996), future research examining the growing complexities of sharing, commenting, and linking news and information in social platforms will contribute to further clarifying their role as disseminators of news.

CHAPTER IV

Study 2: Social Media as Sphere for Political Discourse

New communication technologies are changing the everyday communicative patterns of citizens, by opening up a variety of ways to access information and to connect with others in their social circles. One of the major academic debates in the current media environment revolves around whether the rise of the new technologies could facilitate political discourse that reaches the normative goals of plurality and diversity embodied in the concept of deliberative democracy (Brundidge, 2010; Habermas, 1989). Some scholars suggest that the open nature of online communication can increase citizens' engagement in political discussion (Kavanaugh, Kim, Prez-Quiones, Schmitz, & Isenhour, 2008), while others predict that the Internet would only foster communication within "enclaves", exacerbating fragmentation and decreasing political tolerance (Sunstein, 2007). This debate about whether the Internet can encourage political discourse has entered a new phase with the rapid spread of social media. This chapter explores the potential of social media to contribute to a deliberative democratic citizenship, and explores its function as an open sphere for political discussion that facilitates political conversations across political difference.

Crosscutting Exposure in Social Media

Some scholars have raised the possibility that the new information environment on the web would not only allow easier access to news and political information, but also positively contribute to being exposed to opinion challenging or "crosscutting" viewpoints (Brundidge, 2010; Kim, 2011). Given the weakened boundaries between political and apolitical communicative spaces (Brundidge, 2010), the interactive environment in social media can promote encounters with political difference. In fact, previous research demonstrates that individuals engaged in non-political online groups organized around hobbies or personal interests are exposed to political views that do not necessarily align with their own (Wojcieszak & Mutz, 2009). Social media continue to transform the shape of communities from small tightly knit associations to far-reaching networks of close and distant ties, and given the structural features in social media that aggregate information on centralized newsfeeds and the enhanced connectedness among weak ties, it is likely that social media users stumble upon novel viewpoints that they might not otherwise hear from more tightly knit social circles (Granovetter, 1973).

Findings about crosscutting exposure in social networking sites still remain somewhat mixed. While some studies suggest that the political information exchanged in social networks tend to be highly clustered around particular partisan viewpoints (Himelboim, McCreery, & Smith, 2013), other studies show that users report being exposed to crosscutting viewpoints while using social media with a political purpose (Kim, 2011). In fact, recent reports show that users do not necessarily avoid interacting with others who have dissimilar views in online social networks (Bisgin, Agarwal, & Xu, 2010; Garrett, 2011; Pew Internet & American Life Project,

2012). Previous research has established that individuals tend to expose themselves to likeminded others to avoid cognitive dissonance (Festinger, 1957; Iyengar & Hahn, 2009; Klapper, 1960), yet in reality, only a small proportion of social media users (18%) report having actively taken measures to block or unfriend someone due to different views (Pew Internet & American Life Project, 2012).

In this context, the current study seeks to further advance our understanding of this dynamic, by focusing on crosscutting encounters through everyday use of social media. While previous studies have examined the likelihood of crosscutting exposure on the web in general (e.g. emails and group chats), or politically motivated use of social media (e.g. joining political groups and political messaging) (Brundidge, 2010; Kim, 2011; Wojcieszak & Mutz, 2009), this study focuses on the possibility of crosscutting exposure during routine communications in these online networks. More specifically, the current study hypothesizes that general uses of social media use will positively predict users' exposure to political views that challenge their own.

H1: Social media use will positively predict encountering opinion-challenging political viewpoints.

The Behavioral Consequences of Crosscutting Exposure

While plurality and diversity in political discourse are considered as normative ideals in political deliberation (Habermas, 1989), studies present mixed findings regarding the impact of encountering opinion-challenging viewpoints. Previous research illustrates that while political discussion involving disagreement can foster political tolerance and increase knowledge of rationales for political perspectives, it can also lead citizens to withdraw from subsequent

political engagement, due to their tendency to avoid social conflict and the increased ambivalence in their attitudes (Mutz, 2002). According to this line of research, individuals in diverse discussion networks prefer to avoid conflict with other members of their personal networks, leading them to refrain from further participation (Mutz, 2002). On the other hand, research has also presented findings that show frequently discussing politics in heterogeneous networks positively contribute to participatory activities (Scheufele, Hardy, Brossard, Waismel-Monor, & Nisbet, 2006) and that these positive outcomes can be shaped by how much attention individuals pay to the conversation (Kwak, Williams, Wang, & Lee, 2005).

A relevant, but independent stream of research examines how citizens' perceptions of the opinion climate shape their willingness to engage in political discussions. According to the spiral of silence research, individuals decide whether or not to expose their own views after monitoring their social environment for current and future climates of public opinion (Noelle-Neumann, 1974). Noelle-Neumann (1974) explains that the humans possess a "quasi-statistical sense" that allows individuals to survey and monitor the climate of opinion, which they utilize to predict their own positions in the general distribution. Due to fear of being isolated from the majority, individuals will refrain from publicly expressing their opinions when their own position is projected to be in the minority (Noelle-Neumann, 1974). In other words, perceptions about the opinion climate will predict opinion expression because not becoming social isolates is more important than expressing one's own opinion. Studies have demonstrated that perceptions of the current opinion climate predict willingness to express an opinion, and when individuals feel the danger of isolation, they conceal their true opinions and fall silent (Moy, Domke, & Stamm, 2001). Research testing the process of the spiral of silence shows that individuals' perception of opinion congruity with the majority significantly increased their own willingness to speak out (Bodor, 2012; Eveland, McLeod, & Signorielli; 1995; Ho & McLeod, 2008; Kim, 2012).

While research has begun to investigate the potential of social media to contribute to crosscutting exposure, the behavioral consequences of being exposed to political difference in remain to be explored. Based on the findings in the previous literature, the present study predicts that exposure to politically incongruent viewpoints in online social networking sites will be negatively associated with the likelihood of expressing one's own political viewpoint.

H2: Crosscutting exposure in online social media will negatively predict expression of political viewpoints.

Network Characteristics

The underlying premise of Noelle-Neumann's (1974) spiral of silence is that individuals' perceived climate of opinion plays central role in determining their willingness to speak out. When individuals notice that their own opinion is also taken over by others, they will confidently voice this opinion, whereas those who feel that their own opinion is losing ground will adapt a more reserved attitude. It follows from this that the social media users' perceptions around the opinion climate in their social networks will significantly shape their expressive behaviors. When individuals perceive that the majority of their friends share similar views with themselves on politics, they might not feel discouraged to express their opinions even when they come across crosscutting viewpoints in online social networks. On the other hand, when individuals feel that their friends tend to disagree with them, encountering opinion-challenging viewpoints can further decrease their likelihood of political expression.

An interesting aspect of online social networks is the presence of social cues. Virtually every piece of information shared in social media entails endorsement indicators that inform the user about the sentiment around the content or opinion. These social cues can trigger heuristics to judge the popularity of the opinion-challenging information, acting as an indicator of how much the viewpoint resonates in their own social networks. Studies have shown that the presence of endorsement plays a powerful role in online social networks, to the extent that these cues negated the effects of partisan source cues of news reports (Messing & Westwood, 2012). Given the enhanced visibility of social cues, including endorsement indicators and information sources, individuals are likely to develop an understanding of the prevalence of particular political viewpoints by facilitating judgmental heuristics.

As such, this study suggests that while extended uses of social media can significantly increase the likelihood of encountering opinion-challenging information, whether or not this encounter will suppress or facilitate expressive behaviors can vary depending on the users' perception around the opinion climate in their networks. These perceptions can be based on the social cues that indicate the popularity of the viewpoint, or even the strength of the relationship between the user and the endorser of the information. Therefore, the next hypothesis predicts that social network similarity will negatively moderate the link between crosscutting exposure and political expression

H3: Perceived political similarity in social networks will negatively moderate the relationship between crosscutting exposure and political expression.

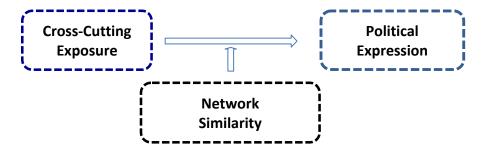


Figure 4. Political similarity as a moderator between cross-cutting exposure and political expression (H3)

The 2012 South Korean Presidential Election Context

Social networking sites expanded to reach the general population in South Korea to engage not only the vast majority of younger adults, but also a substantial proportion of older adults (age 18-29: 86%, age 30-49: 61%, age 50-64: 47%) (Asia News Monitor, 2010). South Korea is known as one of the most wired countries, ranking among the top 10 with broadband connection worldwide, and a mobile-phone penetration rate of over 100% (OECD, 2013). In this context, the 2012 South Korean presidential election offers an excellent opportunity to explore the dynamics of crosscutting exposure and political expression in social media.

Representing the conservative Saenuri Party, Park Geun-hye was elected as the first female leader in the country, defeating her left-wing challenger Moon Jae-in (Democratic United Party). While president elect Park's share of the vote (51.6%) turned out to be the highest won by any candidate since the beginning of direct elections in South Korean history, the 2012

election has also been described as "a showdown of generations" (Park, Hancocks, & Kwon, 2013). Park had won broad support from older Korean voters in their 50s and 60s, while Moon's support came more from younger Korean voters (Park, Hancocks, & Kwon, 2013). Previously, South Korean elections had been characterized to document the deep-rooted regional divides in the country, yet media coverage following the 2012 election highlighted the generational differences in the results. Given that the 2012 presidential election particularly highlighted the generational gap in candidate support and the political climate in Korea, this study explores the way in which crosscutting exposure influenced political expression in different age groups. The South Korean culture, as in many other Asian countries, tends to emphasize collectivistic values, and "fitting in" – to attend to others and conform to in-group norms (Markus & Kitayama, 1991). Given that younger individuals tend to be more influenced by their own peers and reference groups (Ryan, 2001), this study seeks to explore how age shapes the relationships of the proposed constructs. Based on the assumption that reference groups exert greater influence on younger adults, this study predicts that the role of perceived similarity becomes more important in predicting political expression from crosscutting exposure. In contrast, perceived similarity will play a smaller role in shaping the relationship between crosscutting exposure and political expression for older adults, who experience less peer pressure.

H4: The moderating role of perceived similarity between crosscutting exposure and political expression will be greater for younger adults.

Method

Data

This study examined data collected through an online survey in South Korea, March 2013. Participants were recruited through an international online survey firm with a pre-recruited national panel of approximately 960,000 members that mirror the demographic characteristics of the 20-59 year old population in South Korea. From the panel, 4203 respondents were randomly chosen and e-mail solicitations were sent out to participate in the survey. The sample (n=205) was drawn via a non-probability quota sampling method to represent four age groups, 20–29 (n=47), 30–39 (n=50), 40–49 (n=50), 50–59 (n=58), and an equal ratio of gender; males (n=101), females (n=104). The online survey was closed once each subgroup (age and gender) reached its quota, and thus the response rate was not calculated. There were 137 additional respondents who were originally included in the sample, but excluded later from it because they did not meet the criteria for participation (i.e. not an active user of social networking sites). Despite the limitations of a non-probability sampling method, previous studies have utilized the same quota sampling design across gender and age groups to enhance the representativeness of the sample (Kim, 2012).

Key demographic characteristics of the sample resemble the profiles of the population figures reported by the South Korean government's statistical agency, *Statistics Korea*, with respect to age (mean ages in both the sample and population are 39) and gender (50.3% female in the sample and 49.0% in the population). The annual median household income of the population (KRW 4,090,000) was within the same range as the sample median (KRW 4,000,000 - 5,000,000). There was a greater proportion of respondents with higher education in the sample (62.4% have a college degree) as compared to the population (40.2% have a college degree).

Measures

Political Expression in Social Media. Expressing political viewpoints in online social networks was measured by asking respondents to report whether they had expressed their support for a candidate in social media such as Facebook, Twitter, Cyworld, etc. Three items that tapped into the users' political expressions (a) "like" or "follow" a candidate (b) upload a posting (text or picture) to express candidate support, (c) comment on others' postings to express their support. The responses of each item were coded as a dummy variable and summed to create an additive index (M = .42; SD = .65).

Crosscutting Exposure in Social Media. Users' exposure to politically incongruent information was measured through a single item asking how often they were exposed to politically opinion-challenging viewpoints of their friends in online social networking sites. The responses were coded in a five-point scale, ranging from "never (1)" to "everyday (5)" (M = 2.50; SD = 1.11).

Perceived Political Similarity. The respondents' perception of political similarity was measured with two items that asked respondents how *similar* they felt to their friends in online social networks with regard to two items. First, respondents were asked to indicate how much they agree with the statement "my friends in online social networks and I have similar political viewpoints" on a five point scale, ranging from "strongly disagree" (1) "to strongly agree" (5). Second, respondents were asked to rate on a five-point scale, ranging from "completely different" (1) to "almost the same" (5), how similar they felt to their friends about the candidate favored in the 2012 presidential election. The responses were summed to create an additive index (M = 6.0; SD = 1.55, Cronbach $\alpha = .54$).

Social Media Use. Social networking site use was measured by asking respondents to indicate on a five-point scale ranging from "less than once a day" (1) to "I use it so often that I cannot keep count" (5), how often they accessed their social networking sites (M = 2.43; SD = 1.30).

Control variables. A set of demographic variables served as controls in the analysis: gender (49.3% males), age (mean=40, SD=10.97), education (median=college degree) and household income (median=KRW 4,000,000 - 5,000,000). In addition, this study controlled for the respondents' interest in politics and traditional news media use. Respondents were asked to indicate their level of political interest on an eight-point scale, ranging from "definitely not interested (1)" to "definitely interested (8)" (*M*=5.0, SD=1.47). Respondent's use of the traditional news media was measured with their weekly exposure to news from national television news (*M*=3.77, SD=1.35) and daily major newspapers (*M*=2.19, SD=1.40).

Analytic Procedure

To examine the hypothesized relationships between social media use and the consequences of crosscutting exposure, multivariate regression analyses were run with political expression as the outcome variable. In addition to testing the direct relationship between crosscutting exposure in online social networks and political expression, this study also explored how users' perceptions about the general political climate in online social networks — conceptualized as the perceived similarity of political viewpoints and candidate support — moderates the relationship. To carry out this analysis, interaction terms were created between crosscutting exposure and perceived political similarity. In order to avoid potential multicollinearity problems between the interaction term and its components, all of the component

variables were standardized prior to the formation of the interaction terms (Cronbach, 1987). Finally, to examine the three-way interaction between crosscutting exposure, political expression, and age, the respondents were categorized into two groups; younger adults (ages 20-39, n=97) and older adults (ages 40-59, n=108), which were represented by a comparable number in the sample.

Results

The central motivation for this study was to explore the extent to which everyday uses of social media can facilitate encounters with crosscutting political viewpoints, and how such exposure in turn shapes citizens' expression of political opinions. Toward this end, the current study began by examining the direct relationship between citizens' social media use and their exposure to political information that challenged their own viewpoints, within online social networks. Findings in Table 4 provide evidence to support H1, which predicted a positive contribution of social media use to exposure to crosscutting viewpoints. Notably, the significant result of political interest (β =.23, p<.01) in the block of control variables demonstrates that whether individuals are exposed to opinion challenging political viewpoints in online social media is heavily shaped by their level of interest in politics. Yet even after controlling for the respondents' predisposition toward politics as well as a set of other demographic variables, findings highlight that frequent use of the social media significantly contributes to the users' exposure to crosscutting viewpoints (β =.24, p<.01).

Table 4
Predictors of Crosscutting Exposure in Social Media

	Crosscutting Expos	Crosscutting Exposure in Social Media	
	β	t Value	
Control Variables			
Age	10	-1.13	
Gender (high: female)	06	84	
Education	02	31	
Household Income	.00	.02	
Political Interest	.23**	3.17	
Television News Use	03	45	
Newspaper Use	.14	1.96	
Social Media Use	.19**	2.64	
Total R ² (%)	16.5%		

Note:

- 1. Entries are standardized final regression coefficients.
- 2. #p<.10; *p<.05; **p<.01

The next set of analyses focused on the consequences of crosscutting exposure in social media on users' expression of their own political viewpoints. Drawing from previous work on crosscutting exposure and the spiral of silence, H2 predicted that exposure to attitude-challenging information in social media would decrease the tendency to express one's political opinions. Results in Table 5 show, however, that while crosscutting exposure was a significant predictor of opinion expression, the direction was positive (β =.24, p<.01), disconfirming the

prediction in H2. Rather than undermining the willingness to express their own viewpoints, crosscutting exposure was found to contribute positively to users' political expressions.

Table 5
Predictors of Political Expression in Social Media

Political Express	Political Expression in Social Media	
β	t Value	
.04	.62	
13*	-2.03	
.03	.42	
03	38	
.11	1.61	
03	38	
.03	.47	
.16*	2.32	
18.6%		
.24**	3.59	
5.7%		
.21**	3.06	
3.5%		
27.8%		
	β .0413* .0303 .1103 .03 .16* 18.6% .24** 5.7% .21** 3.5%	

Note:

- 1. Entries are standardized final regression coefficients.
- 2. #p<.10; *p<.05; **p<.01

Interested in how the perceived climate of opinion in online social networks shape the behavioral consequences of encountering political disagreement, a two-way interaction term was created with crosscutting exposure and perceptions of political similarity in social media. H3 proposed that the similarity in online social networks would negatively moderate the relationship between crosscutting exposure and political expression. That is, when users believe that most of their friends have similar political viewpoints as themselves (high level of perceived political similarity), they are more likely to be expressive, despite encountering with viewpoint challenging opinions. In contrast, when individuals find that their own political viewpoints differ with most their friends in online social networks (low level of perceived similarity), they are even less likely to express their opinions after they encounter political disagreement in social networks. As shown in Table 6, a significant positive two-way interaction term was found $(\beta=.12, p<.01)$, meaning that the perceived political similarity of online social networks tends to strengthen the relationship between encountering political difference in social networks and individuals' willingness to express their political viewpoints.

Table 6
Predictors of Political Expression in Social Media – Two-way Interaction

	Political Expression in Social Media	
	β	t Value
Prior Blocks (R ² ,%)	27.8%	
Crosscutting Exposure	.12**	2.20
x Perceived Political Similarity		
Inc. R ² (%)	1.4%	
Total R ² (%)	29.3%	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, traditional news use, social media use, crosscutting exposure, and perceived political similarity.
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. #p<.10; *p<.05; **p<.01

Finally, to examine the differences arising from the individuals' age, the current study analyzed a three-way interaction between crosscutting exposure, perceived network political similarity, and age in predicting political expressions. Results in Table 7 show that a significant negative three-way interaction was found (β =-.13, p<.05). For a better illustration of the results, this three-way interaction is plotted in Figure 5. The X-axis in Figure 5 represents the level of perceived political similarity (high and low), while the Y-axis represents the change in users' political expression per rate of change in crosscutting exposure. The slope thus indicates the change in political expression corresponding to crosscutting exposure, at varying levels of perceived political similarity in social networks. As the two different slopes in Figure 5 indicate, the expressive dynamics differ significantly for younger and older adults using social media.

The positive slope for younger adults shows that the inclination toward opinion expression with crosscutting exposure seems to increase when users perceive their friends in online social networks to generally share the same views. On the other hand, the expressive behavior corresponding to crosscutting exposure did not seem to increase significantly for older adults when they perceived online social network friends had similar viewpoints. Instead, the results suggest that older adults tend to be more expressive when they perceive their friends in social networks to have different political viewpoints.

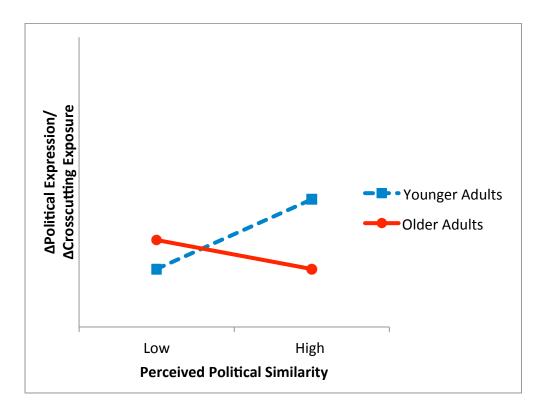


Figure 5.

Three-way interaction between crosscutting exposure, perceived political similarity, and age

Table 7
Predictors of Political Expression in Social Media – Three-way Interaction

	Political Expression in Social Media	
	β	t Value
Prior Blocks (R ² ,%)	29.2%	
Crosscutting Exposure	13*	-1.91
x Perceived Political Similarity		
x Age		
Inc. R ² (%)	1.3%	
Total R ² (%)	30.5%	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, traditional news use, social media use, two-way interaction terms: cross-cutting exposure x perceived political similarity, age x perceived political similarity, age x crosscutting exposure.
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. #p<.10; *p<.05; **p<.01

Discussion

Although the effects of crosscutting exposure in social media and its impact on political expression merits further examination, this study sought to be a first step in that direction, revealing a number of valuable insights for future research. Previous studies have shown that communicating across lines of political difference is essential to the maintenance of a pluralistic society (Mutz, 2001), as well as to the democratic process (Habermas, 1989). Yet the desire for harmony in face-to-face interpersonal interactions has been shown to decrease the likelihood of citizens' engagement in heterogeneous political discussions (Mutz, 2001). These factors lead to the significance of the current research, which draws attention to the role of social media as an alternative sphere for political expression and exposure to crosscutting viewpoints. Findings of this study suggest that social media may in fact play a significant role in exposing citizens to viewpoints that are not necessarily consistent with their own. Analyses corresponding to H1 show a significant positive relationship between citizens' everyday use of the social media and encountering politically diverse information. This suggests that the use of social media can meaningfully contribute to raising citizens' awareness of diverse political perspectives.

In addition to exploring the potential of social media to expose citizens to dissonant political viewpoints, the present study investigates how exposure to political difference shapes users' expression of their own political viewpoints. To clarify whether the same tendency to disengage from politically heterogeneous discussions in the face-to-face conversational setting appear in the online social media context, this study analyzed the relationship between crosscutting exposure and the political expression in social networking sites. Contrary to the predictions of H2, exposure to politically crosscutting viewpoints did not undermine the users'

inclination to express their own viewpoints. Instead, a significant positive relationship between crosscutting exposure and political expression was found, suggesting that rather than stifling political conversations, encountering diverse viewpoints in online social networks can potentially stimulate individuals' engagement in political discourse. This finding is particular interesting, in that it suggests that the dynamics in social media cultivate a discursive environment distinct from face-to-face interaction, allowing individuals to be freely express their political viewpoints.

Extending the theoretical framework of previous literature, this study also examined how perceptions of the similarity between the users' and their friends' political viewpoints shape expressive behaviors (H3). The results indicate that perceived similarity strengthened the positive link between crosscutting exposure and political expression. This finding corresponds with the postulates of previous research, which suggest that individuals tend to be more expressive when they perceive their own opinions to be the majority (Noelle-Neumann, 1974). Given that the current study reveals that crosscutting exposure stimulates rather than stifles political conversations in online social networks, this result seems to further relieve the anxieties that exposure to political difference will lead to political withdrawal.

Finally, interested in how the dynamics of political expression unfold in different age groups (H4) examined the three-way interaction between age, crosscutting exposure, and perceived similarity of political viewpoints. A significant negative three-way interaction was found, suggesting that different patterns arise depending on the users' age. As shown in Figure 5, social media users in their 20's and 30's were more likely to express their own viewpoints when they perceived that the majority of their friends have similar political views or support the same candidate, even though they had encountered politically incongruent information in social media. On the other hand, the tendency of adults in their 40's and 50's to engage in political

expression did not significantly increase as a function of perceptions of political similarity in social networks. As a matter of fact, the expressive tendencies appeared to drop for older adults when they believed that most of their friends shared similar viewpoints or supported the same candidate. This finding suggests that the dynamics of onion expression differ significantly among younger and older adults, particularly regarding politics. Younger adults might experience more pressure toward conforming to social norms (Ryan, 2001), and thus be more inclined to express their support for a candidate when they are certain that most of their peers share the same viewpoint. On the other hand, older adults seem to be more inclined to engage in political discussions when they perceive that their social network friends do not necessarily support their favorite candidate. These findings provide the groundwork for future research to explore how younger and older voters engage in political conversations, as well as how the factors that contribute to their perceptions around the opinion climate in online social networks.

There are a few limitations in this study to be discussed. The findings in this study are based on data from a cross-sectional online survey, which allows for a clarification of the structural relationships, yet provides weak support for causal inferences. Longitudinal research that observes users' political expression over time could provide more robust evidence to understand the impact of crosscutting exposure in online social networks. Despite these limitations, this study provides a promising direction for future research on political discourse in social media, and extending this research will meaningfully contribute to understanding the growing complexities of online social media as a public sphere.

CHAPTER V

Study 3: Social Media as a Motivator for Engagement

The rapid diffusion of social media and their reported effectiveness in mobilizing citizen movements and political uprisings all around the globe has drawn immediate attention to the political potential of the new social media platforms. Reports show that during the political upheavals in 2011, citizens in in Egypt communicated primarily through social media to learn about protests, which increased the odds of their participation (Tufekci & Wikson, 2012). Social media is considered to have enabled Nigerian citizens to act as watchdogs in the 2007 electoral process, by stimulating public discussion and collective action (Ifukor, 2010). While such anecdotal evidence illustrate the significant impact of social media use on citizens' collective action during times of crises (Papacharissi & de Fatima Oliveira, 2012), the political implications of everyday social networking site use still remain to be explored. The current chapter focuses on the potential of routine social media use to contribute to a participatory democratic citizenship, and explores the dynamics underlying the path from encountering politics to engaging in political activities.

Social Media Use and Political Participation

Citizens' active participation in politics has long been considered a key component in democracy. Studies have explored various forms of participatory activities other than voting, such as signing petitions, attendance at town hall meetings, as well as involvement in local community activities (Fishkin, 1995; Gastil & Dillard, 1999; McLeod, Scheufele, & Moy, 1999; Price, Cappella, & Nir, 2002). Interested in the precedents of citizens' involvement in political activities, scholars have revealed the factors that lead to engagement in certain acts of participation. Among these factors, studies have repeatedly shown that citizens' willingness to participate can stem from informal political communication (Bennett, Flickinger, Rhine, 2000; Huckfeldt & Sprague, 1995; Scheufele, 2002). The increased exposure to news and information through informal political discussions is thought to facilitate involvement (Kim et al., 2013; Lemert, 1984).

With the extension of interpersonal conversations into online social networking sites that evolved as a platform for sharing news and political information, researchers have begun to explore the possibility of social media use to contribute to citizens' engagement in politics. Previous studies have shown that individuals involved in political activities in various outlets on the Internet, including emails, blogs, and online discussion forums, were significantly more likely to be engaged in various forms of political actions (Gil de Zúñiga, Veenstra, Vraga, Shah 2010; Shah, McLeod, & Yoon, 2001; Sotirovic & McLoud, 2001). Based on the theoretical roots of the uses and gratifications model (Rosengren, 1974), these studies detected the positive political outcomes of Internet use by focusing on specific uses of the technology, such as information-seeking or political messaging (Gil de Zúñiga et al., 2010). Extant research

examining the political potential of social media has applied the same theoretical framework, and revealed the significant contribution of facilitating social media for political purposes (e.g. Kim, 2011).

Nevertheless, the current study draws attention to the potential political benefits of social media use that is not necessarily driven by a political or informational purpose. Reports show that the majority of users access social media habitually, to the extent that socializing through these online networks has become part of their daily routines (Pew Internet, 2013). Given the infiltration and enhanced visibility of news and political information in online social networks, and the lack of complete control over the stream of information from the users' perspective, they can encounter news and politically engaging information while socializing with their friends or seeking entertainment. Thus, non-politically driven social media use could also result in citizens' engagement in political activities, through the process of inadvertent exposure. To arrive at a clearer understanding of the political outcomes of social media use going beyond informational or political purposes, this study focuses on the potential to encounter information through informal interactions in social media and predicts that it will positively contribute to citizens' political engagement.

H1: Encountering information in social media will be positively associated with engagement in political activities.

This study predicts that the use of social media platforms can contribute to citizens' engagement in political activities. Nevertheless, previous research has shown that regardless of the form of participation, its distribution across any group of citizens is uneven, such that "certain citizens, under certain circumstances, engage in certain acts of participation" (McLeod

et al., 1999, p. 316). Moreover, the transformative potential of the new media environment is not likely to influence all citizens in the same manner (Neuman et al., 2010), and point to the need to examine under what conditions a particular usage pattern would contribute to political participation. Studies suggest that the extent to which these processes lead to political participation vary significantly depending on the individuals' level of interest in politics (Bimber, 2003; Hargittai, 2007; Xenos & Moy, 2007), as well as the affordances of new technological features (boyd, 2010; Flanagin & Metzger, 2000). Thus, the present study seeks to broaden the theoretical scope of research to include more nuanced views of social networking site use, by focusing on the potential interactions between the technological aspect of the medium and the characteristics of its users. More specifically, this research investigates the role of the users' levels of political interest and their trust in the information source, and reveals the underlying dynamics shaping the contribution to citizens' political engagement.

Interest in Politics

Previous research has established that perhaps the most significant difference in citizens' engagement in politics arises from variations in their levels of political interest (Xenos & Moy, 2007). Politically interested citizens are willing to pay attention to political phenomena and spend considerable time focusing on politically oriented tasks or materials at the possible expense of other topics (Lupia & Philpot, 2005). On the other hand, individuals who lack political interest would rather devote their limited time and resources to nonpolitical issues. It follows that citizens with higher levels of interest in politics – who care about and follow politics – are more likely to participate in political activities (Verba, Scholzman, & Brady, 1995). The

political effects of new media use have also been found to be contingent on the users' political interest (Bimber, 2003), outweighing the impact of other relevant factors, such as education and occupation (Luskin, 1990).

The online environment presents users with an unlimited amount of information and a wide variety of ways to fulfill their communicative needs (Prior, 2007). Social networking sites, in particular, provide users with an unprecedented venue to share stories and information about any topic of their interest. Given the time and energy necessary to take part in political activities, as well as the nature of communicative venue that enables users to pursue virtually all of their personal interests, the current study predicts that the contribution of social media use to citizens' engagement in political endeavors will vary depending on their interest in politics. Politically interested citizens are likely to be more motivated to devote their limited resources and participate in action when they encounter information about pressing political problems on social networking sites. Therefore, the link between encountering information in social media use and political participation will be stronger for citizens with high levels of political interest.

H2: Interest in politics will strengthen the link between encountering information in social media and political participation.

Trust in the Information

Recent reports show that an increasing number of people are relying on the Internet as their primary source of information (Pew Internet & American Life Project, 2013). Yet the lack of professional monitoring mechanisms to validate the content circulated in many online platforms places a greater burden on users to determine how much to trust the information on the web (Johnson & Kaye, 2009; Flanagin & Metzger, 2000; 2007). In the online information environment, the trustworthiness of information can be a particularly murky concept because of the multiple sources involved in the transmission process. For instance, your friend could send you an email with a piece of information found through an online discussion group, posted there by another member of the group. This person might have picked up the information from a news source or a wire report (Sundar & Nass, 2000). Such multiplicity of information sources can sometimes lead to confusion, as users tend to associate varying levels of credibility with different sources (Sundar & Nass, 2000).

Research has documented that individuals' trust in the information source can significantly influence their attitude change (Petty & Cacioppo, 1986), as well as subsequent behavioral outcomes, ranging from purchase intentions (Smith, Menon, & Sivakumar, 2005) to the use of technology (Li, Hess, & Valacich, 2008). Defined as individuals' generalized judgment rather than an inherent characteristic of the source (Kiousis, 2001; Rotter, 1967), trust in the information source significantly reduces the perceptions of risk, and shapes the behavioral outcomes of communication (Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Given the enormous amount of information available in the online information environment and the significant impact of information sources in encouraging attitudes and behaviors, findings of

previous studies suggest that if encountering information in social media is to indeed contribute to users' engagement levels, it will occur more among those who trust the competence and motives of the source (Miller & Krosnick, 2000). Thus, this study predicts that the link between social networking site use and engagement in politics will be stronger if users perceive the information mediated through the web to be trustworthy.

H3: Trust in the political information mediated through the web will strengthen the relationship between social media use and political participation.

Unlike other online destinations specifically designed to deliver news or cater to particular political viewpoints, the primary function of social media remains to facilitate social connections. While some scholars are convinced that the online environment reduces the likelihood of chance encounters with political content and intensifies the selectivity of citizens' information consumption (Prior, 2007), interacting in online social platforms can help overcome such selectivity and foster involvement in politics. Thus, the previous hypotheses formulated in this study predicted that encountering information in social networking site will positively contribute to political participation (H1), and that the relationship will be particularly stronger for those who display a more interest in politics (H2), and those who trust the source of the information they are exposed to (H3). Nevertheless, the present study seeks to further advance the field's understanding of the social media environment, by drawing attention to the interplay between interest and trust in realizing the potential of social networking sites to "engage the disengaged."

Literature in psychology illustrates that individuals undergo different cognitive processes depending on various circumstances (Chaiken, 1980; Petty & Cacioppo. 1986; Tversky & Kahneman, 1974). The theoretical framework of the elaboration likelihood model (ELM)

suggests that the individuals' motivation and ability determine whether or not to process the information with cognitive effort (Petty & Cacioppo, 1986). According to this model, when individuals lack the motivation or ability to process the message systematically, the degree to which perceptions about the information source determine the effectiveness of information becomes particularly pronounced (Petty & Cacioppo, 1986). Rather than scrutinizing the message for its relevance or argument quality, individuals with no particular interest in the topic tend to rely more on heuristic cues to evaluate the value of the information, increasing the influence of source credibility judgments (Petty & Cacioppo, 1986). Extending these theoretical frameworks into the social media environment, the current study explores the potential of trust toward the source in drawing disinterested citizens to become involved in political activities. In particular, this study asks whether social networking site use can act as a motivator of engagement for less politically interested citizens, when they highly trust the social intermediaries of information. This is an important question as credibility assessments of online information become complex and users increasingly rely on certain types of information cues, particularly in the social media contexts (Sundar, 2008; Westerwick, Kleinman, & Knobloch-Westerwick, 2013). Thus, the following hypothesis is formulated to examine the interplay between political interest and trust toward the information in shaping the relationship between social networking site use and political participation. More specifically, this study predicts encountering information in social media will positively predict participatory behavior individuals with low political interest, when they highly trust the information mediated through the web. This hypothesis will help clarify whether social media, though not particularly created for political or informational purposes, could still be a valuable and perhaps more penetrating resource for population segments that are often indifferent to civic and political activities.

H4: Encountering information in social media will positively predict participatory behavior for low interest users, when they highly trust the information.

Method

Data

Findings reported in this study are based on data collected through a national mail survey conducted immediately following the 2010 U.S. mid-term elections, by the research firm *Synovate*. A demographically balanced sample of adults in the U.S. was drawn from a prerecruited mail panel of more than 500,000 people who agreed to participate. To ensure an accurate representation of the national adult population, the sample was drawn to reflect the demographic distributions within the five Census divisions of household income, population density, panel member's age, gender, and region. This stratified quota sampling method was used to select approximately 2,000 respondents, from which 1718 usable responses were received (response rate=85.9%). While the stratified quota sampling method differs from other conventional probability sample procedures, previous research has confirmed that it produces highly comparable data (Putnam, 2000). Due to the focus on social media use, respondents who reported using social networking sites were included for the analyses (n=708).

Demographic characteristics of the sample resemble the profiles of the national population figures reported in U.S. Census Bureau's 2007 American Community Survey (ACS), with respect to age (median age for those 18 or older=ACS: 45–54, sample: 48), education, (median for those 25 or older= some college in both ACS and sample), and household income (median ACS: \$50,000–74,999, sample: \$60,000–74,999). Compared to U.S. Census data (51.4% females), the sample had more females (63.1%), and statistical weighting was employed

to match the gender distribution. The breakdown of the other demographic variables (age, education and education) remained the same as prior to the matching of the gender variable.

Measures

Political Participation. Respondents were asked about four types of involvement in traditional forms of political participation: attending a political meeting, rally, or speech; working for a candidate or a party; contacting a public official or a political party; and contributing money to a candidate or a political party. For each item, a seven-point scale, ranging from "none in the last month (1)" to "everyday (7)" was used. Items were added to create a single outcome variable (mean=4.56, SD=1.67, Cronbach's $\alpha=.81$).

Social Media Use. To measure respondents' social media use with a focus on social interactions, a single item was used asking respondents the frequency of visiting a social networking site of friends or family. Respondents answered on an eight-point scale ranging from "none in the last month (1)" to "several times a day (8)" (mean=3.04, SD=2.46).

Trust in the Information. Respondents were asked how much they agree with the statement "information about politics found on the Internet can be trusted" – on a six point scale, ranging from "definitely disagree (1)" to "definitely agree (6)" (mean=2.5, *SD*=1.19).

Interest in Politics. To measure the respondents' level of political interest, they were asked to report how much they agree with the statement "I am interested in politics," on a sixpoint scale ranging from "definitely disagree (1)" to "definitely agree (6)" (mean=3.19, SD=1.57).

Control variables. A set of demographic variables served as controls in the analysis: gender (49.0% males, 51% females), age (median=48, SD=17.54), education (median=some

college, SD=1.11) and household income (median=\$60,000–74,999, SD=6.16). This study also controlled for news media use, to account for their well-established impact on political participation (Shah et al., 2005). In order to measure respondents' exposure to both national (ABC, CBS, or NBC) and local news on television, two items were combined to create a TV news use index (mean=6.68, SD=2.55, Cronbach's α =.79). Newspaper news use was measured with a single item asking how often the respondents read daily newspapers (mean=3.32, SD=1.48). Finally, the current study also controls for informational uses of the Internet, with an item measuring respondents' use of online news sites was included, "how often do you use online news sites" (mean=2.34, SD=1.38). All news items were measured on the same five-point scale, ranging from "never (1)" to "regularly (5)."

Analytic Procedure

To examine the hypothesized relationships, multivariate regression analyses were run to predict political participation. In addition to testing the direct relationship between social media use and political participation, this study also explored how interest in politics and trust in the information moderate their linkages. To carry out these analyses, multiplicative interaction terms were created (social media use x political interest, social media use x trust), and were used in the analyses as predictors. In order to avoid potential multi-collinearity problems between the interaction term and its components, all of the component variables were standardized prior to the formation of the interaction terms (Cronbach, 1987). Finally, to examine the interplay between political interest and trust in the information, a three-way interaction term was created with social media use (social media use x political interest x trust).

Results

The central motivation for this study was to explore the political outcomes of social media use, and provide a starting point for understanding the democratic potential of citizens' social communication in emerging information platforms. Hypothesis 1 stated that social media use would positively predict engagement in political activities.

Table 8
Predictors of Political Participation

	Political Participation	
	β	t Value
Control Variables		
Age	.02	.62
Gender (high: female)	01	37
Education	.05	1.70#
Household Income	01	33
Political Interest	.27**	9.07
Newspaper News Use	02	58
Television News Use	00	24
Online News Use	02	67
Social Media Use	.07*	2.03
Total R ² (%)	8.0%	

Note:

- 1. Entries are standardized final regression coefficients.
- 2. # p<.10; * p<.05; ** p<.01

To test this relationship, this study examined the direct relationship between social networking site use and political participation, along with the respondents' demographics, news media use, and political interest variables. As shown in Table 8, the significant positive regression coefficient of social media use (β = .07, p<.05) provides evidence to support H1. Those who frequently visit the social networking sites of friends and families are more likely to take part in political activities. Among other control variables, political interest was a significant positive predictor of political participation (β = .27, p<.01), confirming that those who are interested in politics would be more inclined to devote their resources to participate in political activities.

Table 9
Predictors of Political Participation – Two-way Interactions

	Political Participation	
	β	t Value
Prior Blocks (R ² ,%)	8.0%	
Social Media Use	.07**	2.44
x Political Interest		
Social Media Use	.10**	3.00
x Trust		
Inc. R ² (%)	3.0%**	
Total R ² (%)	11.0%	
(, -)	= = = = = = = = = = = = = = = = = = = =	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, newspaper news use, television news use, online news use, social media use, trust in the information source.
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. # p<.10; * p<.05; ** p<.01

Results in Table 9 present findings of the next set of analyses, which focused on how political interest (H2), and trust in the information (H3) facilitate the link between interacting in social media and political participation. Hypothesis 2 predicted that political interest would strengthen the link between social networking site use and political participation. The significant positive interaction of social media use x political interest (β =.07, p<.01) provides evidence to support this prediction. As illustrated in Figure 6, the two different slopes indicate that the contribution of social media use to political participation varies clearly depending on the level of political interest. The steeper slope for those with *high* levels of interest suggests that they are more likely to experience the political benefits of social networking site use.

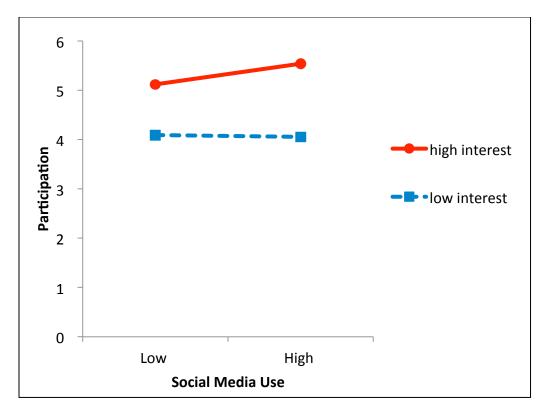


Figure 6.

Two-way interaction between social media use and political interest

Results in Table 9 also provide evidence to support H3, which focused on the role of *trustworthiness* in shaping the political outcomes of social networking site use. The significant positive regression coefficient (β =.10, p<.01) indicates that social networking site use contributes to political participation to a greater extent when users trust the Internet as a reliable source for political information. This result is plotted in Figure 7. As the two slopes indicate, the link between social media use and political participation becomes stronger when users perceive the Internet to be a trustworthy source of information.

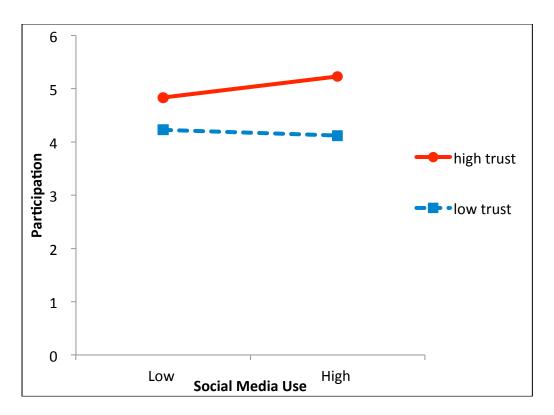


Figure 7.
Two-way interaction between social media use and trust

While these results confirm the direct and moderated relationships, the combined interplay of the interest and trust remains to be further explicated. Analysis of a three-way interaction term (social media use x political interest x trust) was therefore conducted to uncover their interplay in linking social networking site use to political participation (H4). As shown in Table 10, a significant positive three-way interaction was found ($\beta = .12, p < .01$), providing empirical evidence to support H4.

Table 10 Predictors of Political Participation – Three-way Interactions

	Political Participation	
	β	t Value
Prior Blocks (R ² ,%)	11.0%	
Social Media Use	.12**	4.12
x Political Interest		
x Trust		
Inc. R ² (%)	1.2%**	
Total R ² (%)	12.2%	

Note:

- 1. Prior blocks include age, gender, education, household income, political interest, newspaper news use, television news use, online news use, social media use, trust in the information source, two-way interaction terms; social media use x political interest, social media use x trust, trust x political interest.
- 2. Entries are standardized regression coefficients after controlling for the prior blocks.
- 3. # p<.10; * p<.05; ** p<.01

To help visualize the three-way interaction, the results are plotted in Figure 8. The X-axis in this plot represents the users' level of trust in the Internet as a source of political information (high and low). The Y-axis represents the contribution of social networking site use to political participation – expressed as the *change* in participation *per change* in social media use (Δ Participation/ Δ Social Media Use). The slopes thus indicate the rate of change in this contribution corresponding to a change in the level of trust in the Internet.

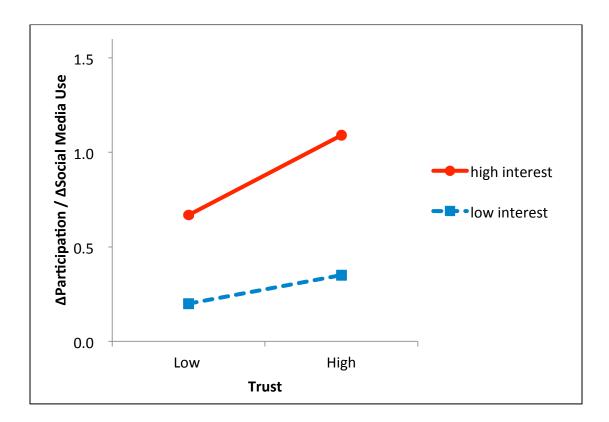


Figure 8.

Three-way interaction between social media use, political interest, and trust

The two positive slopes in Figure 8 suggest that trust in the Internet as an information source enhances the link between social networking site use and political participation. The positive three-way interaction coefficient ($\beta = .12$, p < .01) suggests that the role of trust in shaping

the link is greater for politically interested users. The steeper slope for those with high levels of political interest illustrates this point. Nevertheless, upon closer examination of Figure 6 and Figure 8, an interesting pattern emerged. While hardly any contribution to participation was observed for users with *low* political interest (Figure 6), this pattern changed when trust was incorporated in the regression model. In other words, when individuals trust the political information found on the Internet, social networking site use seemed to contribute to political participation, even when their political interest level was relatively low.

Discussion

While scholars acknowledge the extensive changes that new communication technologies bring to public deliberation and political life, the dynamics of social networking site use leading to citizens' engagement in political activities largely remained to be explicated. The current research adds valuable insight about the value of citizens' social interactions in online platforms in providing an impetus for participation, and draws nuanced understandings of the conditions under which the political outcomes become more manifest. More importantly, this study sheds light on the possibility of social networking sites to engage the politically *disengaged* citizens, revealing an interesting lead for future research.

To begin with, as proposed by H1, social media use was a positive predictor of citizens' engagement in political activities. To move beyond the framework of previous studies that have examined the civic and political outcomes of seeking news and information on social networking sites (Gil de Zúñiga et al., 2012), the current study focused more on how social interactions with friends and family contribute to the users' political engagement. Interestingly, the positive

connection between social networking site use and political participation was significant, after controlling for demographics, news media use (traditional media and online), as well as political interest. This finding suggests that citizens' social-recreational communication can provide additional benefits that can spur citizens' involvement in political activities in ways that have not been previously established. Previous research has shown that informational uses of traditional as well as new media foster civic and political engagement, yet the contribution of social-recreational uses has been a subject of debate (Moy et al., 2005). Nevertheless, social networking sites have evolved remarkably and have come to re-conceptualize the meaning of social-recreational uses of the Internet (boyd, 2010), by offering numerous affordances not only for self-expression or social connections, but also for information sharing and collective engagement, on a single platform. The findings of this research provide evidence to maintain that these diverse features of social networking site use can facilitate citizens' involvement in political life.

Interested in the conditions under which the link between social networking site use and political participation becomes more visible, this study first examined the role of political interest (H2). As predicted, political interest strengthened the relationship between social networking site use and political participation, indicating the benefits of interacting with others on social networking sites was greater for those who are more interested. This result, while resonating with the findings of previous literature (Lupia & Philpot, 2005), first seemed to suggest that those with less interest in politics might not experience any increased political benefits from these social platforms. Yet a more nuanced and intriguing pattern was uncovered when trust in online platform as an information source was incorporated in the analyses.

Given the myriad of information available on the Internet, it seems intuitive that users evaluate the credibility of the source and trust the information to varying degrees. Consistent with prior studies emphasizing the central role of trust in shaping the outcomes of communication (Petty & Cacioppo, 1986), the extent to which exposure to information in online platforms leads individuals to take part in political action differed depending on how much they trust the information. As predicted in H3, the political potentiality of social networking sites was significantly enhanced when users highly trusted the source for political information. In other words, learning about politics and current affairs through social networking sites would facilitate engagement more when users highly trust the information they are exposed to on the web.

The role of trust in the current information environment was further highlighted by the significant three-way interaction (social media use x political interest x trust). The positive two-way interaction between political interest and social networking site use in H2 appeared to suggest that the political impact of social networking site use is greater when users are already politically interested and rather minimal when users lack interest in politics. When trust was introduced in the analytic framework, however, an interesting picture emerged. The three-way interaction illustrated that connecting with friends in social media platforms significantly contributed to political participation of even less politically interested users, when they highly trusted the information. This finding illustrates the central relevance of the users' perceptions of trust in the information source in gauging the outcomes of social media use. In particular, high levels of trust in the information source could potentially overcome the limitations posed by the lack of interest in leading the disengaged users to take part in political action.

Findings of this research provides some evidence to suggest that social media platforms, though initially not created to serve political or informational purposes, can function as a

valuable and perhaps more penetrating resource for population segments that are often indifferent to civic and political activities. In fact, exposure to news mediated through online social networks may be the only way some members of the society encounter politics or current affairs issues. Particularly for younger citizens who have been more adaptive and fully embraced online social networking as a daily habit, social media may be a particularly important arena for their daily updates of news and political information, fostering their engagement in politics. Moreover, the current research underscores the need to consider the users' perceived trustworthiness of the information source in order to develop a clearer understanding of the process by which encountering information in social media can lead to participatory action. Understanding the power of trusted sources in engaging disinterested citizens is not only an important question for communication research but also for political actors and organizations that seek to utilize online social networks to strategically reach citizens.

Nevertheless, this study still faced some limitations. While the data were collected from a national sample of U.S. adults, the study relies on a cross-sectional survey conducted immediately after the 2010 mid-term election. Although the national sample ensures the generalizability of the findings and clarification of the theoretical structure of relationships, the cross-sectional nature of the survey provides limited evidence to draw causal inferences. Future research would benefit from longitudinal data that examine the cumulative impact of social media use on political engagement in *non*-election contexts. In addition, while the trust variable used in this study reflects the users' overall predisposition toward political information found on the Internet, it did not specify the source to be social networking sites. Future research should further investigate the trust dynamics – not only toward the social networking sites themselves, but also toward the influential individuals who actively disseminate information and act as

sources of information. On a similar note, the current study employed a single item for social networking site use, with a measure of the respondents' visits to friends and family's social networks. While this measure was employed both as an attempt to circumvent the limitations of self-recalls of inadvertent exposure to news or politics, and as an alternative to the previous typologies of social media use, it may be too simple to capture the spontaneity of interacting in the social media newsfeeds. Developing new ways to measure user interactions will enrich our understandings of the new media environment.

These limitations notwithstanding, this study takes an initial step in a promising direction. It highlights the potential of social networking site use to engage citizens politically, and shows that the unique dynamics of the networked public can provide relevant information to engage even the disengaged.

CHAPTER VI

Conclusion

The exponential growth social networking sites in recent years has brought them to the center of scholarly research, as illustrated in the sharp increase in the number of published journal articles (Web of Science, 2014). Predictions about the political outcomes of social media vary and are still widely debated. While some project hopes that social media could facilitate democratic discourse, others remain skeptical about their potential as a Habermasian ideal public sphere. Drawing attention to the shift from actively seeking news and political information on the Internet to encountering the content through social interactions, this dissertation presented three studies that examine the outcomes of routine social media use on different dimensions of democratic citizenship.

The first study examined the potential of social media to contribute to an informed citizenry, by facilitating encounters with news or political information in online social networks. Rather than testing the direct contribution of social media use to the individuals' knowledge in politics, this study sheds light on the outcomes of encountering unverified information diffused in online networks and explores the relationship between social media use and belief in political rumors. The second study investigates the potential of social media to function as a deliberative forum, where users can encounter counter-attitudinal opinions of their friends. In the third study, the link between encountering information and participation in politics is tested, and how this relationship is shaped by the users' trust. The current section will briefly review the findings of

the three studies and discuss the ways in which social media use can be politically consequential.

This is followed by a description of the limitations of these studies, and how they might be overcome. Finally, a number of future research opportunities are discussed.

Findings

Before proceeding with the interpretation of the studies, it is useful to review the findings of the three studies. The analyses of Chapter 3 illustrate two main points regarding the role of social media as a source of news and information. The first is that in contrast with the use of traditional news media, there is a positive relationship between social media use and belief in political rumors. Frequently using traditional news media was found to be a negative moderator between social media use and political rumor beliefs. Second, when online social networks were politically similar, the positive association between social media use and belief in political rumors became stronger.

The findings described in Chapter 4 illustrate the potential of social media to function as an arena for political discourse. The study showed that extensive use of social media can increase the likelihood of encountering political viewpoints that are different from the one's own. In addition, contrary to the predictions of the study, crosscutting exposure in social networking sites was found not to undermine political expressions significantly. The positive association between crosscutting exposure and political expression tended to be stronger when users believed that their friends shared similar views as themselves, particularly among younger users of social media.

Turing to the findings in Chapter 5, encountering information in social media was positively associated with users' reported frequency of participation in political activities. This relationship was stronger when users found that the information can be trusted. Interestingly, this finding was established for not only users who reported being interested in politics, but also those who reported not being particularly interested in politics.

Discussion

In general, the findings of this research underscore that social media function as a conduit over which news and information flow, and that communicating in these online networks meaningfully relate to individuals' involvement in politics. The studies illustrate that interacting in online social networks is significantly associated with different dimensions of democratic citizenship – the users' political beliefs, expression, and participation. Findings suggest that the social stream of content can expose users to a wide range of information, such as unverified political rumors, attitude-challenging opinions of others, or politically motivating ideas. Each of the three studies highlights that the outcomes of information exposure in social media can be contingent upon the characteristics of the users' social networks.

The positive relationship between social media use and beliefs in political rumors, as illustrated in Chapter 3, shed light on how encountering information in online social networks might be insufficient to be accurately informed. One possible explanation is that the collaborative filtering of information and the absence of a verification mechanism in social media can open up the venue for sensational information, providing a less accurate picture about politics and current affairs, compared to the traditional news media. Real world cases, such as

the reactions to the Boston marathon bombing and the false rumor about an alleged attack on the White House in social media, show that information entering and spreading in social media may not always be factually confirmed and can even be fabricated.

The second and perhaps more interesting possibility is that the individuals' perceptions around the credibility of information can be socially constructed in networks. Although traditional news media can follow-up to verify and correct misinformation, these efforts can be overshadowed once the infiltrated content becomes widely circulated, and the users' perceptions are influenced by the apparent resonance of the information among their close friends. As established in previous research, social consensus can significantly influence individuals' perceptions, to the extent that they sometimes lose confidence in their initially accurate appraisals (Asch, 1956; Festinger, 1954). The significant outcomes of network similarity in this study provide evidence to underscore the role of network characteristics in shaping the users' perceptions around political information. The findings of this study suggest that while the stream of information in social networking sites can facilitate encounters with news and politics, the contribution to an informed democratic citizenry remains questionable.

The results in Chapter 4 regarding the relationship between crosscutting exposure in social media and political expression seem to be less intuitive. Researchers have repeatedly shown that social pressure and social accountability lead individuals to become less vocal in situations involving political disagreement (Mutz, 2002), particularly when they are aware of their minority position in the opinion climate (Noelle-Neumann, 1974). Yet this research shows that individuals are politically expressive despite their experience of having been exposed to politically opinion-challenging viewpoints in their online social networks. Two possible

explanations can be discussed, the first regarding the nature of interacting in social media, while the second might stem from a limitation of the research design.

The first possibility is that interacting in social media may involve a "psychological distance" that distinguishes it from other forms of interpersonal conversations. Considering that users willingly reveal their real identities with their names, background information, and profile pictures, conversations in social media resemble the characteristics of the face-to-face setting. Yet there is a physical distance among users connected through online social networks, and their communication may not always be synchronous. Interacting in social media can therefore generate a feeling of *distant* face-to-face communication, releasing individuals from the awkwardness and anxieties involved in conversations with political disagreement.

In addition, the "social distance" between individuals can shape the outcomes of crosscutting encounters in online social networks. The nature of the relationship between individuals who disagree may be a critical factor in the users' perceived relevance of the attitude-challenging viewpoint, as well as the decision to engage in the political conversation.

Individuals' attention and response to crosscutting encounters are likely to differ depending on their relationship with the source, such as their tie strength, the source's expertise or opinion-leadership, and future offline encounters. In other words, the source of the information may matter more than the opinion-challenging content in shaping the experience of crosscutting exposure in online social networks. As Hindman (2009) articulates, in an environment where there are few barriers to express political views, what may matter more is not who posts but who gets read.

The other explanation regards the limitation of the study design. This study measured crosscutting exposure with a single item, which asked respondents how often they were exposed

to politically opinion-challenging viewpoints in their online social networks. Political expression, on the other hand, was measured with three items that focused on how often the respondents expressed their support toward the presidential candidate using different features available in social media. If the measure asked respondents to specifically report on how they responded to the crosscutting encounter, the findings could clearly illustrate the interactive dynamics in social media.

Lastly, Chapter 5 provides evidence to suggest that social media promote a distinct interactive dynamics that may encourage a wider spectrum of users to become engaged in political activities. Literature in political science suggests that the political effects of new media use are contingent on individuals' political interest (Bimber, 2003), which is found to be by far the most influential factor, outweighing the impact of other relevant factors, such as education and occupation (Luskin, 1990). Social media may provide an outlet for users with no particular interest or intention to seek politics to information to learn about a social cause, collective action, or political elections, encouraging their participation. This positive outcome can be strengthened by the nature of the relationships between users who introduce such information into the networks, and those who are exposed to the information. The current study relied on a measure of trust toward the information, yet specifying the trust variable to the source could allow for a better understanding of how the relation between users can ease the transfer of political content and lower the threshold for participation.

Limitations of this Research

The three studies in this dissertation provide useful insight into the political role of social media, but each involved limitations that warrant discussion. The first limitation regards the nature of the data. Each of the studies was based on a cross-sectional survey of social media users. It should be thus acknowledged that the cross-sectional nature of the data makes it difficult conclude the causal influence of social media use on the three dimensions of political engagement. In the absence of longitudinal data, it is hard to claim that the observed outcomes are causally attributable to the use of social networking sites. While the demographic characteristics of the data resemble the population parameters, the non-probability sampling method can also raise questions about the generalizability of the results. Collecting longitudinal data from a random sample could allow for a more conclusive finding regarding the influence of social media use. Finally, given that the data were collected immediately after two different elections (presidential and mid-term election) in two different countries, examining the proposed studies in a non-election context will provide insight to how these relationships hold during times of less attention to political competitions.

The second limitation regards the measures of core concepts in the studies. Some of the key variables were based on single items, which can raise concerns regarding the validity and reliability of the measures. In addition, all of the measures are based on self-reports of the respondents. Asking respondents directly about their perceptions around the homogeneity of their online social networks, for instance, may appear to be an intuitive approach, yet can be complicated by social desirability biases. This bias can create a discrepancy between actual and reported behavior.

Another methodological issue to be addressed is the way in which "encountering" with news or political information was measured. Given that social media users are exposed to a constant flow of information, it might place an unrealistic demand on their memory to request reporting how many times they inadvertently encountered news or information through their friends in online social networks. Researchers have addressed this problem of measuring media exposure in various ways, such as providing anchoring points of population frequencies for reference (Prior, 2009), or providing lists of contents that the respondents might have been exposed to (Dilliplane, Goldman, & Mutz, 2013). The current study assumed that spending more time in socializing in online networks would encompass inadvertent exposure to news and information, and employed a social media use measure that served as a somewhat rough substitute for measuring encounters. Although this approach can avoid the pitfalls of respondent's imperfect recall that inflate or attenuate the significance of the demonstrated relationships, it is measure is limited in capturing encounters with information or drawing a nuanced understanding of the nature of social media.

More recently, technological developments have created new ways of collecting data that allow researcher to overcome the limitations of self-reports. Some have begun to employ log data collected automatically through the use of digital technologies (Kobayashi & Boase, 2012). Time-stamped digital footprints of social media activities along with the users' personal information are now made available for research, which opened up a new vista for social media research. In addition, behavior-tracking software allow researchers to unobtrusive examine how users navigate through the social web and pay attention to contents. These alternative methods of collecting social media use data could help overcome the limitations of self-reports, and allow for a more accurate understanding of how social media is actually used.

Finally, each of the three studies focused on understanding the nature of social media use that runs across various online social networking services offered on the web, and examined "social media" as an all-encompassing concept. Although the backbone technology of social media appear to be relatively consistent, each social networking site operates on its own platform with a unique algorithm, and provides a unique user interface. Some social networking sites require users to build reciprocated friendships, while others allow users to maintain unreciprocated followerships. Accordingly, particular cultures and practices can be developed in different social networking sites (body & Ellison, 2007), competing for and attracting different social media users. Taking into account the role of features that are specific to the social networking sites will therefore provide a more nuanced understanding of their interactive dynamics.

Directions for Future Research

The findings of this dissertation suggest several areas for future research. First, future research should take advantage of methodological innovations that enable us to reconcile the discrepancies between users' surveys of self-reports and actual interaction in social media. As discussed in the previous section, the gap between the two could depict an incomplete picture of the political outcomes of social interactions in the current information environment, and overlook the significant consequences of inadvertent encounters. A number of alternatives can supplement this method, one of which is to analyze users' communication in social networks through the use large data sets of log entries. The availability of social media data is considered to have opened a new frontier in communication research and emerged as a key ingredient in

understanding networked interactions. Despite the criticism with regard to privacy issues, the use of publicly available data can provide useful insight into the content and the aggregate flow of information in social media, while minimizing the biases arising from self-reports or obtrusive measurements.

In addition, using a mixed-methods approach with qualitative data will deepen our understanding about how users interact in online social networks. Prompting individuals to report what information they are exposed to, and how they respond to various contents shared by others will allow for an in-depth analysis of the users' perspective on social media use.

Comparing qualitative data with actual log entries of the users will provide an interesting approach to understand how the users' attention is distributed in the constant stream of information updates in social media, and clarify the meaning of "social media use."

A second area for future research is incorporating the users' social relations through the use network data. Social media are a valuable source for organically generated relational data that is not only methodologically but also theoretically meaningful. Throughout this dissertation, it has been argued that social media create a platform where *information* meets *sociality*. Since the flow of information is engrained in existing social relations, the outcomes of information exposure can vary depending on the social distance between users. For instance, information can seem more credible when it from a trusted source or an opinion-leader in the network. This information can be perceived to be even more credible when it resonates within the users' network, as shown through various indicators of endorsement. This prediction seems intuitive, as previous research findings have established the effectiveness of source information and heuristic cues (Chaiken, 1980; Kaheman & Tversky, 1979; Petty & Cacioppo, 1986).

Nevertheless, this mechanism provides an interesting theoretical framework to explore the process through which misinformation and unverified rumors are propagated in online social networks. While data scientists are detecting the presence of political rumors and misinformation in networks through the use of machine learning, the field lacks an understanding of the underlying mechanism that makes false information more believable. Critics have raised caution that extant research has focused more on how heuristic cues serve as rational strategies for effective decision making, overlooking the potential problems associated with their inappropriate use (Kuklinski & Quirk, 2000). The enhanced visibility of social cues can lead individuals to automatically rely on others' endorsement in their social networks, without worrying about the accuracy of information, perhaps in the absence of any contextual knowledge. Whether the impact of social cues can grow to the extent that they challenge the established credibility of traditional news media, or whether they can increase the danger of groupthink and result in a misinformed but participatory citizenry is an important area for future social media research.

A final area for future studies is to explore the influence of this mechanism on teens and younger adults. Digital media have become part of the taken for granted cultural fabric for younger adults who are much more likely to use social networking sites (Correa, Hinsely, & Gil de Zúñiga, 2010). Yet studies show that they are less inclined than older adults to follow the news, even online (Galston 2004; Glasford, 2008). Examining whether the young gravitate toward social sources for news and information, and what implication this shift in weight carries on democratic citizenship remains unexplored. As social media become important sources for information to its users, particularly the young, being able to critically assess information becomes more meaningful. Considering the social transaction costs of misinformation and the

benefits that can be accrued through the information diffusion network, future research should investigate the mechanism through which information gains credibility.

Conclusion

Social media have established themselves as a significant platform for communication, and their use offers unprecedented flexibility to share and access information. Compared to previous forms of social-recreational use of the Internet such as online chat rooms or games, social media represent a change of online recreation from anonymous exchange of information to a place where individuals can communicate in pre-existing networks and easily maintain and enrich their relationships (Kraut, Kiesler, Boneva, Cummings, & Helgeson, & Crawford, 2002; Valkenburg & Peter, 2009). Information becomes increasingly ingrained in existing social relationships and a growing number of users report choosing social media as an alternative source for news. Using the features available in social media, users can actively part in a building a deliberative public connected through networks. Under these circumstances, it is important that we understand the mechanism underlying the relationship between social media use and political engagement.

This research illustrates a beginning step towards understanding the relationship between social media use and democratic citizenry, highlighting the potential for both the bright and dark side of its use. While the idea that informational or politically motivated use of the new technologies can significantly contribute to political engagement has been extensively researched, how exposure to information through routine uses of social media relates to individuals' perceptions and behavior has not yet been explored. In this dissertation, I have argued that while

social media have become a conduit over which news and information flows, their impact on democratic citizenry can be dependent on the network characteristics.

These results of this dissertation are encouraging in that social media can narrow the distance between politics and citizens, and that the embeddedness of information in social relations can lower the threshold for engagement. On the other hand, it appears that there are limitations of the social stream of information as an alternative source for news, as illustrated through the cases of rumors and false information. While it may be a difficult and perhaps a bold endeavor to generalize what "social media" uniformly do to democratic citizenry, the findings of this dissertation illustrate the potential benefits as well as vulnerabilities of the social streams of information.

APPENDIX

Rumor Questions Wording

- : Please tell us about your judgment on the truths about the following statements.
- 1) North Korea is not responsible the sinking of the South Korean Navy ship Cheonan.
 - * Author's Note: International investigations convened by South Korean government concluded that the ship had been sunk by a North Korean torpedo
- 2) Eating imported U.S. beef will increase the danger of getting Mad Cow disease.
 - * Author's Note: the resumption of U.S. beef imports in relation to the U.S.-Korea Free Trade Agreement stirred up fears that would increase the danger of Mad Cow disease from infected beef to be imported from the U.S.
- 3) Accusations against politicians brought to attention by the political talk show podcast "Naneun Ggomsuda" are mostly true.
 - * Author's Note: the host of the talk show "Naneun Ggomsuda" has been ruled by the Supreme Court to have violated the country's election and defamation laws when he spread unconfirmed rumors

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