

Understanding the Role of Social Media in Political Participation: Integrating Political Knowledge and Bridging Social Capital From the Social Cognitive Approach

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Recently, the relationship between use of social media and political participation has received increased scholarly scrutiny. Two main elements that reflect theoretical approaches to the relationship have been developed: political knowledge and bridging social capital. The current study integrates political knowledge and bridging social capital, using Bandura's social cognitive theory (SCT) on data collected from surveys conducted in the U.S. The results suggest that self-efficacy and outcome expectancy mediate the effects of political knowledge and bridging social capital on political participation. The proposed model represents the interactions among bridging social capital, political knowledge, self-efficacy, and outcome expectancy, providing an overall mechanism to assess the effects of social media on political participation using SCT.

Keywords: social media, political participation, social cognitive theory, social capital, political knowledge

The growing use of social media in all demographic groups has motivated scholars to take a closer look at the role these platforms play in political participation. Many studies have shown the instrumental role that social media plays in distributing political news and information, keeping up with like-minded people, and mobilizing various forms of political participation (Bennett, 2012; Gil de Zúñiga, Jung, & Valenzuela, 2012; Lim, 2012; Park, Kee, & Valenzuela, 2009; Tufekci & Wilson, 2012; Valenzuela, Arriagada, & Scherman, 2012).

Most of this research describes either informational use or social capital. The informational approach focuses on the role that social media plays in enhancing its users' political knowledge (Gil de Zúñiga, Molyneux,

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& Zheng, 2014; Park et al., 2009; Tufekci & Wilson, 2012). These studies have found that social media allows its users to create, exchange, and disseminate political information, and makes them more knowledgeable about politics. Ultimately, these knowledgeable and informed users become motivated to engage in political behaviors, such as participating in elections, contributing money to political campaigns, contacting officials, and volunteering for political groups (Park et al., 2009; Sotirovic & McLeod, 2010; Tufekci & Wilson, 2012).

The other stream highlights the role that social media can play in expanding social capital (Ellison, Steinfield, & Lampe, 2011; Valenzuela, Park, & Kee, 2009). The effect that social media has on bridging social capital has also been assessed (e.g., Ellison, Vitak, Gray, & Lampe, 2014). The term *bridging social capital* refers to the loose connections that can develop between individuals or groups who previously were unaware of each other (Gittel & Vidal, 1998, Granovetter, 1973). Empirical studies have demonstrated that social media, such as Facebook and Twitter, supports bridging social capital among users, which could stimulate political participatory behaviors (Ellison et al., 2011; Gil de Zúñiga et al., 2012; Loader, Vromen, & Xenos, 2014).

In fact, studies have shown that the two lines are intimately connected (e.g., Putnam, 1995). Using the concept of social capital, Putnam (1995) postulated that information and information networks (e.g., social media) allow people to cooperate and coordinate collective action, including political behaviors. People with expanded bridging social capital have access to more information resources and can provide more themselves (Wellman & Frank, 2001). This study integrates the informational and bridging social capital approaches using Bandura's social cognitive theory (SCT) to identify the mechanisms of social media usage and political participation. Scholars have long argued that political participation is the outcome of a dynamic process of social cognitive components (e.g., McLeod, Kosicki, & McLeod, 1994; Price & Roberts, 1987; Vecchione & Caprara, 2009), and SCT will provide the theoretical foundation to understand the effects of social media on political participation. This theoretical integration is beneficial for scholars and public administrators because it presents any understanding of the overall mechanism between social media and political participation.

Social Cognitive Perspective on Political Participation

In Bandura's SCT, behavioral changes are understood to occur in social contexts that feature reciprocal interactions among individuals' cognition, environment, and behavior. SCT has been used to understand and predict human behaviors in contexts such as computer-mediated communication (e.g., LaRose & Kim, 2007) and political participation (Kushin & Yamamoto, 2010). In this study, SCT is used because political participation necessarily involves both social and cognitive components. It has been demonstrated that social settings and networks are important antecedents for political participation (e.g., Scheufele, Nisbet, Brossard, & Nisbet, 2004). That is, expanded social networks have been found to enhance communication activities, as members in such networks become more aware of social needs and stimulate their own political participation (e.g., Homans, 1961; Wellman, Haase, Witte, & Hampton, 2001). The effects of bridging social capital on political participation have received a considerable amount of academic attention in this regard (Bourdieu, 1986; Lin, 2001; Putnam 1995, 2000). Likewise, political information has been identified as an important predictor for political participation. The link between cognition and political participation has been well established (Bybee, McLeod, Leutscher, & Garramone, 1981; McLeod & McDonald, 1985; Miller & Wattenberg,

1984). Individuals' information processing has been found to have an effect on their political and civic participation (e.g., McLeod et al., 1994). This line of research has demonstrated that informational use of media promotes political knowledge and information, which contributes to increased civic and political participation. This effect has been demonstrated for newspapers (McLeod et al., 1994), television (Norris, 1996), the Internet (Shah, Cho, Eveland, & Kwak, 2005), and mobile communication technologies (Campbell & Kwak, 2010). This approach has also revealed that the decision whether to participate in political activities depends in large part on a cognitive assessment of the likely outcome of the political participation (Jackman, 1993; Tsebelis, 1990).

Bandura (1993) presented self-efficacy and outcome expectancy as the most crucial parts of SCT. According to Bandura, Barbanelli, Caprara, and Pastorelli (2001), individuals with confidence in their capability to produce designated levels of behavior (self-efficacy) and who expect positive outcomes for a given action (outcome expectancy) are more likely to perform that behavior. Because individuals' social and cognitive components largely function through self-efficacy and outcome expectancy, those two may mediate the effects of informational use and bridging social capital on political participation. Thus, this study proposes that informational use and bridging social capital influence individuals' political participation, mediated by the social cognitive factors of self-efficacy and outcome expectancy.

Social Media, Political Knowledge, and Bridging Social Capital

The link between the use of media and political knowledge has been well established (Bybee et al., 1981; McLeod & McDonald, 1985; McLeod, Scheufele, & Moy, 1999; Smith, 1986; Viswanath, Finnegan, Rooney, & Potter, 1990). Social media have been enabling individuals to share information with each other since the mid-2000s (Howard & Parks, 2012; Pew Research Center, 2012). The Pew Research Center (2012) reported that 34% of social media users posted their own thoughts or comments on political and social issues through it, and 33% used it to repost content related to political or social issues that was originally posted by someone else. As mobile media communication tools continue to advance, social media have become an important source of political information and is facilitating political information exchange to a large degree. It has also been found that use of social media fosters the creation and facilitation of political information, which then increases political participation (e.g., Park et al., 2009; Tang & Lee, 2013).

The central premise of social capital is that social networks have value as such. Thus, social capital can be defined as "the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu, 1986, p. 248). Putnam (1995) suggested that social capital is generated in social networks, including in personal relationships, casual acquaintanceships, and other connections. In studies of social media, bridging social capital has received a great deal of attention (Gil de Zúñiga et al., 2012; Loader et al., 2014). Bridging social capital describes the connections that appear among people who did not know each other previously; they provide new perspectives for one another, but typically not emotional support (Granovetter, 1973). Social media here describe the Internet-based media that allows users to connect with other people and search each other's networks. Users can also communicate with each other through various tools, such as posts and instant messages (boyd & Ellison, 2007). Social media also enable users to collaborate in the creation, distribution, and discussion of information (Westerman, Spence, & Van Der Heide,

2014). In social media environments, dissimilar individuals obtain the opportunity to form weak ties with each other. Positive and significant associations between social media use and bridging social capital have been found (Ellison, Steinfield, & Lampe, 2007; Gil de Zúñiga et al., 2012; Valenzuela et al., 2009); social media lower the cost of communication and helps users visualize, traverse, and expand their networks (e.g., boyd & Ellison, 2007). Bridging social capital is built when members of one group connect with the members of a heterogeneous network to gain information. The use of social media augment and support loose social ties, allowing citizens to create and maintain larger relationship networks (Donath & boyd, 2004; Wellman et al., 2001). Drawing on this literature, this study hypothesizes the following:

H1: Use of social media is positively related to political knowledge.

H2: Use of social media is positively related to bridging social capital.

Bridging Social Capital, Political Knowledge, Outcome Expectancy, and Self-Efficacy

Bridging social capital facilitates the dissemination of information and knowledge throughout a community; the connections that individuals have with other individuals in heterogeneous groups provide opportunities for them to be exposed to new information (Putnam, 2000). Such connections exist in the form of social relationships and networks among individuals. Whether these take on discrete or diffuse forms, social relationships and networks can exchange and produce information (e.g., Sandefur & Laumann, 1998) because they allow individuals to interact with each other. Similarly, Eulau (1986) argued that social formations such as networks provide the opportunities for the exchange of political information. Huckfeldt and Sprague (1987) also argued that political information can be presented not only in politicians' speeches and media coverage, but also through a variety of informal social interactions. Such interactions are themselves a source of information. Indeed, that social networks facilitate the flow of information has long been considered to be empirically proved (Coleman, Katz, & Menzel, 1966; Granovetter, 1973). Bridging social capital inheres in extended social networks because it only inheres in connections among individuals from disparate groups. In other words, bridging social capital is embedded in social relationships and networks, and these lead to the creation and communication of political information and knowledge.

One mechanism through which bridging social capital may be linked to political participation is outcome expectancy created within political participation. In the expanded environment where bridging social capital is formed, citizens are more likely to believe that their political behaviors will lead to the outcomes they desire and intend because they acquire easier access to public officials, and they know where to address their political opinions. In the understanding of SCT, connections to others in heterogeneous groups form vicarious learning, which describes the observation that other, similar individuals have performed given behaviors successfully (Bandura, 1986). This vicarious observation of others' participation encourages citizens to engage in political participation; seeing that others have participated without incurring negative outcomes induces the belief that their participation in political activities would also have positive outcomes (outcome expectancy) and the efficacious belief that they will also reach the same level of outcome (self-efficacy). Observation of another's behavior, taken as a model, can provide information that helps to form outcome expectancies (Manz & Sims, 1981). The SCT postulates that vicarious learning influences behavior by means of its influence on outcome expectancy and self-efficacy (Bandura, 1986).

Larger amounts of bridging social capital simply indicate expanded social networks and relationships (boyd & Ellison, 2007), which in turn mean greater opportunity for vicarious experience. Thus, it is to be expected that bridging social capital can lead to the formation of outcome expectancy and self-efficacy, which in turn influence political participation.

Moreover, Kobayashi (2010) found that connecting citizens through weak ties can nourish skills of social cooperation and social tolerance because those who have increased bridging social capital adjust their interests within a community. In other words, individuals who have expanded bridging social capital are more likely to participate in activities with desirable social outcomes, such as social solidarity and the betterment of their community. Individuals who have increased bridging social capital pursue political participation to promote solidarity in, and the betterment of, their community.

A range of studies have demonstrated that information can increase self-efficacy (Bandura, 1982; Compeau & Higgins, 1995; K. M. Lee, 2006). Self-efficacy is cognitive in nature, malleable, and influenced by information (Devonport & Lane, 2006). In SCT, (Bandura, 1977, 1986), greater information is expected to increase self-efficacy because having it supports the feeling of control in relevant situations. K. M. Lee (2006) found that information-related Internet use predicts college students' political self-efficacy. Newhagen (1994) found that with increased exposure to information media, such as newspapers or national television news programs, came an increase in political efficacy. Thus, the information generated and facilitated by social media can be expected to influence citizens' self-efficacy beliefs in relation to political participatory behavior. In other words, self-efficacy is enhanced by political knowledge and bridging social capital, which plays the role of vicarious learning. Following this reasoning, the following hypotheses are developed:

H3: Bridging social capital is positively related to political knowledge.

H4: Bridging social capital is positively related to outcome expectancy.

H5: Political knowledge is positively related to self-efficacy.

H6: Bridging social capital is positively related to self-efficacy.

Self-Efficacy, Outcome Expectancy, and Political Participation

Individuals are more likely to initiate behaviors when their self-efficacy is high (Bandura, 1982). Bandura's (1997) key statement of the role of self-efficacy in individual behavior is that "people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true" (p. 2). For this reason, the performance of a behavior is often better predicted by their evaluative beliefs about their abilities than by what they are actually capable of achieving. A large number of studies have demonstrated that political participation is an outcome of self-efficacy (e.g., Finkel, 1985; Hoffman & Thomson, 2009; Kenski & Stroud, 2006; Newhagen, 1994; Vecchione & Caprara, 2009; Zimmerman, 1989). Following these studies, self-efficacy can be considered a critical determinant of citizens' political participation. Individuals who are confident in their capability to engage in political participation are more likely to be motivated to be involved in political participation than those with low levels of self-efficacy.

In the understanding of SCT, outcome expectancy refers to the belief that a certain behavior will lead to a certain outcome. According to Bandura (1977), individuals choose to perform a behavior in a certain way because they expect that the result of the chosen behavior will be desirable. Outcome expectancy is another way to regulate human motivation and behavior: Positive outcome expectancies promote future behavior, and negative ones prevent it. Also, a long tradition of study of political participation investigates it as a rational choice (Jackman, 1993; Tsebelis, 1990). This research argues that the decision whether to participate in political activities largely depends on cognitive assessment of the outcome of the behavior. In this mechanism, citizens who perceive that the benefit outweighs the cost become involved in more political participation.

Many researchers have explored the potential outcomes of political participation and have proposed a range of outcomes associated with it, including social, functional, enjoyment, and self-evaluative outcomes. Individuals' political participation can thus be triggered by a belief in or expectation of the benefits of such activities (e.g., Fowler & Kam, 2007). Examples of perceived benefits here include self-expression, self-interest, others' welfare, the favoring of particular social or political groups, the satisfaction of a sense of obligation as a citizen, knowledge gain, getting to know other participants, social norms, and pressure to conform to others' wishes (e.g., Cable, Walsh, & Warland, 1988; Citrin & Green, 1990; Fowler & Kam, 2007; Leighley, 1995; Riker & Ordeshook, 1968).

Bandura (1986) argued that even though, in SCT, outcome expectancy is a guide and motivator for performing a behavior, individuals often act as they do because of their essential belief that they have the ability to generate preferable changes with their own behaviors (self-efficacy). The effects of outcome expectancy on behavior are also governed by self-efficacy. For example, even if the performance of a behavior guaranteed valued beneficial outcomes, individuals may nevertheless avoid engaging in the behavior because they may not be sure that they in particular have what it takes to succeed. Previous research has also confirmed that if individuals believe they can perform a behavior in a given situation, they are more likely to perceive positive outcomes than those who are not certain of their abilities (e.g., Compeau & Higgins, 1995). Thus, strong self-efficacy among citizens can be expected to be positively related to positive outcome expectancy. This leads to the following hypotheses:

H7: Self-efficacy is positively related to political participation.

H8: Self-efficacy is positively related to outcome expectancy.

H9: Outcome expectancy is positively related to political participation.

Method

Sample

All the respondents were U.S. citizens recruited from a panel managed by the professional online research agency Qualtrics. The sample was randomized in the selection from the panelist database. The panels consist of geographically representative respondents who have agreed to be contacted to take online

surveys in exchange for incentives such as a reward program. In May 2015, a total of 500 invitations were sent. A total of 309 respondents provided complete responses (male: 47.6%, female: 52.4%). By age group, 28.5% were between the ages of 18 and 34; 19.1% were between 35 and 44; 13.6% were between 45 and 54; 29.4% were between 55 and 64; and 9.4% were older than 65. A total of 34.9% had at least a college degrees. A total of 33.5% identified as Democrats; 28.4% identified as Republicans; and 38% identified as independent. A total of 78.4% identified as Caucasian; 10.5% identified as African American; 6.5% identified as Hispanic; and 3.9% identified as Asian.

Measurement

The main variables measured in the survey were as follows: use of social media, social capital, political knowledge, self-efficacy, outcome expectancy, and political participation.

Use of social media. Four items measured respondents' use of social media. These items asked respondents how many minutes in a typical day they used social media for the following purposes: contacting friends and acquaintances; watching, reading, or listening to the news; chatting; and expressing an opinion on personally relevant issues (Valenzuela et al., 2012). The items were combined to form the scale. It should be noted that $\log_{10}(1 + \text{value})$ transformations were applied to the items before SEM analysis ($M = 2.15$, $SD = 2.37$, $\alpha = .904$ after \log_{10} transformation) because of the variability of the data (Curran-Everett, 2018).

Political knowledge. Five items were used to identify respondents' level of political knowledge: What position did Chuck Hagel hold in the Obama cabinet? Does the Fifth Amendment to the U.S. Constitution mainly guarantee citizens protection against forced confessions? Which political party has a majority in the U.S. House of Representatives? What is the religion of former Republican presidential candidate Mitt Romney? and What is the name of the current Speaker of the U.S. House of Representatives? Items were coded as 1 (correct answer) or 0 (incorrect answer) and combined to form the scale ($M = 2.50$, $SD = 1.52$).

Bridging social capital. Four items were used to measure bridging social capital (Ellison et al., 2007): I feel I am part of the community; I am interested in what goes on in the community; interacting with people makes me feel like a part of a larger community; and interacting with people in the community makes me want to try new things ($M = 17.12$, $SD = 6.31$, $\alpha = .899$). The items were ranked on a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Self-efficacy. Five items (a combination of items from Eastin & LaRose, 2000, and Gil de Zúñiga et al., 2012) measured self-efficacy in political participation by asking the participants to indicate their perceived ability to engage in political participation: I am confident that I have the ability to give answers to questions or inquiries from others about political issues; I am confident that I have the ability to provide political knowledge that other citizens consider valuable; I am confident that I have the ability to contribute to the goals of this country; I am confident that I have the ability to provide experiences for political events; and I am confident that I have the ability to recommend political events to anyone who seeks advice about

the event ($M = 23.02$, $SD = 9.52$, $\alpha = .946$). The items were ranked on a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Outcome expectancy. Five 7-point Likert-type items ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) measured outcome expectations for social, functional, and ideological needs. The items asked the participants how likely or unlikely it was that performing political behaviors would help them get support from others, find something to talk about, find others who respect their views, improve others' welfare in society, and satisfy their ideological aspirations (Citrin & Green, 1990; Riker & Ordeshook, 1968). The five items were combined to form a scale for outcome expectancy ($M = 25.15$, $SD = 7.50$, $\alpha = .899$).

Political participation. Political participation describes the degree to which citizens are involved in political participation. Five items were ranked on a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The items were: I have discussed politics with someone on the Internet, I have attended public hearings, town hall meetings, or city council meetings during the past 12 months, I have spoken to a public official in person during the past 12 months, I have participated in any demonstrations, rallies, protests, or marches during the past 12 months, and I have been involved in public interest groups, political action groups, political clubs, or party committees during the past 12 months (Gil de Zúñiga et al., 2012). The items were combined to form the scale ($M = 16.70$, $SD = 10.13$, $\alpha = .939$).

Results

This study sought to identify the mechanisms through which social media influenced individuals' political participation and to establish a model that could explain this mechanism. It was necessary to evaluate the proposed model using path analysis.

Path analysis is a statistical approach that uses a range of techniques to explain relationships among observed variables. Path analysis is a useful multivariate analytical approach and is a special case of SEM. It is appropriate to use it to test the hypotheses of this study to advance the understanding of the influence of social media on political engagement behavior and relationships among the relevant constructs.

First, principal component analysis was used to examine the internal statistical structure of the variables. It should be noted that items describing use of social media and political knowledge were not included in the analysis because use of social media was measured by participant description of their usage time in minutes, and political knowledge was coded as 0 (incorrect answer) or 1 (correct answer). The factor matrix is shown in Table 1. The factor loadings indicate that Items 1–4 were unambiguously loaded on the first factor. Each of these items addressed bridging social capital. The reliability coefficient (Cronbach's alpha) for the four-item scale was .899.

The second factor presented in Table 1 consisted primarily of Items 5–9, which were concerned with self-efficacy. The reliability coefficient for these items was .946. The factor loadings indicate that Items 10–14 loaded unambiguously on Factor III, whereas Items 15–19 loaded on Factor IV. Items 10–14 appeared to measure outcome expectancy and had a reliability coefficient (alpha) of .899. Factor IV addressed political participation, and its Cronbach's alpha was .939.

Table 1. Factor Analysis Results for Items Related to the Proposed Model.

	Rotated Component Matrix			
	I	II	III	IV
1) I feel I am part of the community	.841			
2) I am interested in what goes on in the community	.837			
3) Interacting with people makes me feel like a part of a larger community	.738			
4) Interacting with people in the community makes me want to try new things	.730			
5) I am confident that I have the ability to give answers to questions or inquiries from others about political issues		.875		
6) I am confident that I have the ability to provide political knowledge that other citizens consider valuable		.883		
7) I am confident that I have the ability to contribute to the goals of this country		.671		
8) I am confident that I have the ability to provide experiences for political events		.794		
9) I am confident that I have the ability to recommend political events to anyone who seeks advice about the event		.750		
10) By participating in political activities and events, I will get support from others			.825	
11) By participating in political activities and events, I will find something to talk about			.800	
12) By participating in political activities and events, I will find others who respect my views			.868	
13) By participating in political activities and events, I will improve others' welfare in society			.850	
14) By participating in political activities and events, I will satisfy my ideological aspiration			.706	
15) I have discussed politics with someone on the Internet				.661
16) I have attended a public hearing, town hall meeting, or city council meeting over the past 12 months				.818
17) I have spoken to a public official in person over the past 12 months				.767
18) I have participated in a demonstration, rally, protest, or march over the past 12 months				.859
19) I have been involved in a public interest group, political action group, political club, or party committee over the past 12 months				.767

Pearson product-moment correlations were calculated using SPSS to examine the bivariate relationships among the variables of interest. Table 2 shows the matrix of Pearson product-moment correlation coefficients for the variables related to the proposed model.

Table 2. Pearson Correlation of the Variable Related to Political Participation.

	1	2	3	4	5	6
1. Political Participation	1.00					
2. Use of Social Media	.188**	1.00				
3. Political Knowledge	.276**	.222**	1.00			
4. Bridging Social Capital	.458**	.163**	.263**	1.00		
5. Self-Efficacy	.560*	.174**	.449**	.552**	1.00	
6. Outcome Expectancy	.376**	.119*	.269**	.566**	.522**	1.00

* $p < .05$. ** $p < .01$.

A hierarchical regression was performed because it allows partitioning variance to isolate the unique contributions made by particular variables or sets of variables. The variance partitioning that hierarchical regression provides is especially powerful when determining pathways of influence. Table 3 contains the standardized regression coefficients (β), R^2 , R^2 change, and p value. In Block 1, potential confounding demographic variables were entered into the equation, $R = .39$, adjusted $R^2 = .14$, $F(5, 335) = 11.94$, $p < .001$. A total of 14% of the variance in political participation was accounted for the social media use in Block 1. In Block 2, use of social media was entered into the equation, $R = .18$, adjusted $R^2 = .17$, $F(6, 334) = 12.54$, $p < .001$. A total of 17% of the variance was accounted for after Block 2. In Block 3, political knowledge and bridging social capital were entered into the equation, $R = .58$, adjusted $R^2 = .33$, $F(8, 332) = 20.54$, $p < .001$. A total of 32% of the variance was accounted for after Block 3. In Block 4, self-efficacy and outcome expectancy were entered into the equation, $R = .63$, adjusted $R^2 = .39$, $F(10, 330) = 21.10$, $p < .001$. A total of 21% of the variance was accounted for after Block 4.

Table 3. Summary of Hierarchical Regression Analysis for Variables Predicting Political Participation.

	<i>b</i>	<i>SE b</i>	β	<i>T</i>	<i>p value</i>	<i>R</i> ²
Block 1						.39
Constant	44.64	5.03		8.88	.00	
Gender	-6.87	1.77	-.20	-3.88	.00	
Age	.02	.07	.01	.27	.79	
Education	-.91	.70	-.07	-1.30	.20	
Political Affiliation	-4.06	.96	-.21	-4.23	.00	
Race	-5.78	1.43	-.20	-4.01	.30	
Household Income	.00	.00	.23	4.50	.00	
						$\Delta R^2 = .14$
Block 2						.43
Constant	45.09	4.94		9.14	.00	
Use of Social Media	.03	.01	.18	3.65	.00	
						$\Delta R^2 = .17$
Block 3						.56
Constant	26.09	5.19		5.03	.00	
Political Knowledge	.04	.61	.11	2.54	.56	
Bridging Social Capital	1.10	.13	.40	8.32	.00	
						$\Delta R^2 = .33$
Block 4						.63
Constant	13.36	5.57				
Self-efficacy	.62	.12	.34	5.31	.00	
Outcome Expectancy	.02	.04	.03	.52	.61	
						$\Delta R^2 = .37$

The proposed model was tested to examine the social cognitive processes of individuals for their involvement in political participation using AMOS. Based on previous studies (e.g., Gil de Zúñiga et al., 2014; N. J. Lee, Shah, & McLeod, 2012), a variety of demographic variables (gender, age, education, political affiliation, race and household income) were included in the analysis to eliminate potential confounding influences. The categorical variables were dummy coded for the analysis. The model fit indices indicated an adequate fit with the data for the path models, $\chi^2 = 118.35$, $df = 31$, $p = .033$; CMIN/DF = 3.82; AGFI = .92; CFI = .910; RMSEA = .093. Although the results of the chi-square test indicate that the model was not consistent with the data, $\chi^2 = 118.35$, $df = 31$, $p = .033$, this was considered to be an effect of the large sample size. In SEM, the greater the probability (p value) associated with the chi-square test, the better the fit. In other words, a chi-square test that returns significance indicates a lack of satisfactory model fit. That is, if a chi-square test of a hypothesized model shows $p = .000$, this suggests that the hypothesized model could be inadequate. However, because the chi-square statistic is, in essence, a test of statistical significance, it is sensitive to sample size, which means that the chi-square statistic nearly always rejects the model when large samples are used (Bentler & Bonett, 1980; Jöreskog & Sörbom, 1993).

To improve model fit, the modification indices recommended one path: use of social media and political participation (see Figure 1 for the modified model). The addition of the path indeed improved the model fit (CMIN/DF: 3.82 => 1.47, AGFI: .92 => .962, CFI = .910 => .943, RMSEA: .093 =>.045). Unlike the hypotheses adopted in the current study, SCT constructs might not be able to fully mediate effects of social media on political participation based on the modified model.

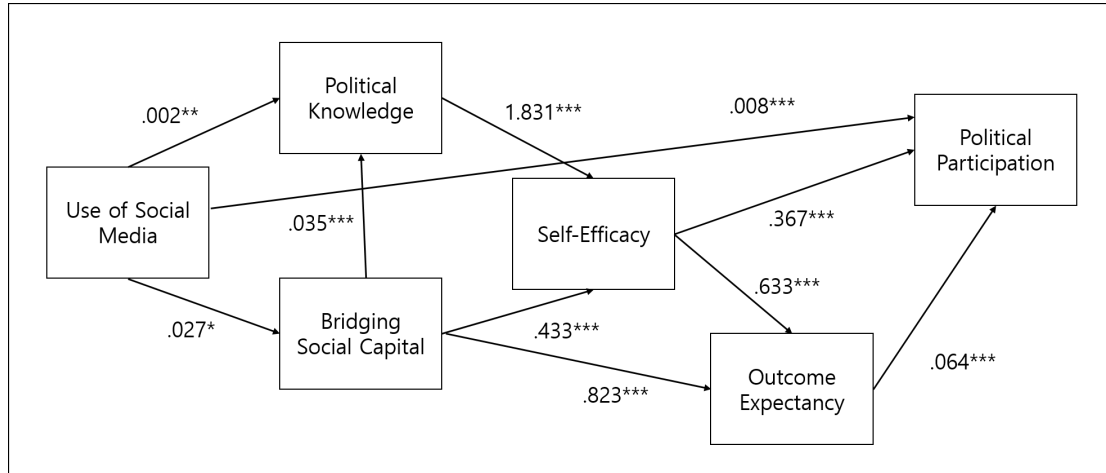


Figure 1. Results of standardized path analysis for the modified model.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

To further confirm the mediating roles of political knowledge, bridging social capital, self-efficacy, and outcome expectancy in the model, a series of mediation analyses were performed using Hayes’ (2013) bootstrapping method with 5,000 resamples (Model 4). As shown in Table 4, all the results of mediation analyses show that the confidence interval did not include zero, indicating that the mediating roles of the constructs are significant. First, the mediating role of political knowledge between the use of social media and self-efficacy was confirmed ($\beta = .0109$, $SE = .0036$, 95% CI [.0063 to .0204]). Second, the mediating role of bridging social capital between the use of social media and self-efficacy was confirmed ($\beta = .0129$, $SE = .0036$, 95% CI [.0078 to .0219]). Third, the mediating role of self-efficacy between political knowledge and political participation was supported ($\beta = 1.4459$, $SE = .1790$, 95% CI [1.1137 to 1.8051]). Fourth, the mediating role of self-efficacy between bridging social capital and political participation was confirmed ($\beta = .3291$, $SE = .0491$, 95% CI [.2390 to .4315]). Fifth, the mediating role of outcome expectancy between self-efficacy and political participation was supported ($\beta = .0636$, $SE = .0293$, 95% CI [.0028 to .1190]). Last, the mediating role of outcome expectancy between bridging social capital and political participation was confirmed ($\beta = .1321$, $SE = .0732$, 95% CI [.0011 to .2890]).

Table 4. Results of Mediation Analyses.

Path	β	SE	LLCI	ULCI
Use of Social Media – Political Knowledge – Self-Efficacy	.0109	.0036	.0063	.0204
Use of Social Media – Bridging Social Capital – Self-Efficacy	.0129	.0036	.0078	.0219
Political Knowledge – Self-Efficacy – Political Participation	1.4459	.1790	1.1137	1.8051
Bridging Social Capital – Self-Efficacy – Political Participation	.3291	.0491	.2390	.4315
Self-Efficacy – Outcome Expectancy – Political Participation	.0636	.0293	.0028	.1190
Bridging Social Capital – Outcome Expectancy – Political Participation	.1321	.0732	.0011	.2890

Note. LLCI: Lower Level of Confidence Interval, ULCI: Upper Level of Confidence Interval

Discussion

The proposed model demonstrates the overall mechanism for the influence of social media on political participation. It was used to examine the social cognitive processes through which individuals become involved in political participation through social media use, via self-efficacy, outcome expectancy, bridging social capital, and political knowledge. These findings constitute a contribution to the field of computer-mediated communication and political communication in several respects. First, this study integrates informational and bridging social capital approaches to investigate social media's influence on political participation. Whereas earlier studies presented information and social capital as separate entities, this study integrated them and empirically demonstrated the overall mechanism of the effects of social media on political participation, using bridging social capital, political knowledge, outcome expectancy, and self-efficacy.

Second, the findings showed that the impact of political knowledge and bridging social capital on political participation was mediated by social cognitive constructs, self-efficacy, and outcome expectancy. Even though the mediation relationships were confirmed by Hayes' bootstrapping method, the modified model suggested the path between the use of social media and political participation. The path implies that use of social media directly influences one's political participation as well. In other words, political knowledge, bridging social capital, self-efficacy, and outcome expectancy partially mediate the effect of social media use on political participation. This suggests that individuals are less likely to engage in political participation unless they feel confident in their ability to do so (self-efficacy) and expect positive outcomes from their behavior (outcome expectancy). This indicates that self-efficacy has a large role in the explanatory mechanisms for the effects of the use of social media on individuals' political engagement. Specifically, these results show that individuals' self-efficacy goes beyond direct influence on the decision to engage in some forms of political participation while also indirectly affecting them by instigating the assessment of outcome expectancy. The participants in this study who exhibited high levels of self-efficacy had higher positive outcome expectancy. This outcome expectancy directly motivates citizens to engage in political participatory behaviors. In sum, political participation is triggered by social cognitive mechanisms in which individuals cognitively evaluate their own

ability and the potential positive consequences that are associated with political participation. This shows human self-regulatory mechanisms in which self-efficacy and outcome expectancy play central roles in explaining the effects of social media on political participation. The current findings suggest that self-efficacy and outcome expectancy are critical for understanding the effects of social media on political participation. This confirms that SCT is applicable to the domain of political participation behavior and can be used to produce theoretical and empirical evidence for the social cognitive process of political participation.

This study is also noteworthy for its use of social media. Individuals use social media for a range of reasons, including the pursuit of interactive, expressive, and informational aims (e.g., Barker, 2009). Previous studies have found that the informational use of social media leads to political participation (e.g., Gil de Zúñiga et al., 2012). Like traditional media, social media also provides individuals with information and news. However, the informational use of social media is often unintentional (Kim, Chen, & Gil de Zúñiga, 2013). Those who are active on social media to pursue interaction tend to have larger networks and are thus more likely to encounter posts about political issues (Chan, 2016). For this reason, this study did not isolate the respondents' informational use of social media. Although different uses of social media, including interactive, expressive, and informational uses, are conceptually distinct, individuals' actual use of social media exhibits intertwined aspects. The various uses of social media interactively influence political participation (Boulianne, 2015; Skoric, Zhu, Goh, & Pang, 2016).

This study approached bridging social capital as a vicarious learning platform in SCT terms. In this way, the psychological mechanisms of why and how the use of social media could increase citizens' political participation were given explanation. SCT stresses the importance of vicarious learning, which is promoted by continuous interaction among individuals (Bandura, 1977). Bridging social capital increases with the expansion of the social network because that network continues to act as a platform to support and promote interactions among individuals.

Earlier works have identified bridging social capital and political knowledge as two separate mechanisms. With self-efficacy and outcome expectancy, this study showed how the social capital approach and the informational approach (political knowledge) could be integrated to explain the effect of social media on political participation. Consistent with this idea, this study theoretically and empirically posited that bridging social capital and political knowledge are interlinked with self-efficacy, outcome expectancy, and political participation. The current social cognitive model extends the two previous approaches by recognizing factors such as self-efficacy and outcome expectancy as crucial constructs. Because this study demonstrates the importance of self-efficacy and outcome expectancy, the mechanism through which social media use affects political participation may go beyond simply increasing individuals' political knowledge and bridging social capital. The dynamic relationships among self-efficacy, outcome expectancy, political knowledge, and bridging social capital motivate political participation.

Limitation

The first limitation comes from the measurement of social media use. In this study, we asked participants to report their social media use in terms of minutes. Answering this question accurately may have

been inconvenient for participants. Surveys require self-reporting technique, which means that for accuracy's sake, measurements should be made easy to answer for participants, and this question may not have been.

The second limitation of this study may be the bidirectional relationship between some of its constructs. For instance, individuals' social capital might influence their use of social media (Chan, 2016). Specifically, Chan (2016) demonstrated that Facebook network size and connections influence participation through Facebook use. However, because of the cross-sectional survey method used in this study, no bidirectional relationship between social capital and social media use could be examined. In other words, longitudinal evidence is required in future studies.

The third limitation may relate to the validity of the measurements of bridging social capital measurements presented in this study. Appel and colleagues (2014) tested the validity of bridging social capital measurements by comparing them to the Medical Outcome Study (MOS) and position and resource generators (Sherbourne & Stewart, 1991, for MOS; Lin, Fu, & Hsung, 2001, for position generator; Van Der Gaag & Snijders, 2005, for resource generators). Appel and associates (2014) found low convergent validity among the measurements, the position generator, and the resource generator. The measurement also had a weak relationship to measures of emotional and positive support based on the MOS. Therefore, it is strongly recommended that the proposed model be tested with different measurements for bridging social capital.

Last, it should be noted that Bandura's concept of self-efficacy is used in this study, in contrast to most studies of political communication, in which political efficacy is often used. Political efficacy refers to citizens' faith and trust in the government (external efficacy) and their belief that they can understand and influence political affairs (internal efficacy; Finkel, 1987). Simply, the concept of self-efficacy used in the current study is equivalent to internal efficacy. In other words, the current model did not employ external efficacy and/or group efficacy. Previous studies demonstrated the positive relationship between political participation and external efficacy (e.g., Finkel, 1985) and between political efficacy and group efficacy (e.g., Whiteley, 1995). The concept of self-efficacy plays the core role in SCT. The current study aims to explain the mechanism of how the informational approach and the bridging social capital approach can lead to political participation within the boundary of SCT. Future studies might be able to provide a complete picture of social media use and political participation by adding external efficacy and/or group efficacy.

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